

VIRUDHUNAGAR S.VELLAICHAMY NADAR POLYTECHNIC COLLEGE (AUTONOMOUS),
(Affiliated to Directorate of Technical Education, Chennai – 25)

VIRUDHUNAGAR – 626 001.

SYLLABUS
DIPLOMA IN GARMENT TECHNOLOGY

N1 – SCHEME
(2019-2020 onwards)
OUTCOME BASED EDUCATION



Head of the Department

Principal

VIRUDHUNAGAR S.VELLAICHAMY NADAR POLYTECHNIC COLLEGE (AUTONOMOUS),
(Affiliated to Directorate of Technical Education, Chennai – 25)
VIRUDHUNAGAR.

N1 - SCHEME

Regulations [MPEC SYSTEM]

(Implemented from 2019-2020)

Diploma Courses in Engineering / Technology/ Commerce

1. Autonomy and Multi Point Entry and Credit System:

As per G.O Ms 1136 dated 20.11.92 our Institution has been granted Autonomous status from the academic year 1994–95.

The Students admitted for the I Term Engineering at this Institution in Multi Point Entry Credit System (MPEC) will study under Autonomous pattern.

2. Condition for Admission:

Condition for admission to the Diploma Courses shall be required to have passed in the S.S.L.C. Examination of the Board of Secondary Education, Tamil Nadu.

(Or)

The Anglo Indian High School Examination with eligibility for Higher Secondary Course in Tamil Nadu.

(Or)

The Matriculation Examination of Tamil Nadu.

(Or)

Any other Examination recognized as equivalent to the above by the Board of Secondary Education, Tamil Nadu.

Note: In addition, at the time of admission the candidate will have to satisfy certain minimum requirements, which may be prescribed from time to time.

3. Admission to Second year (Lateral Entry):

A pass in HSC (Academic) or (Vocational) Courses mentioned in the Higher Secondary Schools in Tamil Nadu affiliated to the Tamil Nadu Higher Secondary Board with eligibility for University Courses of study or equivalent examination and should have studied the following subjects.

Sl. No.	Courses	H.Sc. Academic	H.Sc. Vocational	
		Subjects Studied	Subjects Studied	
			Related Subjects	Vocational Subjects
1.	All the Regular Diploma Courses	Physics, Chemistry & Mathematics/Biology (Botony and Zoology)	Maths / Physics / Chemistry	Related Vocational Subjects Theory & Practical
2.	Diploma Course in Modern Office Practice	English & Accountancy English & Elements of Economics English & Elements of Commerce	English & Accountancy, English & Elements of Economics, English & Management Principles & Techniques, English & Typewriting	Accountancy & Auditing, Banking, Business Management, Co-operative Management International Trade, Marketing & Salesmanship, Insurance & Material Management, Office Secretary ship.

- For the diploma programmes related with Engineering/Technology, the related / alternate courses prescribed along with Practical may also be taken for arriving the eligibility.
- Programme will be allotted according to merit through counseling by the Principal as per communal reservation.
- *Candidates who have studied Commerce Subjects are not eligible for Engineering Diploma Courses.*

4. Age Limit : No Age Limit

5. Medium of Instruction : English

6. Courses of Study and Curriculum Outline:

The Courses of study shall be in accordance with the curriculum prescribed by the Autonomous Academic Board from time to time, both in Theory and Practical. The curriculum outline is given in Annexure-I.

7. Description of the Programme:

The Programme for the Full Time Diploma in Engineering & Technology / MOP shall extend over a period of three academic years, consisting of six terms. Each Term will have 15 weeks duration of study.

The Curriculum for all the Six Terms of Diploma Programme have been revised and revised curriculum is applicable for the candidates admitted from 2019–2020 academic year onwards.

8. Requirements of Examination and Attendance:

The Examination shall be conducted at the end of each term by the Autonomous body affiliated to the State Board of Technical Education and Training, Tamilnadu.

A Candidate will be permitted to appear for the Autonomous End Examinations only if he/she secures minimum 80% of attendance in the term concerned.

If the candidate does not appear for at least one of the regular courses in the End Examination, he/she has to attend the same term in the next academic year.

9. Eligibility for the Award of Diploma:

No candidate shall be eligible for the award of Diploma unless he/she has undergone the prescribed programme of study for a period of not less than **three academic years** in the Institution, when joined in First Year and **two academic years** if joined under Lateral Entry scheme in the second year and passed the prescribed examination. The minimum and maximum periods for completion of Diploma Programme are as given below.

Diploma Courses	Minimum Period	Maximum Period
Full Time	3 Years	6 Years
Full Time (Lateral Entry)	2 Years	5 Years

10. Autonomous End Examinations:

Autonomous End Examinations in all Programme of all the terms under the scheme of examinations will be conducted at the end of each term both in theory and practical. The internal assessment marks for all the courses will be awarded on the basis of continuous internal assessment earned during the term concerned.

For each course, 25 Marks are allotted for internal assessment and 75 Marks are allotted for End Examination.

11. Continuous Internal Assessment:

D) THEORY

The Continuous Internal assessment marks for a total of 25 Marks, which are to be distributed as follows:

Test	-	10 Marks
Assignment / Drawing Plate	-	10 Marks
Course Attendance	-	5 Marks

Total		25 Marks

(i) Test

10 Marks

Two Periodical Tests each of two hours duration for total of 50 Marks each and Model Examination for three hours duration for 75 Marks are to be conducted. The average of two periodical tests (PT) is to be taken for 5 Marks and Model Exam to be taken for another 5 marks. The periodical test mark and model exam marks are to be converted to five marks and awarded with the next higher integer if there is any fraction.

Total test marks (5 + 5) = 10 Marks

TEST	SYLLABUS	MAXIMUM MARKS	DURATION	WHEN TO CONDUCT
Periodical Test – I	I & II Unit	50	2 Hrs.	30 working days from Reopening
Periodical Test – II	III & IV Unit	50	2 Hrs.	30 working days from first periodical test
Model Exam	All Units	75	3 Hrs.	After last working day

(a) [i] Question Paper Pattern for Periodical Test – I & Test – II (First Year)

With No Choice

Part – A	4 Questions x 2 Marks	-	8 Marks
Part – B	4 Questions x 3 Marks	-	12 Marks
Part – C	6 Questions x 5 Marks	-	30 Marks

	Total		50 Marks

[ii] Question Paper Pattern for Periodical Test – I & Test – II (Engineering)

With No Choice:

Part – A	4 Questions x 2 Marks	-	8 Marks
Part – B	4 Questions x 3 Marks	-	12 Marks
Part – C	3 Questions x 10 Marks	-	30 Marks

	Total		50 Marks

[iii] Question Paper Pattern for Periodical Test – I & Test –II
(Modern Office Practice)

With No Choice:

Part – A	4 Questions x 5 Marks	-	20 Marks
Part – B	2 Questions x 15 Marks	-	30 Marks

		Total	50 Marks

(b) Question Paper Pattern for Model Exam:
(First Year, Engineering & Modern Office Practice)

As per Syllabus Book

(ii) Assignment

10 Marks

For each course, three Assignments are to be given each for 10 Marks and the total marks scored should be converted to 10 Marks and awarded with the next higher integer if there is any fraction.

(iii) Course Attendance

5 Marks

Award of marks for course attendance to each Theory / Practical Course / Project Work and Seminar will be as per the range given below.

Attendance mark reference table

Range of Attendance (%)	Marks
80% - 83%	1
84% - 87%	2
88% - 91%	3
92% - 95%	4
96% - 100%	5

(iv) Total

The Attendance (5 Marks), Assignment (10 Marks) & Test Marks (10 Marks) should be added and the Continuous Internal assessment marks for a total of 25 Marks is arrived.

II) PRACTICAL / DRAWING

The internal assessment mark calculation for Practical courses is given as follows:-

a) Observation and Exercise	:	10 Marks
b) Model Practical Examination	:	10 Marks
c) Attendance	:	5 Marks

Total	:	25 Marks

- After completion of each exercise, record should be submitted in the subsequent practical classes and marks awarded for observation should be carried over to record.
- The mark should be awarded for 10 in each exercise.
- The students have to submit the duly signed Bonafide record note book / file during the End Practical Examinations.
- All the experiments indicated in the syllabus should be completed and the same be given for final End Examinations.

Note: All the marks awarded for Assignments, Tests and Attendance should be entered in the course file / log book of the staff, who is handling the course. This is applicable to both Theory and Practical courses.

For Drawing

For drawing courses, 20 Marks should be awarded for each drawing plate. The total of all drawing plate marks should be converted to 10 marks and awarded with the next higher integer if there is any fraction.

12. Project Work and Seminar:

The students of all the Diploma Programmes have to do a Project Work and Seminar as part of the Curriculum and in partial fulfillment for the award of Diploma by the State Board of Technical Education and Training, Tamilnadu.

In order to encourage students to do worthwhile and innovative projects, every year prizes are awarded for the best three projects in department, institution wise, region wise and state wise. The selection of Project Work should be taken up in V Term of study.

The Project may be reviewed twice during 4th and 10th week of VI Term.

a) Internal assessment marks for Project Work and Seminar:

Project Review I & II (VI Term) (5+5)	:	10 Marks
Seminar I & II (5+5)/2	:	5 Marks
Project report	:	5 Marks
Attendance (Award of marks same as course pattern)	:	5 Marks

TOTAL	:	25 Marks

b) Mark Allocation for Project Work and Seminar in End Examination:

Viva Voce	:	25 Marks
Demonstration / Presentation	:	50 Marks
(The following Criteria components to be considered- Relevance of topic, Knowledge of methodology, Role of individual in the team, finding the Study etc.)		-----
TOTAL	:	75 Marks

A neatly prepared **PROJECT REPORT** as per the format has to be submitted by individual student during the Project work End Examination.

Selection of seminar topics should be based on Professional Ethics, Environmental Engineering and Management.

Proper record is **to be maintained for the two project reviews & seminars** and it should be preserved for two terms.

13. Academic Audit:

All Test Papers and assignment note books after getting the signature with date from the students must be kept in the safe custody in the Department for verification and audit for two terms.

14. Criteria for pass:

1. No candidate shall be eligible for the award of Diploma unless he/she has undergone the prescribed programme of study successfully and pass all the courses prescribed in the curriculum.

2. A candidate shall be declared to have passed the examination in a course if he/she secures not less than 40% in Theory courses and 50% in Practical courses out of the total prescribed maximum marks including both the Internal Assessment and the End Examination marks put together, subject to the condition that he/she has secured at least a **minimum of 30 Marks out of 75 Marks in the End Theory and a minimum of 35 Marks out of 75 Marks in the End Practical Examinations.**

15. Classification of successful candidates:

Classification of candidates who pass out the final examinations from April 2022 onwards (joined in first year 2019-2020) will be done as specified below.

First Class with Superlative Distinction

A Candidate will be declared to have passed in **First Class with Superlative Distinction** if he/she secures not less than 75% of the marks in all the courses and passes all the terms in the first appearance itself and passes all the courses within the stipulated minimum period of study without any break in study.

First Class with Distinction

A Candidate will be declared to have passed in **First Class with Distinction** if he/she secures not less than 75% of the aggregate of marks in all the terms put together and passes all the above terms except the I & II Term in the first appearance itself and passes all the courses within the stipulated minimum period of study without any break in study.

First Class

A Candidate will be declared to have passed in **First Class** if he/she secures not less than 60% of the aggregate marks in all terms put together and passes all the courses within the stipulated minimum period of study without any break in study.

Second class

All other successful candidates will be declared to have passed in **Second Class**.

16. Duration of a period in the Class Time Table:

The duration of each period of instruction is one hour and the total period of instruction hours excluding interval and lunch break in a day should be uniformly maintained as seven hours corresponding to seven periods of instruction (Theory & Practical).

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PROGRAMME: GARMENT TECHNOLOGY

N1 - SCHEME

ANNEXURE - I

LIST OF COURSES

I FOUNDATION COURSES

Course Code	Name of the course	Credits	Prerequisites
N1BE101	Communication English-I	2	-
N1BE102	Engineering Mathematics	5	-
N1BE103	Engineering Physics-I	3	-
N1BE104	Engineering Chemistry– I	3	-
N1BE105	Engineering Physics -I Practical	2	-
N1BE106	Engineering Chemistry -I Practical	2	-
N1BE107	Communication Skill Practical	3	-
N1BE108	Computer Application Practical	3	-
N1BE109	Communication English-II	2	N1BE101
N1BE110	Applied Mathematics	4	N1BE102
N1BE111	Engineering Physics –II	2	N1BE103
N1BE112	Engineering Chemistry-II	2	N1BE104
N1BE113	Engineering Physics -II Practical	2	N1BE105
N1BE114	Engineering Chemistry -II Practical	2	N1BE106
Total Credits		37	-

II CORE COURSES

Course Code	Name of the course	Credits	Prerequisites
N1BE201	Engineering Graphics	5	-
N1BE202	Engineering Drawing	5	N1BE201
N1BE203	Workshop Practice	3	-
N1GT204	Fiber science and Yarn Manufacture	5	-
N1GT205	Pattern Drafting & Construction -I	5	-
N1GT206	Pattern Drafting & Construction - II	5	N1GT205
N1GT207	Embroidery Practical	3	-
N1GT208	Advanced Hand Embroidery Practical	3	N1GT207
N1GT209	Pattern Drafting -I Practical	3	-
N1GT210	Garment Construction-I Practical	3	-
N1GT211	Pattern Drafting-II Practical	3	N1GT209
N1GT212	Garment Construction-II Practical	3	N1GT210
Total Credits		46	-

PROGRAMME: GARMENT TECHNOLOGY**III APPLIED COURSES**

Course Code	Name Of Course	Credits	Prerequisites
N1GT301	Fashion Designing	5	-
N1GT302	Apparel Designing	5	-
N1GT303	Apparel Production Planning and Control	5	-
N1GT304	Technology of Fabric Manufacture	5	
N1GT305	Clothing Machinery and Equipment	5	N1GT204
N1GT306	Textile Testing	6	-
N1GT307	Textile Wet Processing	5	-
N1GT308	Textile Management	5	-
N1GT309	Apparel Quality control	6	-
N1GT310	Fashion Designing Practical	3	-
N1GT311	Apparel Designing Practical	3	-
N1GT312	Textile Testing & Wet Processing Practical	3	-
N1GT313	Fashion and Garment CAD Practical	3	N1GT301 N1GT209
N1GT314	Advanced Pattern Drafting and Construction Practical	3	-
Total Credits		62	

IV DIVERSIFIED COURSES

Course Code	Name Of Course	Credits	Prerequisites
N1GT401 N1GT402	Elective Theory –I 1.Apparel Merchandising 2.Indian and Western Costumes	5	-
N1GT403 N1GT404 N1GT405	Elective Theory –II 1.Home Textiles 2.Fashion Draping 3. Solar and Nano Technology in Textiles	5	-
N1GT406	Handicraft Practical	3	-
N1GT407	Fashion Draping Practical	3	-
N1GT408	Project Work and Seminar	4	-
Total Credits		20	

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PROGRAMME: All Programmes of Diploma in Engineering and Technology except DMOP N1–
SCHEME
MPEC SYSTEM

TOTAL CREDITS FOR THE COURSES

No Of Credits	
I Year	50
III Term	27
IV Term	29
V Term	30
VI Term	29
Total	165

Name Of Course	Credits	Percentage (%)
FOUNDATION COURSE	37	22.47
CORE COURSE	46	27.88
APPLIED COURSE	62	37.58
DIVERSIFIED COURSE	20	12.12
Total	165	100

CURRICULUM OUTLINE AND SCHEME OF EXAMINATIONS

PROGRAMME: All Programmes of Diploma in Engineering and Technology except DMOP

N1–SCHEME

I TERM

Course Code	Course Name	Col No	Hours Per week			Credits	Duration of Exam in hours	Examination Marks			Minimum For pass
			Theory	Drawing	Tutorial Practical			Internal Assessment marks	External Exam Marks	Marks	
N1BE101	Communication English-I	1	4	-	-	2	3	25	75	100	40
N1BE102	Engineering Mathematics	2	7	-	-	5	3	25	75	100	40
N1BE103	Engineering Physics-I	3	5	-	-	3	3	25	75	100	40
N1BE104	Engineering Chemistry– I	4	5	-	-	3	3	25	75	100	40
N1BE201	Engineering Graphics	5	-	6	-	5	3	25	75	100	40
N1BE105	Engineering Physics -I Practical	6	-	-	2	2	3	25	75	100	50
N1BE106	Engineering Chemistry -I Practical	7	-	-	2	2	3	25	75	100	50
N1BE107*	Communication Skill Practical*	8	-	-	3	3	3	25	75	100	50
N1BE108^	Computer Application Practical^										
	Library				1						
	Total		21	6	8	-	25	200	600	800	-

* For Circuit Branches only

^ For Non-Circuit Branches only

CURRICULUM OUTLINE AND SCHEME OF EXAMINATIONS

PROGRAMME: All Programmes of Diploma in Engineering and Technology except DMOP

N1–SCHEME

II TERM

Course Code	Course Name	Col No	Hours Per week			Credits	Duration of Exam in hours	Examination Marks			Minimum For pass
			Theory	Drawing	Tutorial Practical			Internal Assessment marks	External Exam Marks	Marks	
N1BE109	Communication English-II	1	4	-	-	2	3	25	75	100	40
N1BE110	Applied Mathematics	2	6	-	-	4	3	25	75	100	40
N1BE111	Engineering Physics-II	3	4	-	-	2	3	25	75	100	40
N1BE112	Engineering Chemistry– II	4	4	-	-	2	3	25	75	100	40
N1BE202	Engineering Drawing	5	-	6	-	5	3	25	75	100	40
N1BE113	Engineering Physics -II Practical	6	-	-	2	2	3	25	75	100	50
N1BE114	Engineering Chemistry –II Practical	7	-	-	2	2	3	25	75	100	50
N1BE203	Workshop Practise	8	-	-	3	3	3	25	75	100	50
N1BE107 ^	Communication Skill Practical^	9	-	-	3	3	3	25	75	100	50
N1BE108 *	Computer Application Practical*										
	Library				1						
	Total		18	6	11	25		225	675	900	-

* For Circuit Programmes only

^ For Non-Circuit Programmes only

CURRICULAM OUTLINE AND SCHEME OF EXAMINATIONS

DIPLOMA IN GARMENT TECHNOLOGY

III TERM

Course Code	Course Name	Hours Per Week			Credits	Duration of Exam	Marks		
		Theory	Practical	Others			Int.	Ext.	Total
N1GT204	Fibre Science and Yarn Manufacture	5	-	-	5	3	25	75	100
N1GT301	Fashion Designing	5	-	-	5	3	25	75	100
N1GT302	Apparel Designing	5	-	-	5	3	25	75	100
N1GT310	Fashion Designing Practical	-	5	-	3	3	25	75	100
N1GT207	Embroidery Practical	-	5	-	3	3	25	75	100
N1GT311	Apparel Designing Practical	-	5	-	3	3	25	75	100
N1GT406	Handicraft Practical	-	5	-	3	3	25	75	100
	TOTAL	15	20	-	27	.	175	525	700

CURRICULAM OUTLINE AND SCHEME OF EXAMINATIONS

DIPLOMA IN GARMENT TECHNOLOGY

IV TERM

Course code	Course Name	Hours Per Week			Credits	Duration of Exam	Marks		
		Theory	Practical	Others			Int.	Ext.	Total
N1GT303	Apparel Production planning and control	5	-	-	5	3	25	75	100
N1GT304	Technology of Fabric Manufacture	5	-	-	5	3	25	75	100
N1GT305	Clothing Machinery and Equipment	5	-	-	5	3	25	75	100
N1GT205	Pattern Drafting and Construction – I	5	-	-	5	3	25	75	100
N1GT209	Pattern Drafting – I Practical	-	5	-	3	3	25	75	100
N1GT210	Garment Construction– I Practical	-	5	-	3	3	25	75	100
N1GT208	Surface Enrichment Practical	-	5	-	3	3	25	75	100
	TOTAL	20	15	-	29	-	175	525	700

CURRICULAM OUTLINE AND SCHEME OF EXAMINATIONS

DIPLOMA IN GARMENT TECHNOLOGY

V TERM

Course code	Course Name	Hours Per Week			Credits	Duration of Exam	Marks		
		Theory	Practical	Others			Int.	Ext.	Total
N1GT306	Textile Testing	5	-	-	6	3	25	75	100
N1GT307	Textile Wet Processing	5	-	-	5	3	25	75	100
N1GT206	Pattern Drafting and Construction – II	5	-	-	5	3	25	75	100
N1GT401 N1GT402	Elective Theory-I 1.Apparel Merchandising 2.Indian And Western Costumes	5	-	-	5	3	25	75	100
N1GT312	Textile Testing And Wet Processing Practical	-	5	-	3	3	25	75	100
N1GT211	Pattern Drafting – II Practical	-	5	-	3	3	25	75	100
N1GT212	Garment Construction– II Practical	-	5	-	3	3	25	75	100
	TOTAL	20	15	-	30	-	175	525	700

CURRICULUM OUTLINE AND SCHEME OF EXAMINAIONS

DIPLOMA IN GARMENT TECHNOLOGY

VI TERM

Course Code	Course Name	Hours Per Week			Credits	Duration of Exam	Marks		
		Theory	Practical	Others			Int.	Ext.	Total
N1GT308	Textile Management	5	-	-	5	3	25	75	100
N1GT309	Apparel Quality Control	5	-	-	6	3	25	75	100
N1GT403 N1GT404 N1GT405	Elective Theory –II 1.Home Textiles 2.Fashion Draping 3. Solar and Nano Technology in Textiles	6	-	-	5	3	25	75	100
N1GT313	Fashion and Garment CAD Practical	-	5	-	3	3	25	75	100
N1GT314	Advanced Pattern Drafting and Construction Practical	-	5	-	3	3	25	75	100
N1GT407	Fashion Draping Practical	-	5	-	3	3	25	75	100
N1GT408	Project work and Seminar	-	5	-	3	3	25	75	100
	TOTAL	16	20	-	29	-	175	525	700



Virudhunagar S. VellaiChamy Nadar Polytechnic College (Autonomous)
Virudhunagar
OUTCOME BASED EDUCATION



F5

Virudhunagar S.Vellaichamy Nadar Polytechnic College (Autonomous)
Virudhunagar

INSTITUTION VISION

To be an institute of excellence in technical education and training of individual focusing on the needs of the nation and society in tune with technological developments.

INSTITUTION MISSION

Our mission is to produce disciplined and quality technocrats through academic programme of noted excellence to serve the society.



Virudhunagar S. VellaiChamy Nadar Polytechnic College (Autonomous)
Virudhunagar
OUTCOME BASED EDUCATION



F5

Virudhunagar S.Vellaichamy Nadar Polytechnic College (Autonomous)
Virudhunagar

DEPARTMENT OF GARMENT TECHNOLOGY

VISION

“To be a Department of excellence in Garment Technology and Training individuals, focusing on the needs of the Nation and Society in tune with Technological Developments”

MISSION

“Our Mission is to produce Disciplined and Quality Garment technocrats through Academic Programme of noted excellence to serve the society”

PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

- ✓ Diploma technocrats apply their knowledge in Garment Designing and create fashionable garments.
- ✓ Diploma technocrats gain foundation in pursuing successful profession
- ✓ Diploma technocrats will gain idea regarding quality assurance, to meet societal and industry needs.



Programme Outcomes and PSO

Programme: GARMENT TECHNOLOGY

1. Basic and Discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
2. Problem analysis: Identify and analyse well-defined engineering problems using codified standard methods.
3. Design/ development of solutions: Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
4. Engineering Tools: Experimentation and Testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
5. Engineering practices for society sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.
6. Project Management: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
7. Life-long learning: Ability to analyse individual needs and engage in updating in the context of technological changes.

PSO (Programme Specific Outcome)

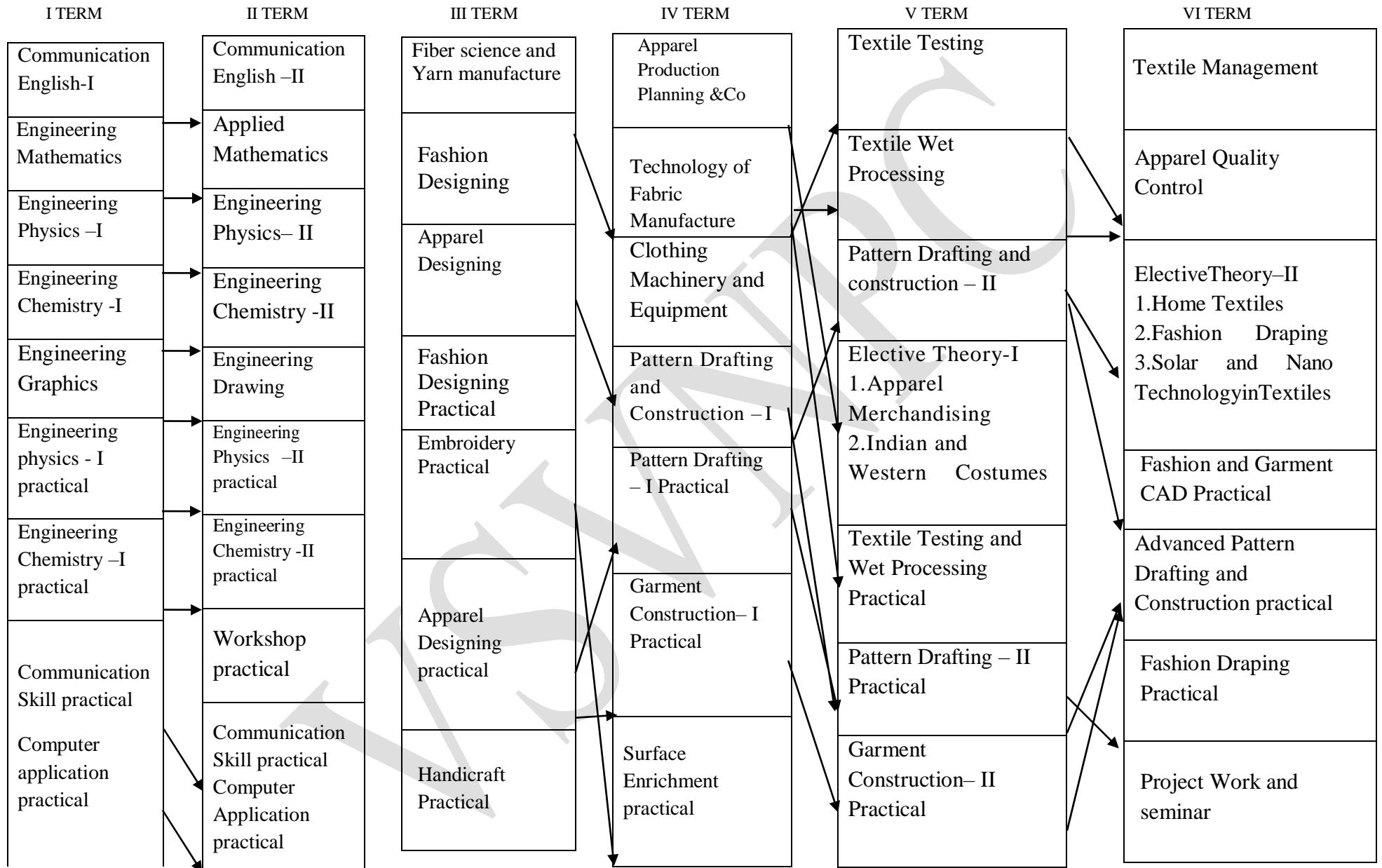
- Design and develop Apparel products in tune with fashion trend.
- Imparting knowledge and skills to serve in Export sectors.

Overall Course-PO & PSO Attainment Matrix

Sl. No.	Term	Course Name	Programme Outcomes (PO's)							Programme Specific Outcomes (PSO's)	
			1	2	3	4	5	6	7	1	2
1.	III	Fibre Science and Yarn Manufacture	2	-	-	-	-	1	2	2	1
2.		Fashion Designing	2	-	2	-	2	2	2	2	2
3.		Apparel Designing	3	-	3	-	2	2	2	2	2
4.		Fashion Designing Practical	2	-	2	2	2	2	2	3	3
5.		Embroidery Practical	2	-	2	2	2	2	1	2	1
6.		Apparel Designing Practical	2	-	2	2	2	2	2	2	2
7.		Handicraft Practical	2	-	2	2	-	1	1	1	-
1.	IV	Apparel Production planning and control	2	3	1	-	-	2	-	2	2
2.		Technology of Fabric Manufacture	2	-	2	-	-	1	-	1	1
3.		Clothing Machinery and Equipment	3	-	-	2	-	2	-	2	2
4.		Pattern Drafting and Construction – I	3	2	2	2	-	2	2	2	2
5.		Pattern Drafting – I Practical	3	2	2	2	-	2	2	2	3
6.		Garment Construction– I practical	3	2	2	2	1	2	2	2	3
7.		Surface Enrichment Practical	2	-	2	2	2	2	1	2	1

Sl. No.	Term	Course Name	Programme Outcomes (PO's)							Programme Specific Outcomes (PSO's)	
			1	2	3	4	5	6	7	1	2
1.	V	Textile Testing	1	2	2	-	-	1	1	1	1
2.		Textile Wet Processing	1	1	2	3	1	2	1	1	1
3.		Pattern Drafting and Construction – II	3	2	2	2	-	2	2	2	2
4		<u>ELECTIVE THEORY-I</u>									
		1.Apparel Merchandising	1	2	2	1	2	2	1	1	2
		2.Indian And Western costumes	1	-	-	-	2	2	1	1	1
5		Textile Testing And Wet Processing Practical	2	2	2	2	2	1	1	1	1
6		Pattern Drafting – II Practical	3	2	2	2	-	2	2	2	3
7	Garment Construction– II Practical	3	2	2	2	1	2	2	2	3	
1.	VI	Textile Management	1	-	-	-	2		1	-	2
2.		Apparel Quality Control	2	2	-	2	-	2	1	-	2
3.		<u>ELECTIVE THEORY-II</u>									
		1.Home Textiles	1	-	2	-	-	2	1	1	2
		2.Fashion Draping	3	2	2	2	-	2	2	2	2
		3. Solar and Nano Technology in Textiles	1	-	-	-	1	1	1	-	1
4		Fashion and Garment CAD Practical	2	-	2	2	2	2	2	2	3
5		Advanced Pattern Drafting and Construction Practical	3	2	2	2	1	2	2	2	3
6	Fashion Draping Practical	3	2	2	2	-	2	2	2	2	
7	Project work and Seminar	2	2	2	2	1	3	1	2	2	

COURSE PREREQUISITE FOR THE CURRICULUM OF DIPLOMA IN GARMENT TECHNOLOGY



**VIRUDHUNAGAR S. VELLAICHAMY NADAR POLYTECHNIC COLLEGE
(AUTONOMOUS)
(Affiliated to Directorate of Technical Education, Chennai-25)
VIRUDHUNAGAR-626001**

N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 204
Term : III Term
Course Name : FIBRE SCIENCE AND YARN MANUFACTURE

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per Semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board Examination	Total	
FIBRE SCIENCE AND YARN MANUFACTURE	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	INTRODUCTION AND NATURAL FIBRES	15
II	SYNTHETIC FIBRES	15
III	YARN MANUFACTURING PROCESS	15
IV	POST SPINNING AND MAN MADE FILAMENT PROCESSING	15
V	COMMERCIAL YARNS	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

C204.1 Acquire knowledge on classification of textile fibres.

C204.2 Gain knowledge on types of fibre.

C204.3 Describe process sequence for producing yarn.

C204.4 Acquire knowledge on Post spinning process.

C204.5 Acquire knowledge on fancy yarns.

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C204.1	Acquire knowledge on classification of textile fibres.	R/U/A	1,6,7	15
C204.2	Gain knowledge on types of fibre.	R/U/A	1,6,7	15
C204.3	Describe process sequence for producing yarn.	R/U/A	1,6,7	15
C204.4	Acquire knowledge on Post spinning process.	R/U/A	1,6,7	15
C204.5	Acquire knowledge on fancy yarns.	R/U/A	1,6,7	15
			Total sessions	75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	INTRODUCTION AND NATURAL FIBRES	15	25	2	18	5	17.86 %
II	SYNTHETIC FIBRES	15	25	2	18	5	17.86 %
III	YARN MANUFACTURING PROCESS	15	25	2	18	5	17.86 %
IV	POST SPINNING AND MAN MADE FILAMENT	15	25	2	18	5	17.86 %
V	COMMERCIAL YARNS	15	25	2	18	5	17.86 %
I to V*			15	6	9	0	10.70 %
	Total		140	16	99	25	100 %

* 3 x 2Marks and 3 x 3Marks from any Unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
FIBRE SCIENCE AND YARN MANUFACTURE	2	-	-	-	-	1	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course-PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
FIBRE SCIENCE AND YARN MANUFACTURE	2	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

- IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
 IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
 IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
 IF $< 5\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS CONSIDERED NOT-ADDRESSED.

DETAILED SYLLABUS

Unit	Topic	Hours
I	<p>INTRODUCTION AND NATURAL FIBRES Textile Fibres – Definition – Classification – Important properties of an ideal Textile Fibre. Identification of Textile Fibres (Cotton, Silk, Wool, Polyester, Nylon and Acrylic) - Burning test, Solvent test and Microscopic appearance. Cotton fibres – Content – Indian varieties - Physical and Chemical properties – uses. Linen and Flax fibres - uses. Silk Fibre – Varieties - degumming of silk – Weighting of silk -Properties - Uses. Wool fibre – Varieties based on fleece – Properties and uses.</p>	15
II	<p>SYNTHETIC FIBRES Manmade fibre spinning techniques - Wet, Melt, Dry spinning. Viscose rayon – Manufacturing flow chart - Properties and uses. Properties uses of Lyocel, Modal and Bamboo. Polyester fibre (PET) – Manufacture flow chart - Properties and Nylon 6-6 fibre – Manufacturing flow chart – Properties and Acrylic fibre – Manufacturing flow chart – Properties and uses. Properties and uses of Nomex and Kevlar.</p>	15
III	<p>YARN MANUFACTURING PROCESS Ginning – definition- Objects of Mixing and Blending – Sequence of processes involved in Carded and Combed yarn manufacturing- Objects of blow room , carding, drawing, comber, simplex & ring frame – Brief study of open end spinning – Differences between carded and combed yarn – Difference between ring yarn and OE yarn - Brief study of Compact, Friction and Air-jet spun yarn production systems.</p>	15
IV	<p>POST SPINNING AND MAN-MADE FILAMENTS PROCESSING Doubling – Objects – Passage of material through doubling. Two for One Twister – Objects – Passage of material through Two for One Twister. Brief study of Reeling and Bundling processes. Filament yarn and Staple fibre manufacturing process. Texturisation Definition – Objects – Study of texturing of yarn by Stuffer box, Flase twist and Air Texturisation methods.</p>	15
V	<p>COMMERCIAL YARNS Definition of – Slub yarns – Flock or Flake yarns – Boucle yarn – Gimp yarn – Spot and Knot yarns – Loop or Curl yarn – Grandrelle yarns – Spiral or Cork screw yarns – Chenille yarn – Covered yarn – Core yarn – Faciated yarn – mélange yarns- Elastomeric yarns – Metallic yarns– (No method of production details). Sewing threads – Manufacturing flow chart for cotton and spun polyester sewing thread manufacture, 2 ply & 3 ply yarns, Embroidery threads – Properties of Viscose Rayon and Trilobal polyester thread.</p>	15

Text Book :

Title	Author	Publisher	Year
A Text book of Fibre science and	S.P.Mishra	New Age International Pvt. Ltd, Delhi- 110002	2005
Yarn Preparation	Sengupta	The Textile Institute, Manchester, UK	1970
Textiles Fibre to Fabric	Corbman	Mc Graw-Hill international Edition, Singapore editions, Singapore	1983
Textile Science	E.P.G. Gohl, L. D.Vilensky	CBS Publishers & Distributers, Delhi.	1990
Textile Terms and	The Textile Institue, UK	The Textile Institue, UK	1975
Man-Made fibres	William Moncrieff	Butter worth & Co. Ltd., London	1975

Reference:

Title	Author	Publisher	Year
Manual of cotton Spinning	Shirley	The Textile Institute Manchester, UK	1965
Practical guide to opening & Carding	Klein.W	The Textile Institute, Manchester, UK	1987
Open End Spinning	Rohlana	Elsevier Scientific Publishing Co.,	1974
Handbook of Textile fibres Vol I & II- Natural Fibres	J.Gardon Cook	Wood Head Publishing Ltd	2005
Spinning of Man-mades and Blends on Cotton	Salhotra K R	Textile Association(India), Mumbai	-

MODEL QUESTION PAPER – I

Term : III Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Fibre Science And Yarn Manufacture Course Code : N1GT204

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART – A

1. What is Textile Fiber?
2. Draw the microscopic appearance for Wool Fiber.
3. What are the yarns that are produced from the wet spinning process?
4. Write any two uses of Nylon 66 fiber.
5. Define Ginning.
6. Define Doubling.
7. What is Texturisation?
8. What do you mean by Metallic Yarns?

PART – B

9. Name the varieties of cotton fiber.
10. How will you identify the fibers by burning test?
11. Write the properties of polyester fiber.
12. How will you produce yarn by Melt spinning method?
13. Write about Compact spinning.
14. Distinguish carded and combed yarn.
15. Briefly explain about stuffer box Texturisation Method.
16. Explain the types of Embroidery Threads.

[Turn over....

PART – C

17. (a) Detail the important properties of an Ideal textile fibre.

(Or)

(b) Explain in Microscopic appearance and Solvent test for textile fiber.

18. (a) Explain in detail the manufacturing of Viscose Rayon.

(Or)

(b) Explain in detail the manufacturing of Acrylic fiber.

19. (a) Explain the sequence of process involved in Carded yarn manufacturing.

(Or)

(b) Explain in detail about Air jet spinning.

20. (a) Give the neat sketch of the passage of material through Doubling machine.

(Or)

(b) With neat sketch, explain the Air and False Twist Texturisation process.

21. (a) Write about the components of Core, Elastomeric and Faciated yarns.

(Or)

(b) Give the process flowchart for cotton and spun polyester sewing thread manufacture.

MODEL QUESTION PAPER – II

Term : III Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Fibre Science And Yarn Manufacture Course Code : N1GT204

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART – A

1. Write the Content of Cotton fiber.
2. Define Degumming.
3. What are the yarns that are produced from the Melt spinning process?
4. Write any two uses of Polyester fiber.
5. Write the objects of Mixing and Blending.
6. Define Doubling.
7. What is Texturisation?
8. What do you mean by Chenille Yarns?

PART – B

9. Write the properties of Wool fiber.
10. How will you identify the fibers by Solvent test?
11. Write the properties of polyester fiber.
12. How will you produce yarn by Wet spinning method?
13. Write about Friction spinning.
14. Distinguish Ring and OE yarn.
15. Briefly explain about stuffer box Texturisation Method.
16. Explain the types of Embroidery Threads.

Turn over....

PART – C

17. (a) Detail the important properties of an Ideal textile fibre.

(Or)

(b) Explain in Microscopic appearance and Burning test for textile fiber.

18. (a) Explain in detail the manufacturing of Viscose Rayon.

(Or)

(b) Explain in detail the manufacturing of Nylon 66.

19. (a) Explain the sequence of process involved in Combed yarn manufacturing.

(Or)

(b) Explain in detail about Air jet spinning.

20. (a) Give the neat sketch of the passage of material through Two for one Twister.

(Or)

(b) With neat sketch, explain the Air and False Twist Texturisation process.

21. (a) Write about the components of Covered, Elastomeric and Faciated yarns.

(Or)

(b) Give the process flowchart for cotton and spun polyester sewing thread manufacture.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 301
Term : III Term
Course Name : FASHION DESIGNING

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
FASHION DESIGNING	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	ELEMENTS & PRINCIPLES OF DESIGN	15
II	COLOUR ASPECTS	15
III	DESIGN DEVELOPMENT	15
IV	WARDROBE PLANNING	15
V	FASHION INDUSTRY	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

- C301.1 Acquire knowledge on Elements and Principles of design.
- C301.2 Acquire knowledge in color basics and color scheme.
- C301.3 Understand design development.
- C301.4 Understand Wardrobe planning.
- C301.5 Acquire knowledge on the fashion Industry.

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C301.1	Acquire knowledge on Elements and Principles of design.	R/U/A	1,3,5,6,7	15
C301.2	Acquire knowledge in color basics and color Scheme	R/U/A	1,3,5,6,7	15
C301.3	Understand design development.	R/U/A	1,3,5,6,7	15
C301.4	Understand Wardrobe planning.	R/U/A	1,3,5,6,7	15
C301.5	Acquire knowledge on the fashion Industry	R/U/A	1,3,5,6,7	15
			Total sessions	75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	ELEMENTS & PRINCIPLES OF DESIGN	15	25	2	18	5	17.86 %
II	COLOUR ASPECTS	15	25	2	18	5	17.86 %
III	DESIGN DEVELOPMENT	15	25	2	18	5	17.86 %
IV	WARDROBE PLANNING	15	25	2	18	5	17.86 %
V	FASHION INDUSTRY	15	25	2	18	5	17.86 %
I to V*			15	6	9	0	10.70 %
Total		75	140	16	99	25	100 %

* 3 x 2Marks and 3 x 3Marks from any Unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
FASHION DESIGNING	2	-	2	-	2	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course-PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
FASHION DESIGNING	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

- IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
 IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
 IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
 IF $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

DETAILED SYLLABUS

Contents: Theory

Unit	Topic	Hours
I	<p>ELEMENTS & PRINCIPLES OF DESIGN</p> <p>Elements of designs - Different types of lines on dresses - Different types of dress Shapes - Different types of Texture on dresses - Light and Shade effects on dresses. Illusion created by Lines, Shapes, Texture, Colour. Principles of Design - Unity on dress - Emphasis on dress - Balance on dress - Proportion on dress - Harmony on dress - Rhythm on dress. Objects of Radiation and Gradation on dress. Equipments for sketching - different types of pencils, markers, brushes, papers.</p>	15
II	<p>COLOR ASPECTS</p> <p>Introduction to colour theory - Pigment colour theory – Primary, Secondary, Intermediate and Tertiary colours in pigment theory – Study of 12 colour wheel. Study of Colour dimensions - Hue, Value, Intensity, and Tints & Shades - Warm and Cool colours. Study of Colour Scheme – Related colour scheme – Monochromatic, Neutral, Analogous Contrast colour scheme – Simple contrast, Double contrast, Split, Triad - Psychology of colour on dress - Application of colour on different seasons. Brief study of Munsell colour systems and Brief study of Colour harmony.</p>	15
III	<p>DESIGN DEVELOPMENT</p> <p>Design development –Motif – Definition – Types of motifs Development of motifs – Motifs on the fabrics – Steps in des development – Sources of Inspirations – Design development through natural sources. Study of Pattern in fabrics - Naturalistic abstract - Conventional – Geometric - Animate - Abstract - floral design – Half drop design & Reverse half drop design. Study of Structural and Decorative Design - Different types of Structural design on dress - Study of Decorative items - Different types of decorative design on dress - Characteristics of good decorative design.</p>	15
IV	<p>WARDROBE PLANNING</p> <p>Life style analysis- Pre-existing wardrobe analysis- Factors influencing personality- Study of Wardrobe planning-Formal wear, Casual wear, Leisure wear and Accessories- Factors to be considered economic factors-social factors - Purchase planning - Selection of materials - Wardrobe plans for Teen age and middle age people - Dress for occasions- Dress for seasons.</p>	15
V	<p>FASHION INDUSTRY</p> <p>Introduction to Fashion industry - Mood board, fabric board, colour board, accessory board. Understanding the fabrics, construction and embellishments. - Work of Fashion Director - Work of Fashion Designer – Well known fashion designer of India, USA, UK, and France - Fashion capitals - Fashion shows and its importance – Procedure to conduct fashion show – Importance of Fashion magazines – Importance of Fashion forecasting and steps involved in forecasting.</p>	15

Text Book:

Title	Author	Publisher	Year
Illustrating Fashion	Kathryn McKelvey & Janine Munslow	Blackwell Publishing	2005
Fashion Design Process, Innovation & Practice	Kathryn McKelvey & Janine Munslow	Blackwell Publishing	2003
Art in everyday life	Goldstein and Goldstein	-do-	
Elements of Design & Apparel Design	Sumathi.G.J	New Age International, Delhi	2002

Reference:

Title	Author	Publisher	Year
The Psychology of dress	Frank Alvah	Doubleday Page & Co.	1982
The arts of costume & Personal appearance	Grace Margarit Morton	John Wiley & Sons London.	1985
How you look and dress	Byrta Carson	Mcgraw - Hill Book co. London.	1981
Fabrics and dress	Ruth tone and Tarplay	Houghton Mifflin London	1981
Elementary Costume design	Harison feather	John Wiley and Sons Stone Dorothy	1983
Dress Designing	H.F. Kepworth	The English Univ. Press Ltd., London	1981
Individuality and Cloths	Margaret story	Funle & Wsanalls Lippion cott.	1985
Essential of Design	Degrmo Winslow	Macillion Co. New York.	1986
Men's wardrobe	Thames and Hudson	London	1996
Art & Fashion	Dr. Alice Mackrell	Batsford Publication	2005

MODEL QUESTION PAPER – I

Term : III Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Fashion Designing Course Code : N1GT301

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. What is Unity?
2. Define rhythm on dress.
3. What do you mean by Tertiary Colours.
4. Give the example for Warm and Cool colours.
5. Define motif.
6. Define Half Drop Design.
7. What is Casual Wear?
8. What is Mood Board?

PART- B

9. Write short note on Radiation.
10. Write the psychology of colour.
11. What is meant by Colour Dimensions?
12. Write short note on Decorative design.
13. Mention any two factors to be considered in selecting materials for wardrobe?
14. Write short notes on dress for occasions.
15. What are the importance of fashion magazines?
16. Briefly write the work of Fashion Designer

[Turn over....

PART- C

17. (a). Explain in detail about the elements of design

(OR)

(b). Explain in detail about the different types of equipment used for sketching

18. (a). Explain the colour wheel with neat sketch.

(OR)

(b). Explain in detail about the colour scheme with neat sketch..

19. (a). Explain the structural design with suitable diagram.

(OR)

(b). Explain the following Pattern in fabrics.

i. Geometric ii. Conventional iii. Floral Design

20. (a). Explain the Wardrobe plan for Teenage Girl.

(OR)

(b). Elaborate on wardrobe planning for different occasion

21. (a). Explain the procedure for conducting Fashion Show.

(OR)

(b). Explain in detail about fashion forecasting and their steps involved in it.

MODEL QUESTION PAPER –II

Term : III Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Fashion Designing Course Code : N1GT301

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. What is Emphasis?
2. Define Balance on dress.
3. What do you mean by Primary Colours.
4. Define Tint.
5. Define motif.
6. Define Reverse Half Drop Design.
7. What is Formall Wear?
8. What is Colour Board?

PART- B

9. Write short note on Gradation.
10. Write about psychology of colour.
11. Write a short note on related colour scheme.
12. Write short note on Structural design.
13. Mention any two factors to be considered in selecting materials for wardrobe.
14. Write short notes on dress for occasions.
15. What are the importance of fashion magazines?
16. What are the steps involved in fashion forecasting?

[Turn over....

PART- C

17. (a). Explain in detail about the Principles of design

(OR)

(b). Explain in detail about the different types of equipment used for sketching

18. (a). Explain the colour wheel with neat sketch.

(OR)

(b). Explain in detail about the colour scheme with neat sketch..

19. (a). Explain the Decorative design with suitable diagram.

(OR)

(b). Explain the following Pattern in fabrics.

i. Geometric ii. Animate iii. Half drop design

20. (a). Explain the Wardrobe plan for Middle age People.

(OR)

(b). Elaborate on wardrobe planning for different occasion

21. (a). Explain the procedure for conducting Fashion Show.

(OR)

(b). Discuss the various work of fashion designer.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 302
Term : III Term
Course Name : APPAREL DESIGNING

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board Examination	Total	
APPAREL DESIGNING	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	BASICS OF APPAREL DESIGN	15
II	PATTERN LAYOUT	15
III	SEAM, SEAM FINISHES AND PLACKETS	15
IV	YOKE, COLLARS AND SLEEVES	15
V	CUFF, POCKETS AND FULLNESS	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

- C302.1 Know about the anatomy of human figure and measurements
- C302.2 Understand the layout and cloth estimation
- C302.3 Know about the seams and seam finishes
- C302.4 Understand the various components of the garment
- C302.5 Know about Fullness.

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C302.1	Know about the anatomy of human figure and measurements	R/U/A	1,3,5,6,7	15
C302.2	Understand the layout and cloth estimation	R/U/A	1,3,5,6,7	15
C302.3	Know about the seams and seam finishes	R/U/A	1,3,5,6,7	15
C302.4	Understand the various components of the garment	R/U/A	1,3,5,6,7	15
C302.5	Know about Fullness	R/U/A	1,3,5,6,7	15
		Total sessions		75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	BASICS OF APPAREL DESIGN	15	25	2	18	5	17.86 %
II	PATTERN LAYOUT	15	25	2	18	5	17.86 %
III	SEAM, SEAM FINISHES AND PLACKETS	15	25	2	18	5	17.86 %
IV	YOKE, COLLARS AND SLEEVES	15	25	2	18	5	17.86 %
V	CUFF, POCKETS AND FULLNESS	15	25	2	18	5	17.86 %
I to V*			15	6	9	0	10.70 %
	Total	75	140	16	99	25	100 %

* 3 x 2Marks and 3 x 3Marks from any Unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
APPAREL DESIGNING	3	-	3	-	2	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course-PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
APPAREL DESIGNING	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
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DETAILED SYLLABUS

Contents: Theory

Unit	Name of the Topic	Hours
I	<p>BASICS OF APPAREL DESIGN</p> <p>Eight head theory and its importance in apparel manufacturing, Garment Construction Tools & Equipment – Measuring, Marking, Cutting, Pressing and General tools. Measurements – Importance, Procedure for taking measurements and Various body measurements for Kid’s, Lady’s & Gent’s. Pattern – Definition and importance of paper patterns, Types and its merits and demerits of patterns. Fabric Details – Kinds of fabrics for Garment Constructions- Plain, Striped, Checked, Napped, Pile, one way, Printed designs.</p>	15
II	<p>PATTERN LAYOUT</p> <p>Fabric grains – types of grain and its importance. Principles in pattern making – Pattern layout and its importance – Principles in pattern layout – Different types fabric folding for layout – Special types of Layout – Procedure for economical layout- Insufficient fabric layout – Marshdan layout for bulk production and its importance –Type of Lays – Lay length and marker – Marker efficacy – Lay efficiency.</p>	15
III	<p>SEAMS, SEAM FINISHES & PLACKETS</p> <p>Seams – Definition- Different types of seams- Plain, French, Welt seam, Top stitch seam. Seam finishes- Piped, crossed, Bound and Pinked. Hems – definition – types of hems – Slip, Catch stitch, Invisible, Herring bone. Plackets & Openings – definition- characteristics of good plackets. Types of plackets – One piece, Two pieces, Tailored and Zipper plackets.</p>	15
IV	<p>YOKE, COLLARS AND SLEEVES</p> <p>Yoke – definition- selection of yoke design. Different types of yokes –Partial, Midriff, and Yoke with fullness. Collars – Types of collar like Shirt, Stand, Ruffle, Roll, Shawl, Peter pan, Square and Neck line finishes. Sleeves – types of sleeves such as Plain, Puff, Bell, Circular, Leg-O-mutton, Magyar, and Raglan sleeves.</p>	15
V	<p>CUFFS, POCKETS AND FULLNESS</p> <p>Types of cuffs - Round, Gauntlet and pointed. Pockets - Different types of pockets such as Patch, Welt, front Hip and Set in pocket. Fullness – definition, Single and double pointed darts, Relocation of dart by slash and spread method. Types of tucks like pin tuck, cross tuck, piped tuck, shell tuck and importance, Types of pleats like Knife pleat, Box pleat, Kick pleat, Cartridge pleat, Pinch pleat and its importance. Gathers and Frills.</p>	15

Text Book:

Title	Author	Publisher	Year
Practical clothing construction Part I& II	Mary Mathews	Bhatarans Reprographics (P) Ltd., Chennai.	1974
The Art of Sewing	Anna Jacob Thomas	UBS Publisher, Delhi	2001
Practical dress Design	Enwin, M.D.	The MacMillan Comp ., New York.	1982

Reference:

Complete guide to sewing	Reader's digest sewing guide	Association, Inc. Newyork	1976
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MODEL QUESTION PAPER – I

Term : III Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Apparel Designing Course Code : N1GT302

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. What is eight head theory?
2. Define Paper Pattern.
3. Define Fabric Grains.
4. What is Marshdan Layout?
5. What is Placket?
6. What is Yoke?
7. What is Cuff?
8. What is Pinch Pleat?

PART- B

9. Name the tool used for marking.
10. Explain lay length and marking efficiency.
11. Write the procedure for economical layout.
12. Explain the characteristics of good plackets.
13. Briefly explain the different types of collar.
14. Write about selection of Yoke Design.
15. Define Gathers and Frills.
16. Write a brief note on Fullness.

[Turn over....

PART- C

17. a) Explain the important gent's measurement in detail.

(Or)

b) Explain eight head theory and its importance.

18. a) Explain the principles of pattern layout.

(Or)

c) Explain the special types of layouts with neat sketches.

19. a) Explain different type of Seams.

(Or)

c) Explain the construction of two piece and tailored placket.

20. a) Explain the construction of midriff yoke, Partial yoke and Yoke with Fullness.

(Or)

b) Explain the construction of Stand, Shirt and Ruffle collars.

21. a) Explain the different types of darts.

(Or)

b) Explain the different type of tucks.

MODEL QUESTION PAPER – II

Term : III Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Apparel Designing Course Code : N1GT302

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. What is Checked Design?
2. Write any two merits of Paper pattern.
3. Define Fabric Grains.
4. Define Lay efficiency.
5. What is Seam finish?
6. What is Yoke?
7. What is Ruffle Collar?
8. Write any two types of tuck.

PART- B

9. Name the tool used for marking.
10. Explain one way and printed designs.
11. Write the procedure for insufficient fabric layout.
12. Explain the characteristics of good plackets.
13. Briefly explain the different types of seams.
14. Write about selection of Yoke Design.
15. Define Gathers and Frills.
16. Briefly explain about Patch and Welt pockets.

[Turn over....

PART- C

17. a) Explain the important lady's measurement in detail.

(Or)

b) Explain eight head theory and its importance.

18. a) Explain the principles of pattern layout.

(Or)

c) Explain the different types of fabric folding for layout.

19. a) Explain different type of Seam Finishes.

(Or)

c) Explain the construction of Invisible, Slip and Herring bone hems.

20. a) Explain the construction of midriff yoke, Partial yoke and Yoke with Fullness.

(Or)

b) Explain the construction of Magyar, Raglan and Circular sleeve.

21. a) Explain the different types of darts.

(Or)

b) Explain the different type of Pleats.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 310
Term : III Term
Course Name : FASHION DESIGNING PRACTICAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
FASHION DESIGNING PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C310.1 Ability to draw figures and basic garment shapes.
- C310.2 Ability to colour chart.
- C310.3 Ability to prepare colour boards..
- C310.4 Ability to draw men based garment.
- C310.5 Ability to draw women based garment.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs.
C310.1	Ability to draw figures and basic garment shapes	1,2	A	1,3,4,5,6,7	25
C310.2	Ability to colour chart	3,4,	A	1,3,4,5,6,7	10
C310.3	Ability to prepare colour boards.	5,6,7,8,9,10	A	1,3,4,5,6,7	30
C310.4	Ability to draw men based garment.	11	A	1,3,4,5,6,7	5
C310.5	Ability to draw women based garment.	12	A	1,3,4,5,6,7	5
			Total sessions		75

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
FASHION DESIGNING PRACTICAL	2	-	2	2	2	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

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Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
FASHION DESIGNING PRACTICAL	3	3

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
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LIST OF EXPERIEMENTS

1. Draw Male and Female figures using Eight head theory.
2. Draw basic garment shapes- pleats, collars etc.
3. Prepare 12 colour wheel charts.
4. Prepare chart for Tint and Shade.
5. Prepare colour board for Mono chromatic Colour Scheme.
6. Prepare colour board for Analogous Colour Scheme.
7. Prepare colour board for Complimentary Colour Scheme.
8. Prepare colour board for Simple Contrast Colour Scheme.
9. Prepare colour board for Split Contrast Colour Scheme.
10. Prepare colour board for Warm and cool colours.
11. Design a garment for Men based on your own taste.
12. Design a garment for Women based on your own taste

CONTENT BEYOND SYLLABUS

1. Design a garment for a teen age girl.
2. Design a party wear for children

LIST OF EQUIPMENT

Drawing table- 30 nos.

Materials required :

Chart paper- A4/ A3 size- 30 nos. / expt./ batch of 30 students.

Drawing tools & colouring tools- 30nos./ expt./ batch of 30 students.

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Experiment	60 marks
Write up	10 marks
Viva	05 marks
Total	75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 207
Term : III Term
Course Name : EMBROIDERY PRACTICAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
EMBROIDERY PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C207.1 Apply basic embroidery stitches.
- C207.2 Apply Lazy daisy, Button hole and Blanket stitches
- C207.3 Apply Fly, Herring bone stitches and knot stitches.
- C207.4 Apply Satin, Zardoshi and stone work.
- C207.5 Acquire knowledge on machine Embroidery.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs.
C207.1	Apply basic embroidery stitches.	1,2,3	A	1,3,4,5,6,7	15
C207.2	Apply Lazy daisy, Button hole and Blanket stitches	4, 5,6	A	1,3,4,5,6,7	15
C207.3	Apply Fly, Herring bone stitches and knot stitches.	7,8,9	A	1,3,4,5,6,7	15
C207.4	Apply Satin, Zardoshi and stone work.	10,11	A	1,3,4,5,6,7	15
C207.5	Acquire knowledge on machine Embroidery	12	A	1,3,4,5,6,7	15
			Total sessions		75

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
EMBROIDERY PRACTICAL	2	-	2	2	2	2	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
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Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
EMBROIDERY PRACTICAL	2	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

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VSNMP

LIST OF EXPERIMENTS

1. Prepare Embroidery Design using Running Stitch & Double running stitch.
2. Prepare Embroidery Design using Stem Stitch & Back stitch.
3. Prepare Embroidery Design using Chain Stitch.
4. Prepare Embroidery Design using Lazy Daisy Stitch.
5. Prepare Embroidery Design using Button hole Stitch.
6. Prepare Embroidery Design using Blanket Stitch
7. Prepare Embroidery Design using Fly Stitch or Feather stitch.
8. Prepare Embroidery Design using Fish-Bone or Herring bone.
9. Prepare Embroidery Design using Knot stitch.
10. Prepare Embroidery Design using Satin Stitch.
11. Prepare Embroidery Design using Zardoshi and stone work.
12. Prepare Machine Embroidery Design using Running and Satin stitch

CONTENT BEYOND SYLLABUS

1. Prepare a Hand kerchief applying suitable Embroidery stitches.
2. Design a neckline using suitable embroidery stitches.

LIST OF EQUIPMENT

Hand / Machine embroidery tools & machineries:-

Embroidery frame- 30 nos.

Hand needles- 30 nos.

Tracing wheel- 30 nos.

Thimbles- 30 nos.

Embroidery machines:

Lock stitch sewing or embroidery machine- 30 nos. Zig -Zag machine*
Fashion Maker*

Multi head multi needle embroidery machine*

*- Optional

Materials required:

2 meter fabric/ expt/ batch of 30 students

1 meter Non-woven or Sponge sheet / expt/ batch of 30 students 10 sheets of tracing
paper/expt/batch of 30 students

Embroidery threads- 30skeins of assorted colors/expt/ batch of 30 students

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Experiment 50 marks

Write up 20 marks

Viva 05 marks

Total 75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 311
Term : III Term
Course Name : APPAREL DESIGNING PRACTICAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
APPAREL DESIGNING PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C311.1 Able to construct seams, hems and plackets.
- C311.2 Able to construct pockets, sleeves and collar.
- C311.3 To understand construction of darts and Pleats
- C311.4 To know the construction of tucks, Frills and gathers
- C311.5 To know the finishing of Neckline.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	Linked PO	Teaching Hrs.
C311.1	Able to construct seams, hems and plackets.	1,2,3	1,3,4,5,6,7	10
C311.2	Able to construct pockets, sleeves and collar.	4,5,6,7	1,3,4,5,6,7	23
C311.3	To understand construction of darts and Pleats	8,9	1,3,4,5,6,7	24
C311.4	To know the construction of tucks, Frills and gathers	10,11	1,3,4,5,6,7	23
C311.5	To know the finishing of Neckline	12	1,3,4,5,6,7	10
Total				90

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
APPAREL DESIGNING PRACTICAL	2	-	2	2	2	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
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Course-PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
APPAREL DESIGNING PRACTICAL	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
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 IF $< 5\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS CONSIDERED NOT-ADDRESSED.

LIST OF EXPERIMENTS

1. Construct different types of Seams – any three.
2. Construct different types of Hems– any three.
3. Construct different types of Plackets– any three.
4. Construct different types of Pockets– any three.
5. Prepare patterns and Construct any two sleeves.
6. Prepare patterns and Construct Shirt collar.
7. Prepare patterns and Construct Peter pan collar.
8. Construct different types of Darts.
9. Construct Knife, Box, Cartridge and Pinch pleats.
10. Construct different types of Tucks– any three.
11. Construct different types of Frills and Gathers.
12. Construct different types of Neck Line Finishes– any

CONTENT BEYOND SYLLABUS

1. Construct a inverted box pleat
2. Construct a asymmetrical Neckline

LIST OF EQUIPMENT

Equipment required:

Measuring tools Pattern making tools Construction tools General tools Sewing machines:

Materials required:

Lock stitch- 15 m/cs. Over lock- 2 m/c. Flat lock- 1 m/c Button hole- 1 m/c Button stitch- 1 m/c

3- 5 meters of fabric/ expt./ batch of 30 students. Sewing threads: - white and assorted – 30 nos.

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Experiment	50 marks
Write up	20 marks
Viva	05 marks
Total	75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 406
Term : III Term
Course Name : HANDICRAFT PRACTICAL

TEACHING & SCHEME OF EXAMINATION:

No. of weeks per Semester: 15 Weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
HANDICRAFT PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C406.1 Ability to prepare sample for crotchet stitches
- C406.2 Ability to design & stitch ladies purse
- C406.3 Ability to design & stitch shoulder bag.
- C406.4 Ability to apply fabric colours.
- C406.5 Ability to paint on glass.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs.
C406.1	Ability to prepare sample for crochet stitches	1,2,3,4,5,6,7	A	1,3,4,7	35
C406.2	Ability to design & stitch ladies purse	8	A	1,3,4,7	10
C406.3	Ability to design & stitch shoulder bag.	9,10	A	1,3,4,7	20
C406.4	Ability to apply fabric colours.	11	A	1,3,4,7	5
C406.5	Ability to paint on glass	12	A	1,3,4,7	5
			Total sessions		75

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
HANDICRAFT PRACTICAL	2	--	2	2	-	-	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

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Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
HANDICRAFT PRACTICAL	1	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.
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LIST OF EXPERIMENTS

1. Prepare a sample using single crochet
2. Prepare a sample using double crochet
3. Prepare a sample using shell crochet
4. Prepare a sample using puff stitch in crochet
5. Prepare a sample using cluster stitch in crochet
6. Prepare a sample for motif using Crochet stitches
7. Prepare a sample for braid using two colors
8. Design, cut, stitch and finish of ladies purse
9. Design, cut, stitch and finish of shoulder bag
10. Design, cut, stitch and finish of shopping bag
11. Prepare a table cloth and design it with fabric colours
12. Prepare a wall hanger by glass painting

CONTENT BEYOND SYLLABUS

1. Prepare a coaster using single crochet.
2. Design a Pillow cover with fabric colours.

LIST OF EQUIPMENT

Crotchet needle- 30nos

Materials required:

Lock stitch- 15 m/cs.

3- 5 meters of fabric/ expt./ batch of 30 students. Sewing threads: 30 nos.

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Experiment 50 marks

Write up 20 marks

Viva 05 marks

Total 75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT303
Term : IV Term
Course Name : APPAREL PRODUCTION PLANNING AND CONTROL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
APPAREL PRODUCTION PLANNING AND CONTROL	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	INTRODUCTION	15
II	APPAREL ENGINEERING	15
III	PRODUCTION PLANNING AND MATERIALS MANAGEMENT	15
IV	BALANCING, MRP AND QUICK RESPONSE	15
V	INDUSTRIAL ENGINEERING	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

C303.1 Understand the production preplanning

C303.2 Learn about production systems

C303.3 Understand the production planning

C303.4 Learn about MRP

C303.5 Learn about the Time study

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C303.1	Understand the production preplanning	R/U/A	1,2,3,6	15
C303.2	Learn about production systems	R/U/A	1,2,3,6	15
C303.3	Understand the production planning	R/U/A	1,2,3,6	15
C303.4	Learn about MRP	R/U/A	1,2,3,6	15
C303.5	Learn about the Time study	R/U/A	1,2,3,6	15
		Total sessions		75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	UNDERSTAND THE PRODUCTION	15	25	2	18	5	17.86 %
II	LEARN ABOUT PRODUCTION SYSTEMS	15	25	2	18	5	17.86 %
III	UNDERSTAND THE PRODUCTION PLANNING	15	25	2	18	5	17.86 %
IV	LEARN ABOUT MRP	15	25	2	18	5	17.86 %
V	LEARN ABOUT THE TIME STUDY	15	25	2	18	5	17.86 %
I to V*		15	15	6	9	0	10.70 %
	Total		140	16	99	25	100 %

* 3 x 2Marks and 3 x 3Marks from any Unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
APPAREL PRODUCTION PLANNING AND CONTROL	2	3	1	-	-	2	-

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
APPAREL PRODUCTION PLANNING AND CONTROL	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.
METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
IF $< 5\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS CONSIDERED NOT-ADDRESSED.

DETAILED SYLLABUS

Contents: Theory

Unit	Name of the topic	Hours
I	INTRODUCTION Production Control – Objectives – Relationship with functional areas of Manufacturing – elements of production control system- strategy for implementing a production control system- Business preplan –objectives- Merchandising preplanning- Basic strategy- Financial planning- Cash flow analysis- production preplanning.	15
II	APPAREL ENGINEERING Basic concept of Apparel engineering – Flexible Manufacturing – Throughput – Work flow – Plant layout- materials handling- Production systems – Progressive Bundle system- Unit Production system- Modular Production system – Individual finishing system – Group system – Combination of Production system – Mass production system – Lean production system – Comparison of lean and mass production system – Ergonomics.	15
III	PRODUCTION PLANNING AND MATERIAL MANAGEMENT Production planning- Plant capacity- Committed Capacity- Available capacity- Potential capacity- Required capacity- Individual operation capacity- Excess capacity- Relationship of production Standards to capacity. Basic principles in material management – Principles of purchasing – Purchasing system based on Sales plan. Inventory control – Economic order quantity.	15
IV	BALANCING, MRP AND QUICK RESPONSE Introduction- Basics of Sectionalization – Basics of Balancing – Scheduling of machines- Theoretical Balancing- Balancing of work force- Principles of Manufacturing Resource Planning (MRP)- Critical assessment of MRP- Clothing industry experiences of MRP- Organizational strategies for Quick Response- Standardization affecting the materials supply chain- Buyer / Supplier relationship- Brief study of Sourcing strategies- Just in time suppliers- Overseas sourcing.	15
V	INDUSTRIAL ENGINEERING Role IE in garment production management - Implementation procedure – Time study – Definition, Calculation of basic time, Calculation for standard time, Definition of SAM - SAM calculation through time study - Steps in production line setup – make operation breakdown - Define machine for each operation - Calculate production/Hour and no. of machine and Balancing of machine.	15

Text Book:

Title	Author	Publisher	Year
Introduction to Clothing Production Management	Chuter AJ	Blackwell Science	1998
Materials Management In Clothing Production	David J Taylor	BSP Professional Books London	2001

Reference:

Title	Author	Publisher	Year
Apparel manufacturing	Ruth E Glock Grace I Kunz	Prentice hall New Jersey	1987
Industrial Engineering in Apparel Production	Ramesh Babu V	Woodhead Publishing India	2012
Industrial Engineering and Management	N V S Raju	Cengage Learning	2015

MODEL QUESTION PAPER – I

Term : IV Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Apparel Production Planning and Control Course Code : **N1GT303**

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. Define Production Control
2. What is financial planning?
3. Define individual finishing system.
4. What is Lean production system?
5. Define Production Planning.
6. Define Inventory Control.
7. Define theoretical balancing.
8. Define SAM.

PART-B

9. Give the objectives of Business preplanning.
10. Briefly explain about cash flow analysis.
11. Briefly explain about Ergonomics.
12. Write the basic principles in material management.
13. What is Plant capacity?
14. Briefly explain about Overseas Sourcing.
15. Briefly explain about MRP.
16. Briefly explain about Balancing of Machine.

[Turn over....

PART- C

17.a) Explain in detail about Elements of Production control system.

(OR)

b) Explain in detail about Merchandising Preplanning.

18. a) Explain in detail about Lean Production system.

(OR)

b) Explain in detail about various material handling equipment used for Garment production

19. a) Explain in detail about Principles involved in Material Management.

(OR)

b) Explain in detail about Economic Order Quantity.

20.a) Explain in detail about critical assessment of MRP.

(OR)

b) Explain in detail about Just in time suppliers and overseas sourcing.

21. a) Explain in detail about Time Study.

(OR)

b) Explain about role of IE in garment industry.

MODEL QUESTION PAPER – II

Term : IV Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Apparel Production Planning and Control Course Code : **N1GT303**

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. What is Production Control?
2. What is Business preplanning?
3. Give the different types of Garment production system.
4. What is Ergonomics?
5. Define Production Planning.
6. Define Inventory Control.
7. Give the advantages of Buyer/supplier relationship.
8. Define Time Study.

PART-B

9. Give the objective of preplanning.
10. Briefly explain about financial planning.
11. Briefly explain about Mass production system.
12. Write the basic principles in material management.
13. What is Plant capacity?
14. Briefly explain about Basics of Balancing.
15. Briefly explain about MRP.
16. Briefly explain about SAM.

[Turn over....

PART- C

17.a) Explain in detail about Elements of Production control system.

(OR)

b) Explain in detail about Production Preplanning.

18. a) Explain in detail about various Garment Production system.

(OR)

b) Explain in detail about various material handling equipment used for Garment production

19. a) Explain in detail about the relationship of Production standards to capacity.

(OR)

b) Explain in detail about Economic Order Quantity.

20.a) Explain in detail about critical assessment of MRP.

(OR)

b) Explain in detail about Just in time suppliers and overseas sourcing.

21.a) Explain the SAM calculation through time study.

(OR)

b) Explain about role of IE in garment industry.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 304
Term : IV Term
Course Name : TECHNOLOGY OF FABRIC MANUFACTURE

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
TECHNOLOGY OF FABRIC MANUFACTURE	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	WEAVING PREPARATORY PROCESS	15
II	WOVEN FABRIC FORMATION	15
III	KNITTED FABRIC FORMATION	15
IV	FABRIC STRUCTURES	15
V	NON WOVEN & SPECIAL FABRICS	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

C304.1 Understand the concepts of preparation of yarn for weaving.

C304.2 Understand the classification of looms.

C304.3 Understand the weft knitted fabric production.

C304.4 Apply the knowledge to identify the basic weaves.

C304.5 Knowledge on Non woven and smart textiles.

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C304.1	Understand the concepts of preparation of yarn for weaving.	R/U/A	1,2,9	15
C304.2	Understand the classification of looms.	R/U/A	1,3,6	15
C304.3	Understand the weft knitted fabric production.	R/U/A	1,3,6	15
C304.4	Apply the knowledge to identify the basic weaves.	R/U/A	1,3,6	15
C304.5	Knowledge on Non woven and smart textiles.	R/U/A	1,3,6	15
			Total sessions	75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	UNDERSTAND THE CONCEPTS OF PREPARATION OF YARN FOR WEAVING.	15	25	2	18	5	17.86 %
II	UNDERSTAND THE CLASSIFICATION OF LOOMS.	15	25	2	18	5	17.86 %
III	UNDERSTAND THE WEFT KNITTED FABRIC PRODUCTION.	15	25	2	18	5	17.86 %
IV	APPLY THE KNOWLEDGE TO IDENTIFY THE BASIC	15	25	2	18	5	17.86 %
V	KNOWLEDGE ON NON WOVEN AND SMART TEXTILES.	15	25	2	18	5	17.86 %
I to V*			15	6	9	0	10.70 %
	Total		140	16	99	25	100 %

*

3 x 2Marks and 3 x 3Marks from any Unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
TECHNOLOGY OF FABRIC MANUFACTURE	2	-	2	-	-	1	-

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
TECHNOLOGY OF FABRIC MANUFACTURE	1	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.
METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

DETAILED SYLLABUS

Contents: Theory

Unit	Name of the topic	Hours
I	<p>Weaving Preparatory Process : Sequence of processes involved in Weaving preparatory with objectives- winding, warping, sizing - Passage of material in Autoconer- Features of Autoconer- Functions of Tensioners, Slub catchers, Electronic Clearers and Splicer – Comparison between Knotting and Splicing – Advantages of splicing. – Object of Sectional Warping and its salient features - Passage of material in Beam warping - Passage of material in Sizing machine.</p>	15
II	<p>Woven Fabric Formation Looms- types- Features of Tappet, Dobby, Jacquard looms – Object of Drawing-In and Denting - Passage of Warp in a conventional Plain loom – Objects of Primary, Secondary & Auxiliary motions in a Plain loom – Features of Automatic Shuttle Loom and Shuttleless Loom - Shuttleless looms Classification (Flexible Rapier, Projectile, Air jet and Water jet) and its advantages - Defects in Woven fabrics - Missing ends, Warp & weft streaks, Floats, Temple marks and Stains.</p>	15
III	<p>Knitted Fabric Formation Knitting – Definition, Classification – Uses- Comparison between knitting and weaving - Important Knitting terms - Course, Wales, Texture, Gauge, Loop length, Loop density, Face loop, Back loop- Knitting elements -. Needles (Latch, Beard and Compound), Sinker, Cam- Passage of material in a Circular plain Weft knitting machine - Knitting cycle of Latch needle in plain weft knitting machine- Uses of Double Jersey, Flat and Warp knitting machine. Defects in Weft knit fabrics - Vertical lines, Horizontal lines, Drop stitches, Distorted stitches and Press off - Comparison between woven and knitted fabrics.</p>	15
IV	<p>Fabric Structures Woven Structures: Definition of Design, Draft, Peg plan – Design, Draft & Peg plan for Plain weave– 4x4 Matt weave– 2/1, 3/1 Twill weave – 5 end Satin weave and Sateen weave – End uses of above fabrics. Knit Structures: Knit, Tuck and Miss Stitches – Drawing of Graphical and Needle (Diagrammatic) notation of single jersey Plain, purl and Double jersey Rib. Drawing of Needle (Diagrammatic) notation of Interlock and Lacoste fabrics.</p>	15
V	<p>Non Woven and Special Fabrics Non-Woven fabrics – definition - uses - classification of Non Woven Fabrics. Web Formation Techniques – Staple Fibre Webs – Wet laid webs, Dry laid webs, Parallel, Cross and Random laid webs – Continuous Filament webs – Spun laid webs and Melt blown webs. Non Woven Fabric Formations Techniques – Adhesive bonding, Thermal Bonding, Needle punching and bonding of spun laid webs. Definition of Lace fabrics and Braided fabrics.</p>	15

Text Book:

Title	Author	Publisher	Year
Principles of weaving	R Marks ATC Robinson	The Textile Institute, Manchester, UK	1976
Cotton Yarn Weaving	Kanungo R.N	Textile Association India, Ahmedabad	1980
Weaving machines, Mechanisms & Management	M K Talukdar P K Sriramulu D.B Ajgaonkar	Mahajan Publications Pvt Ltd, Ahmadabad-9	1998
Modern Weaving Technology	J K Arora	Abhisek Publications, Chandigarh- 17	2008
Knitting Technology	David J Spencer	Pergamon Press Oxford	1988
Principles of Knitting	D B Ajgaonkar	Universal Publishing Corporation	1988

References :

Title	Author	Publisher	Year
Warp Knitting	D G B Thomas	Merro Pub. Co. ISA Building, UK. UK	1985
Textile Fibre to Fabric	Bernard P Corbman	M c Graw –Hill Book co., Singapore.	1983

MODEL QUESTION PAPER – I

Term : IV

Time : 3 Hours

Programme : Diploma in Garment Technology

Max. Marks : 75

Course : Technology of Fabric Manufacture

Course Code : N1GT304

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. Write the objectives of Winding.
2. Write the advantages of splicing.
3. What are Auxillary Motions?
4. List the shuttleless looms.
5. Define Courses and Wales.
6. Define Draft.
7. What are the uses of Plain weave fabrics?
8. Give the uses of non-woven fabrics.

PART- B

9. Write short note on features of Autoconer
10. Classify the types of loom.
11. Write the objects of Secondary Motion.
12. Write short note on defects in weft Knit fabrics.
13. Briefly explain the functions of compound needle.
14. Draw the design of satin and matt weave.
15. Briefly explain Miss Stitch.
16. Briefly explain Lace fabrics and braided fabrics.

[Turn over.....

PART- C

17. (a) Write the flow chart of the sequence of processes involved in weaving preparatory.

(Or)

(b) Explain the passage of material in a Beam Warping machine.

18. (a) Draw the passage of warp yarn in a conventional plain loom.

(Or)

(b) Write notes on (i) Air jet loom (ii) Water jet loom.

19. (a) Explain of knitting elements with Proper sketch.

(Or)

(b) Explain the passage of material in circular plain weft knitting machine.

20. (a) . Draw design, draft & peg plan for 2/1 Twill and 5 end Satin weave

(Or)

(b) Draw diagrammatic notation of Knit, Tuck and Miss Stitches.

21. (a) Write notes on (i) Wet laid web (ii) Parallel laid web.

(Or)

(b) . Write notes on (i) Adhesive Bonding (ii) Needle Punching.

MODEL QUESTION PAPER – II

Term : IV
Programme : Diploma in Garment Technology
Course : Technology of Fabric Manufacture

Time : 3 Hours
Max. Marks : 75
Course Code : N1GT304

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. Define warping.
2. Mention the functions of Splicer.
3. What are Primary Motions?
4. List the shuttleless looms.
5. List the various knitting elements.
6. Define Design.
7. What are the uses of Sateen weave fabrics.
8. Define the term “Non Woven Fabric”

PART- B

9. Write short note on features of Autoconer
10. Classify the types of loom.
11. Write the objects of Secondary Motion.
12. Write short note on latch needle.
13. Briefly explain the functions of cam.
14. Draw the design of satin and matt weave.
15. Briefly explain tuck stitch.
16. Classify the nonwoven fabrics.

[Turn over.....

PART- C

17. (a) Write the flow chart of the sequence of processes involved in weaving preparatory.

(Or)

(b) Explain the passage of material in a Sizing machine.

18. (a) Draw the passage of warp yarn in a conventional plain loom.

(Or)

(b) Explain the Defects in woven fabric.

19. (a) Explain with proper sketch of knitting elements.

(Or)

(b) Explain the passage of material in circular plain weft knitting machine.

20. (a) . Draw design, draft & peg plan for 3/1 Twill and Sateen weave

(Or)

(b) Draw diagrammatic notation of Single jersey and Interlock fabrics.

21. (a) Write notes on (i) Wet laid web (ii) Dry laid web.

(Or)

(b) . Write notes on (i) Adhesive Bonding (ii) Thermal Bonding.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 305
Term : IV Term
Course Name : CLOTHING MACHINERY AND EQUIPMENT

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
CLOTHING MACHINERY AND EQUIPMENT	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	BASIC MECHANICAL ENGINEERING	15
II	BASIC ELECTRICAL & ELECTRONICS ENGINEERING	15
III	BASIC SEWING MACHINE	15
IV	SPECIAL MACHINES & ATTACHMENTS	15
V	CUTTING, FINISHING MACHINES & MAINTENANCE	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

- C305.1 Know the mechanism of sewing machines.
- C305.2 Understand about Electrical fundamentals.
- C305.3 Know about industrial sewing machines.
- C305.4 Understand the special machines and attachments.
- C305.5 Know the cutting and finishing machines.

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C305.1	Know the mechanism of sewing machines.	R/U/A	1,4,6	15
C305.2	Understand about Electrical fundamentals.	R/U/A	1,4,6	15
C305.3	Know about industrial sewing machines.	R/U/A	1,4,6	15
C205.4	Understand the special machines and attachments.	R/U/A	1,4,6	15
C305.5	Know the cutting and finishing machines.	R/U/A	1,4,6	15
			Total sessions	75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	KNOW THE MECHANISM OF SEWING MACHINES.	15	25	2	18	5	17.86 %
II	UNDERSTAND ABOUT ELECTRICAL	15	25	2	18	5	17.86 %
III	KNOW ABOUT INDUSTRIAL SEWING MACHINES.	15	25	2	18	5	17.86 %
IV	UNDERSTAND THE SPECIAL MACHINES AND ATTACHMENTS.	15	25	2	18	5	17.86 %
V	KNOW THE CUTTING AND FINISHING MACHINES.	15	25	2	18	5	17.86 %
I to V*			15	6	9	0	10.70 %
	Total		140	16	99	25	100 %

* 3 x 2Marks and 3 x 3Marks from any Unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
CLOTHING MACHINERY AND EQUIPMENT	3	-	-	2	-	2	-

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
CLOTHING MACHINERY AND EQUIPMENT	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.
METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed

DETAILED SYLLABUS

Unit	Name of the topic	Hours
I	<p>BASIC MECHANICAL ENGINEERING Transmission of Motion and Power: Types of belt drives and its advantages. Gear drive – Classification of Gear drives and its advantages. (Spur, Bevel, Helical and Worm Gear) Cams – definition – Types of Cams. Clutch – Functions of clutch – Principle and working of single plate friction Clutch with diagram. Brakes – Principle & working of Hydraulic Brake with diagram. Bearings – Type and importance. Lubrications – Purpose – types such as Liquid, Semi-liquid & Solid. Lubrication Systems – Gravity circulation System, Pressure circulating systems with diagram.</p>	15
II	<p>BASIC ELECTRICAL & ELECTRONICS ENGINEERING. Fundamentals of AC and DC. Terminologies such as Voltage, Current, Resistance, Watts, Power, Power factor. Difference between AC and DC. AC Generator- Working Principle with diagram. AC Motor- Principle & Construction with diagram. Features of Stepper motor and Servo motor. Objectives of devices such as Limit Switch, Push Button Switch, Sensors, Resistors and its Colour code, Inductor, and Transistor. Brief study of LCD and LED.</p>	15
III	<p>BASIC SEWING MACHINES Single needle Lock stitch machines – Parts and Functions, Timed sequence in stitch formation in single needle lock stitch machine, Needle bar mechanism with diagram. Brief study of Shuttle and Hook mechanism with diagram. Study of thread tension variation and its adjustment in needle and Bobbin. Different types of needles and Needle Number. Threading procedure of 3 threads over lock. Causes and remedies for sewing defects. Merits of Computerized sewing machine.</p>	15
IV	<p>SPECIAL MACHINES & ATTACHMENTS Different types of Feed mechanism in sewing machine. Flat lock Machine (5 Thread) – Threading Procedures with diagram. Brief Study of Button hole & Button Stitch Machines – Elastic tape Stitch Machine – Collar turner- Feed-Off-Arm machine – Chain Stitch Machine – Bar Tacking machine – Blind stitch Machine – Zig Zag machines – Computerized embroidery machine. Brief study of Hemmer Foot, Cording Foot, Piping Foot, Quilter & Guide Foot with diagram. Brief study of special attachments and uses – Folders, Binders & Guides.</p>	15
V	<p>CUTTING, FINISHING MACHINES & MAINTENANCE Objectives of Spreading – Brief study of manual and automatic machine. Types of Cutting machines – Straight Knife, Band Knife, Die Cutting and Laser Cutting. Brief study about Computerized cutting machine. Fusing – Elements of fusing, Types of Fusing machine and working of continuous fusing machine with diagram. Brief Study of Thread Sucking Equipment with diagram – Brief study of needle detector. Pressing – types of pressing system. Finishing – form finishers, tunnel finishers. Maintenance of Machines – Importance – Maintenance Schedule in Garment Units</p>	15

Text Book:

Title	Author	Publisher	Year
Mechanical Technology	V Sivarajan	VK Pub. Bangalore	
Theory of Machines	S S Rattan	Tata Mc GRAW – Hill Pub. Co .Ltd. New Delhi-110033	1996
Text book of Electrical Technology	B L Theraja A K Theraja	S. Chand & Co. New Delhi	2002
Essentials of Electricity	KC Graham	D B Taraporewala Mumbai	
Technology of Clothing Manufacture	Carr & Lathem	Blackwell Sci.Pub New York	2004
Introduction to Clothing Manufacture	Gerry Cooklin	Blackwell Sci.Pub New York	2005

References:

Title	Author	Publisher	Year
Theory of Machines	P L Ballaney	Kanna Pub., Delhi.	1980
Complete Guide to Sewing		Readers Digest.	1999
The complete book of Sewing	Dorling Kindersley	London	1999
A Text book of Machine Design	R S Khurmi J K Gupta	Eurasia Pub., New Delhi	1998

MODEL QUESTION PAPER – I

Term : IV

Time : 3 Hours

Programme : Diploma in Garment Technology

Max. Marks : 75

Course : Clothing Machinery & Equipment

Course Code : N1GT305

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. Which power transmissions have no slippage?
2. What is clutch?
3. Define Resistance.
4. Write any two merits of computerized sewing machine.
5. Write any two uses of Collar turner machine.
6. Define Cording foot.
7. Write the objectives of spreading.
8. List the types of cutting machines.

PART- B

9. Briefly explain Spur and Bevel Gear.
10. Briefly explain about Bearings.
11. Briefly explain about Power factor.
12. Explain different types of needles and needle number.
13. Briefly explain causes and remedies for sewing defects.
14. Write a note on blind stitch machine.
15. Give the uses of bar tacking machine.
16. Write the uses of Computerized cutting machine.

[Turn over...

PART- C

17. a. Explain the working principles of single plate clutch with neat sketch.

(Or)

b. Explain the method of lubricating systems and its advantages.

18. a. Explain the principle and construction of AC Motor with neat sketch.

(Or)

b. Explain the principles and construction of LED.

19. a. Draw the neat sketch of lock stitch machine and explain its parts.

(Or)

b. Explain the Needle bar mechanism with suitable diagram.

20. a. Draw the threading procedure of five threads flat lock machine.

(Or)

b. Explain any four types of foot used in sewing machine

21. a. Explain in detail about the Band Knife cutting machine.

(Or)

b. Explain the different types of pressing system.

MODEL QUESTION PAPER – II

Term	: IV	Time	: 3 Hours
Programme	: Diploma in Garment Technology	Max. Marks	: 75
Course	: Clothing Machinery And Equipment	Course Code	: N1GT305

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. Which power transmissions have no slippage?
2. What is clutch?
3. Define Watts.
4. Define Shuttle.
5. Write any two uses of Feed-Off-Arm machine.
6. Define Binders and Guides.
7. Write the objectives of spreading.
8. List the types of Pressing system.

PART- B

9. Briefly explain Helical and worm Gear.
10. Explain the features of Stepper motor.
11. Briefly explain about Limit switch.
12. Explain different types of needles and needle number.
13. Briefly explain causes and remedies for sewing defects.
14. Write a note on Chain stitch machine.
15. Give the uses of bar tacking machine.
16. Briefly explain about thread sucking equipment.

[Turn over...

- 2 -
PART- C

17. a. Explain the working principles of Hydraulic brake with neat sketch.

(Or)

b. Explain different types of belt drives.

18. a. Explain the principle and construction of AC Motor with neat sketch.

(Or)

b. Explain the principles and construction of LCD.

19. a. Draw the neat sketch of lock stitch machine and explain its parts.

(Or)

b. Explain the Needle bar mechanism with suitable diagram.

20. a. Draw the threading procedure of five threads flat lock machine.

(Or)

b. Explain the working procedure of collar turner Machine.

21. a. Explain in detail about the Laser and Die cutting machine.

(Or)

b. Explain the Maintenance of machines in garment units.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 205
Term : IV Term
Course Name : PATTERN DRAFTING AND CONSTRUCTION-I

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
PATTERN DRAFTING AND CONSTRUCTION-I	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	PATTERN DRAFTING FOR INFANTS WEAR	15
II	PATTERN DRAFTING FOR CHILDREN'S WEAR	15
III	PATTERN DRAFTING FOR GIRLS' WEAR	15
IV	PATTERN DRAFTING FOR BOYS' WEAR	15
V	PATTERN DRAFTING FOR LADIES' WEAR	15
	Total	75

Course Outcomes:

On successful completion of the course, the student will be able to:

- C205.1 To know the principles of drafting on paper
- C205.2 To comprehend the drafting procedure for various components
- C205.3 To understand the pattern construction of various components.
- C205.4 To analyze and apply drafting principles
- C205.5 Understand about dress drafting

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C205.1	To know the principles of drafting on paper	R/U/A	1,2,3,4,6,7	15
C205.2	To comprehend the drafting procedure for various components	R/U/A	1,2,3,4,6,7	15
C205.3	To understand the pattern construction of various components.	R/U/A	1,2,3,4,6,7	15
C205.4	To analyze and apply drafting principles	R/U/A	1,2,3,4,6,7	15
C205.5	Understand about dress drafting	R/U/A	1,2,3,4,6,7	15
		Total sessions		75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	TO KNOW THE PRINCIPLES OF DRAFTING ON PAPER	15	25	2	18	5	17.86 %
II	TO COMPREHEND THE DRAFTING PROCEDURE FOR VARIOUS COMPONENTS	15	25	2	18	5	17.86 %
III	TO UNDERSTAND THE PATTERN CONSTRUCTION OF VARIOUS COMPONENTS.	15	25	2	18	5	17.86 %
IV	TO ANALYZE AND APPLY DRAFTING PRINCIPLES	15	25	2	18	5	17.86 %
V	UNDERSTAND ABOUT DRESS DRAFTING	15	25	2	18	5	17.86 %
I to V*			15	6	9	0	10.70 %
	Total		140	16	99	25	100 %

* 3 x 2Marks and 3 x 3Marks from any Unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
PATTERN DRAFTING AND CONSTRUCTION-II	3	2	2	2	-	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
PATTERN DRAFTING AND CONSTRUCTION - I	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.
METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

DETAILED SYLLABUS

Unit	Name of the topic	Hours
I	<p>PATTERN DRAFTING FOR INFANTS WEAR Pattern making for Bib, Pilch Knicker, Zabra, Bloomer, Body suit (One piece baby cloth) – with styles description – suitable fabrics - Layout, fabric consumption calculation and construction procedure.</p>	15
II	<p>PATTERN DRAFTING FOR CHILDREN’S WEAR Pattern making for A line Frock, Yoke Frock, Umbrella Frock, Sun suit- with style description – suitable fabrics - Lay out, Fabric Consumption Calculation and Construction procedure.</p>	15
III	<p>PATTERN DRAFTING FOR GIRLS WEAR Pattern making for Pleated Skirt, Pinafore, Skirt blouse, Peddle Pusher- with style description- suitable fabrics – Lay out, Fabric Consumption Calculation and construction procedure.</p>	15
IV	<p>PATTERN DRAFTING FOR BOYS WEAR. Pattern making for Boys shorts, Bermuda shorts, Pyjama, Slack shirt - with style description – suitable fabrics- Lay out, Fabric Consumption Calculation and Construction procedure.</p>	15
V	<p>PATTERN DRAFTING FOR LADIES WEAR. Pattern making for, Modern Salwar, Chudidar, Kameez, Ladies skirt shorts - with style description – suitable fabrics - Lay out, Fabric Consumption Calculation and Construction procedure.</p>	15

Text Book:

Title	Author	Publisher	Year
The Art Of Sewing	Anna Jacob Thomas.	Ubs Publishers, Delhi.	2001
Practical Clothing Constructions Part I & II	Mary Mathews	Paprinpack Printers, Chennai.	1985
Zarapkar System Of Cutting.	K.R.Zarapkar	Navneet Publications (I) Ltd., Dantali. Gujarat.	

Reference:

Title	Author	Publisher	Year
Sew It Yourself.	Lippman (Gidon)	Prentice Hall Inc New Jersey	
Metric Pattern Cutting For Children's Wear	Winfred Aldrich	Blackwell science	1991
Pattern Design For Children's Clothes	Gloria Mortimer-Dunn	BTBatsford Ltd, London	1996
Clothing For Moderns	Erwine	Macmillan Pub.Co., New York.	1992
Comparative Clothing Construction Techniques	Virginn Stolpe Lewis	Surjeet publications Delhi.	
Scientific Garments Cutting	K.M.Hegde	K.M.Hegde & Sons, Poona	1989
Art In Everyday Life	Harriet Goldstein Vetta Goldstein	Oxford & IBH Publishing	1982

MODEL QUESTION PAPER – I

Term : IV Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Pattern Drafting and Construction- I Course Code : N1GT205

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. Define Pattern Drafting.
2. What is the use of Bib?
3. Draw a model for Umbrella Frock.
4. How will you calculate fabric consumption for A-line frock?
5. Give the measurements required for Peddle pusher
6. Briefly explain the style features of Shorts.
7. What kind of darts is used in Kameez?
8. List the combination garment style for kameez.

PART B

9. Write the construction procedure of pilch Knicker.
10. Write about the one piece baby cloth.
11. Draw layout for sunsuit
12. Draw and mention the measurement and parts of yoke frock
13. Calculate the fabric consumption of pleated skirt with following detail
Full length-26", waist – 28".
14. Write the parts and measurements of slack shirt.
15. Write the advantages of modern salwar.
16. Give the layout for Ladies Skirt shorts.

[Turn over...

PART- C

17.a) Explain the drafting procedure for Pilch knicker

(OR)

c) Explain the drafting procedure for Bloomer

18. a. Explain the drafting method of Umbrella frock.

(OR)

b. Explain the drafting procedure for Sun Suit.

19. a. Design and draft Peddle pusher with style description

(OR)

b. Draft a pattern for pleated skirt

20. a. Explain the drafting method of Slack Shirt with style description

(OR)

c. Explain the pattern drafting procedure of pyjama.

21.a Explain the drafting and construction of Chudidar.

(OR)

b. Explain the drafting procedure of kameez.

MODEL QUESTION PAPER – II

Term : IV Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Pattern Drafting and Construction- I Course Code : N1GT205

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. Draw a style of body suit.
2. What is the use of Bib?
3. Draw a model for Umbrella Frock.
4. How will you calculate fabric consumption for Yoke frock?
5. Give the measurements required for Peddle pusher
6. Briefly explain the style features of Bermuda Shorts.
7. What kind of darts is used in chudidar?
8. Draw a picture of modern salwar.

PART B

9. Write the construction procedure of pilch Knicker.
10. Write about the Zabla.
11. Draw layout for sunsuit
12. Draw and mention the measurement and parts of A Line frock.
13. Calculate the fabric consumption of pleated skirt with following detail
Full length-26" waist – 28".
14. Write the parts and measurements of boys shorts.
15. Write the drafting procedure for Chudidar.
16. Give the layout for Ladies Skirt shorts.

[Turn over...

PART- C

17.a) Explain the drafting procedure for Body suit.

(OR)

c) Explain the Drafting details for Bloomer

18. a. Explain the drafting method of Yoke frock.

(OR)

b. Explain the drafting procedure for Sun Suit.

19. a. Explain the construction procedure of skirt blouse.

(OR)

B.Explain the drafting procedure for pleated skirt

20. a. Explain the drafting method of Boys shorts with style description

(OR)

c .Explain the pattern drafting procedure of pyjama.

21.a Explain the drafting and construction of Chudidar.

(OR)

b. Explain the drafting procedure of kameez.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 209
Term : IV Term
Course Name : PATTERN DRAFTING –I PRACTICAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
PATTERN DRAFTING – I PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C209.1 Prepare paper pattern and material calculation for Infants wear.
- C209.2 Prepare paper pattern and fabric consumption for Children’s wear.
- C209.3 Draft the paper pattern for Boys wear.
- C209.4 Prepare the paper pattern for the garment pyjama and Kameez.
- C209.5 Develop paper patterns as per the required styles for Modern Salwar.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs.
C209.1	Prepare paper pattern and material calculation for Infants wear.	1,2	A	1,2,3,4,6,7	10
C209.2	Prepare paper pattern and fabric consumption for Children's wear.	3,4,5,6,7	A	1,2,3,4,6,7	35
C209.3	Draft the paper pattern for Boys wear.	8,9	A	1,2,3,4,6,7	10
C209.4	Prepare the paper pattern for the garment pyjama and Kameez.	10,11	A	1,2,3,4,6,7	10
C209.5	Develop paper patterns as per the required styles for Modern Salwar.	12	A	1,2,3,4,6,7	10
Total					75

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
PATTERN DRAFTING-I PRACTICAL	3	2	2	2	-	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course-PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
PATTERN DRAFTING – I PRACTICAL	2	3

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.
METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

LIST OF EXPERIMENT

1. Prepare the paper pattern and calculate fabric consumption for the Garment – Plich knicker.
2. Prepare the paper pattern and calculate fabric consumption for the Garment - Zabala
3. Prepare the paper pattern and calculate fabric consumption for the Garment – Bloomer
4. Prepare the paper pattern and calculate fabric consumption for the Garment – Body suit.
5. Prepare the paper pattern and calculate fabric consumption for the Garment – A line Frock
6. Prepare the paper pattern for the Garment – Umbrella Frock
7. Prepare the paper pattern for the Garment – Pinna fore
8. Prepare the paper pattern for the Garment – Slack shirt
9. Prepare the paper pattern for the Garment – Boys Shorts
10. Prepare the paper pattern for the Garment – Pyjama
11. Prepare the paper pattern for the Garment – Modern Salwar
12. Prepare the paper pattern for the Garment – Kameez.

CONTENT BEYOND SYLLABUS

1. Prepare the paper pattern Plich knicker with ruffles
2. Prepare the paper pattern for Kameez with assymetrical hem

LIST OF EQUIPMENT

Equipment required:

Pattern table- 8'x4' table- 4 nos.

Materials required:

Pattern paper-30 nos./expt /batch of 30 students

Measuring, drafting & general tools-30/ batch of 30 students

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Pattern preparation	50 marks
Drafting procedure	20 marks
Viva	05 marks
Total	75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 210
Term : IV Term
Course Name : GARMENT CONSTRUCTION –I PRACTICAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
GARMENT CONSTRUCTION – I PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C210.1 Cut, stitch and finish the infants garment.
- C210.2 Assemble the suitable components for Children’s wear.
- C210.3 Construct the garments for Boys wear.
- C210.4 Construct the garment components for Pyjama and Kameez.
- C210.5 Practice the construction of garments for various styles for Modern Salwar.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	Linked PO	Teaching Hrs.
C210.1	Cut, stitch and finish the infants garment.	1,2	1,2,3,4,5,6,7	15
C210.2	Assemble the suitable components for Children's wear.	3,4,5,6,7	1,2,3,4,5,6,7	35
C210.3	Construct the garments for Boys wear.	8,9	1,2,3,4,5,6,7	15
C210.4	Construct the garment components for Pyjama and Kameez.	10,12	1,2,3,4,5,6,7	15
C210.5	Practice the construction of garments for various styles for Modern Salwar.	11	1,2,3,4,5,6,7	10
			Total	90

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
GARMENT CONSTRUCTION-I PRACTICAL	3	2	2	2	1	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
GARMENT CONSTRUCTION – I PRACTICAL	2	3

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

LIST OF EXPERIMENTS

1. Using the paper pattern cut, stitch and finish the Garment - Plich Knicker
2. Using the paper pattern cut, stitch and finish the Garment - Zabala
3. Using the paper pattern cut, stitch and finish the Garment – Bloomer.
4. Using the paper pattern cut, stitch and finish the Garment – Body suit.
5. Using the paper pattern cut, stitch and finish the Garment – A line Frock.
6. Using the paper pattern cut, stitch and finish the Garment - Umbrella Frock
7. Using the paper pattern cut, stitch and finish the Garment – Pinna fore
8. Using the paper pattern cut, stitch and finish the Garment – Slack shirt
9. Using the paper pattern cut, stitch and finish the Garment – Boys Shorts
10. Using the paper pattern cut, stitch and finish the Garment – Pyjama
11. Using the paper pattern cut, stitch and finish the Garment – Salwar
12. Using the paper pattern cut, stitch and finish the Garment – Kameez

CONTENT BEYOND SYLLABUS

1. Construct Plich knicker with ruffles
2. Construct Kameez with assymetrical hem

LIST OF EQUIPMENT

Equipment / Machines required: Sewing machines-

Lock stitch- 15 m/cs. Over lock- 2 m/cs Flat lock- 1 m/c Button hole- 1 m/c Button stitch- 1 m/c 4- Needle trimmer*- 1 m/c Chain stitch*- 1 m/c Feed- off-arm* - 1 m/c Iron press- 1m/c *Optional

Material required:

1.5 – 2 meters of fabric/ expt. / batch of 30 students. Sewing threads- white, assorted
Decorative materials

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Garment Construction	50 marks
Layout & Construction Procedure	20 marks
Viva	05 marks
Total	75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 208
Term : IV Term
Course Name : SURFACE ENRICHMENT PRACTICAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
SURFACE ENRICHMENT PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C208.1 Apply shadow work stitches.
- C208.2 Apply patch work and quilt work.
- C208.3 Apply ribbon embroidery work.
- C208.4 Apply smocking.
- C208.5 Apply mirror work and sequence work.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs.
C208.1	Apply shadow work stitches.	1,2,3	A	1,3,4,5,6,7	25
C208.2	Apply patch work and quilt work.	4,9	A	1,3,4,5,6,7	10
C208.3	Apply ribbon embroidery work.	5,6,7,8,10	A	1,3,4,5,6,7	30
C208.4	Apply smocking.	12	A	1,3,4,5,6,7	5
C208.5	Apply mirror work and sequence work.	11	A	1,3,4,5,6,7	5
				Total sessions	75

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
SURFACE ENRICHMENT PRACTICAL	2	-	2	2	2	2	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
SURFACE ENRICHMENT PRACTICAL	2	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

LIST OF EXPERIMENTS

1. Prepare Embroidery Sample using Shadow work
2. Prepare Embroidery Sample using Shaded work
3. Prepare Embroidery Sample using Patch work
4. Prepare Embroidery Sample using Quilt work
5. Prepare Embroidery Sample using Ribbon embroidery
6. Prepare Embroidery Sample using Cross stitch
7. Prepare Embroidery Sample using Assisi work
8. Prepare Embroidery Sample using Cut work
9. Prepare Embroidery Sample using Smocking
10. Prepare Embroidery Sample using Kutch work
11. Prepare Embroidery Sample using Mirror work
12. Prepare Embroidery Sample using Sequence work

CONTENT BEYOND SYLLABUS

1. Prepare hand kerchief with Shaded work
2. Prepare a coaster using Quilt work

LIST OF EQUIPMENT

Embroidery frame- 30 nos.

Hand needles- 30 nos.

Tracing wheel- 30 nos.

Thimbles- 30 nos.

Materials required:

2 meter fabric/ expt/ batch of 30 students

1 meter Non-woven or Sponge sheet / expt/ batch of 30 students
10 sheets of tracing paper/expt/batch of 30 students

Embroidery threads- 30skeins of assorted colors/expt/ batch of 30 students

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Experiment 50 marks

Write up 20 marks

Viva 05 marks

Total 75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 306
Term : V Term
Course Name : TEXTILE TESTING

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
TEXTILE TESTING	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	MOISTURE AND ITS RELATIONS IN TEXTILES	15
II	FIBRE TESTING	15
III	YARN TESTING	15
IV	FABRIC TESTING	15
V	STATISTICAL QUALITY CONTROL	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

- C306.1 Understand the relationship of moisture with textiles.
- C306.2 Know about the methods of testing the fibres
- C306.3 Understand the method of testing the yarn.
- C306.4 Study the methods of testing the fabric
- C306.5 Study the statistical methods involved in quality control

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C306.1	Understand the relationship of moisture with textiles.	R/U/A	1,2,3,6,7	15
C306.2	Know about the methods of testing the fibres	R/U/A	1,2,3,6,7	15
C306.3	Understand the method of testing the yarn.	R/U/A	1,2,3,6,7	15
C306.4	Study the methods of testing the fabric	R/U/A	1,2,3,6,7	15
C306.5	Study the statistical methods involved in quality control	R/U/A	1,2,3,6,7	15
		Total sessions		75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hour	Max. Marks per Unit	Questions to be set for			Marks weightage (%)
				R	U	A	
I	MOISTURE AND ITS RELATIONS IN TEXTILES	15	25	2	18	5	17.86%
II	FIBRE TESTING	15	25	2	18	5	17.86%
III	YARN TESTING	15	25	2	18	5	17.86%
IV	FABRIC TESTING	15	25	2	18	5	17.86%
V	STATISTICAL QUALITY CONTROL	15	25	2	18	5	17.86%
I to V*			15	6	9	0	10.70%
	Total	75	140	16	99	25	100%

*3×2Marks and 3×3Marks from any unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
TEXTILE TESTING	1	2	2	-	-	1	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
TEXTILE TESTING	1	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2

IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1

If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

DETAILED SYLLABUS

Unit	Name of the topic	Hours
I	<p>MOISTURE AND ITS RELATIONS IN TEXTILES Humidity and its importance in Textiles - Definitions of Absolute Humidity, Relative Humidity, Standard Testing atmospheric condition, Measurement of Humidity - Wet and dry bulb Hygrometer, Definition of Moisture content, Moisture regain - Estimation of moisture content and regain using Conditioning oven and Shirley Moisture meter, Standard regain – Definition - standard regain values of cotton, viscose, silk, wool, nylon and polyester - Effect of moisture regain on fibre properties</p>	15
II	<p>FIBRE TESTING Length – Importance of fibre length - Definition of effective length - Methods of measuring fibre length by Baer Sorter and Digital Fibro graph. Fibre fineness - Importance of fibre fineness - Methods of measuring fibre fineness by Sheffield micronaire instrument. Fibre maturity – Importance, measurement of fibre maturity by sodium hydroxide swelling method - Maturity ratio and Maturity coefficient. Fibre strength - Importance and method of measuring fibre strength by Stelometer. Estimation of trash content by Shirley Trash Analyser. Fibre Quality Index - Brief idea about High volume instrument and Advanced Fibre Information System(AFIS)</p>	15
III	<p>YARN TESTING Yarn count – Determination of yarn count by Auto sorter and Beesley balance - Importance of CSP and RKM - Importance of Twist - Estimation of yarn twist – single yarn, doubled yarn. Importance of yarn strength Principle of working of yarn strength testers – CRE, CRL and CRT Working of single yarn strength tester of pendulum lever type, lea strength tester and principle of Instron tester. Yarn irregularities – thick, thin, slub, nep - Methods of Assessing yarn evenness by yarn - appearance board and Uster Evenness Tester - Brief study of Uster classmate.</p>	15
IV	<p>FABRIC TESTING Crimp-Definition, Importance – Shirley crimp tester. Study of Shirley stiffness tester and Shirleycrease recovery tester. Definition of fabric handle, serviceability, abrasion, pilling and drape. Importance of fabric tensile strength, tearing strength and bursting strength. Study of fabric tensile strength tester. Definition of Fabric Air Permeability and Fabric Air Resistance</p>	15

V	<p>STATISTICAL QUALITY CONTROL Classification and Tabulation of Data - Frequency Diagram – Histogram and frequency polygon. Measures of Central tendency - Mean, Median, Mode. Simple Calculation of Mean, Median, Mode. Measures of dispersion - Mean Deviation, Percent Mean Deviation, Standard Deviation and Co-efficient of variation. Simple calculation of MD,PMD,SD & CV. Normal distribution curve and its properties. Quality Control Chart - Definition, use, Construction of control chart for Averages and Ranges.</p>	15
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TEXT BOOKS

S.No	Title	Authors	Publisher	Year
1	Hand Book of Textile Testing and quality Control	E.B.Groover and D.S.Hamby	MohinderSingh Sejwal (for Wiley Eastern Ltd New Delhi, India	1960
2	Hand Book of Methods of Test for Cotton Fibers Yarnand Fabrics	V.Sundaram and R.L.N.Iyengar	CTRL.,Mumbai	1988
3	ISI Hand book of Textile Testing	-	Indian Standard Institution, New Delhi, India	1982

Reference:

S.No	Title	Authors	Publisher	Year
1	Principles of Textile	J.E. BOOTH	Butterworth Scientific London	1996
2	The Characteristics of Raw Cotton Vol II Part-I in the series manual of Cotton Spinning	E.Lord	The Textile Institute and Butterworth, England	1961
3	Methods of Test for Textiles–B.S.Handbook	B.S.I	British Standards Institution, London, England	1963
4	Method of Test for Textiles B.S.Hand book No:11	B.S.I	British Standards Institution, London, England	1963
5	Statistical methods	Gupta	S.Chand & Co, New Delhi	1983
6	An Outline of statistical methods Textile Industry	A.Brearley & D.R.Cox	WIRA, LEEDS,U.K.	1974
7	Theory and problems of Statistics	M.R.Spiegel	McGraw Hill, International Book Company. Newyork, London	1972

MODEL QUESTION PAPER – I

Term : V

Time : 3 Hours

Programme : Diploma in Garment Technology

Max. Marks : 75

Course : Textile Testing

Course Code : N1GT306

**[N.B.: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART – A

- 1) Define Humidity.
- 2) What is Standard Testing atmospheric condition?
- 3) Define Maturity Ratio.
- 4) Define AFIS.
- 5) Mention the various principle of working of yarn strength tester.
- 6) What is bursting strength?
- 7) What is Median?
- 8) Define quality control chart.

PART – B

- 9) Define Absolute Humidity and Relative Humidity.
- 10) Explain FOI.
- 11) Briefly explain the Effective Length.
- 12) Briefly explain the Yarn irregularities.
- 13) Write the principle of lea strength tester.
- 14) Write the importance of Crimp.
- 15) Briefly explain Mean Deviation and Mode.
- 16) State the properties of Normal Distribution Curve.

[Turn over.....

- 2 -
PART – C

17) a. Explain in detail about wet and dry bulb hygrometer with a neat sketch..

(Or)

b. With a sketch, explain the method of estimating moisture content and regain by using Conditioning Oven.

18) a. Explain in detail about Baer sorter with a neat sketch.

(Or)

b. With a neat sketch, explain the method of estimation of trash using Shirley trash analyzer.

19) a. Explain in detail about yarn count by Beesley balance with a neat sketch.

(Or)

b. With a neat sketch, explain the working of single yarn strength tester.

20) a. Explain in detail about Shirley crimp tester with a neat sketch.

(Or)

b. Write About (i) Fabric Handle (ii) Abrasion (iii) Pilling (iv) Drape

21) a. Draw mean and range chart from the following data collected from a mill and state your conclusion

Sample No	1	2	3	4	5	6	7	8	9	10
Sample Mean	12.8	13.1	13.5	12.9	13.2	14.2	12.1	15.5	13.9	14.2
Sample Range	2.1	3.1	3.9	2.1	1.9	3.0	2.5	2.8	2.5	2.0

.Given N=5 A2=0.577 D3=0 D4=2.114

(Or)

b. Find the standard deviation and Coefficient of Variation of the individuals.

X= 105, 110, 95, 115, 120, 105, 115, 110, 110,120.

MODEL QUESTION PAPER – II

Term : V

Time : 3 Hours

Programme : Diploma in Garment Technology

Max. Marks : 75

Course : Textile Testing

Course Code : N1GT306

**[N.B.: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART – A

- 1) Define Absolute Humidity.
- 2) What do you mean by moisture regain?
- 3) Define Maturity Coefficient.
- 4) Define FQI.
- 5) Mention the various principle of working of yarn strength tester.
- 6) What is Crease Recovery?
- 7) What is Mode?
- 8) Define quality control chart.

PART – B

- 9) Briefly explain about Standard Testing atmospheric condition.
- 10) Explain AFIS.
- 11) Briefly explain the Effective Length.
- 12) Write short notes on slub and nep.
- 13) Write the principle of lea strength tester.
- 14) Write the importance of Crimp.
- 15) Briefly explain Mean Deviation and Median.
- 16) Briefly explain SD and CV.

[Turn over.....

- 2 -
PART – C

17) a. Explain in detail about wet and dry bulb hygrometer with a neat sketch..

(Or)

b. With a sketch, explain the method of estimating moisture content and regain by using Conditioning Oven.

18) a. Explain in detail about Baer sorter with a neat sketch.

(Or)

b. Explain about the sodium hydroxide swelling method of determining fiber maturity.

19) a. Explain in detail about yarn count by Beesley balance with a neat sketch.

(Or)

b. With a neat sketch, explain the working of uster evenness tester.

20) a. Explain in detail about Shirley crimp tester with a neat sketch.

(Or)

b. How will you determine Air Permeability of fabric?

21) a. Draw mean and range chart from the following data collected from a mill and state your conclusion

Sample No	1	2	3	4	5	6	7	8	9	10
Sample Mean	120	121	123	122	120	121	124	122	123	120
Sample Range	2	3	2	1	2	3	1	2	3	2

.Given N=5 A2=0.577 D3=0 D4=2.114

(Or)

b. Find the standard deviation and Coefficient of Variation of the individuals.

X= 125, 120, 125, 123, 120, 123, 126, 128, 122,121.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT307
Term : V Term
Course Name : TEXTILE WET PROCESSING

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
TEXTILE WET PROCESSING	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	Preparatory and Bleaching Process	15
II	Dyeing Process	15
III	Printing Process	15
IV	Finishing Process	15
V	Quality and pollution Control	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

- C 307.1 Understand the preparatory wet processing of cotton.
- C 307.2 Understand dyeing of textile fabric
- C 307.3 Acquire knowledge in screen printing.
- C 307.4 Acquire knowledge on fundamental finishing process.
- C 307.5 Acquire knowledge on Eco- friendly process.

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C 307.1	Understand the preparatory wet processing of cotton.	R/U/A	1,2,3,4,5,6, 7	15
C 307.2	Understand dyeing of textile fabrics.	R/U/A	1,2,3,4,5,6, 7	15
C 307.3	Acquire knowledge in screen printing.	R/U/A	1,2,3,4,5,6, 7	15
C 307.4	Acquire knowledge on fundamental finishing process.	R/U/A	1,2,3,4,5,6, 7	15
C 307.5	Acquire knowledge on Eco-friendly process.	R/U/A	1,2,3,4,5,6, 7	15
		Total sessions		75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hour	Max. Marks per Unit	Questions to be set for			Marks weightage (%)
				R	U	A	
I	PREPARATORY AND BLEACHING PROCESS	15	25	2	18	5	17.86%
II	DYEING PROCESS	15	25	2	18	5	17.86%
III	PRINTING PROCESS	15	25	2	18	5	17.86%
IV	FINISHING PROCESS	15	25	2	18	5	17.86%
V	QUALITY AND POLLUTION CONTROL	15	25	2	18	5	17.86%
I to V*			15	6	9	0	10.70%
	Total	75	140	16	99	25	100%

*3×2Marks and 3×3Marks from any unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
TEXTILE WET PROCESSING	1	1	2	3	1	2	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
TEXTILE WET PROCESSING	1	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2

IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1

If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

DETAILED SYLLABUS

Unit	Name of the topic	Hours
I	<p>PREPARATORY AND BLEACHING PROCESS Impurities present in grey cotton and cotton fabric - sequence of wet processing treatments with objectives of each treatment - Singeing -Gas Singeing Machine for woven fabric with line diagram - Desizing - Continuous desizing method and its merits - Enzyme desizing- Scouring - Mechanism of scouring Process of caustic scouring using high pressure kier. Bleaching – Hydrogen Peroxide Bleaching- Continuous scouring and bleaching using Continuous Bleaching Range (CBR) –Optical Brightening Agent treatment</p>	15
II	<p>DYEING PROCESS Definition of dyeing - Classification of dyes based on their mode of application - Dyeing of cotton with Reactive dyes and vat dyes - Dyeing of wool with acid dyes - Dyeing of silk with basic dyes - Dyeing of Polyester with Disperse dyes - Dyeing machines - Working of jigger Soft flow jet dyeing machine - HTHP Beam dyeing machine, cheese dyeing machine. Garment dyeing – Advantage and disadvantage – Working of drum type Garment dyeing machine.</p>	15
III	<p>PRINTING PROCESS Definition and objective of printing - Comparison between dyeing and printing –Styles and methods of printing – Definition and functions of Ingredients of printing paste. Direct style of printing with pigments on cotton - Direct style of printing with reactive dyes on cotton - Direct style of printing with Disperse dyes on polyester - Screen preparation - Flat bed screen printing machine - Rotary screen printing machine - curing machine –steamer</p>	15
IV	<p>FINISHING PROCESS Purpose of finishing - Stiff finishing of cotton fabric with Starch, Polyvinyl Acetate –Types of softeners and their properties - wrinkle free finish- Sanforizing – Mercerisation - Advantages – Chainless mercerizing machine - calendering - Hot air stenters Anti crease finish with DMDHEU Resin - Brief study on antimicrobial finish - UV protective finish - water repellent finish- Flame retardant finish (Only objectives and recipe)</p>	15
V	<p>QUALITY AND POLLUTION CONTROL Importance of Quality Control –Different Fastness Tests for dyed and printed materials - Determination of wash fastness - Wet and Dry rubbing fastness – Computer Colour Matching - Objectives & Limitations – Importance and need of environment protection - Air, water and noise pollution. Brief study on Effluent Treatment Process flow chart only. Brief study on eco-friendly processing - List of banned chemicals and alternatives.</p>	15

Text Book:

Title	Author	Publisher	Year
Technology of Textile Processing Vol.3 Technology of Bleaching	Shenai V.A.	Shevak Publications Mumbai-37	1981
Technology of Textile Processing, Vol.6 Technology of Dyeing	Shenai V.A.	Shevak Publications Mumbai – 37	1980
Technology of Textile Processing, Vol.4 Technology of Printing	Shenai V.A.	Shevak Publications Mumbai – 37	1979
Technology of Textile Processing, Vol.10 Technology of Finishing	Shenai V.A.	Shevak Publications Mumbai-37	1987

Reference:

Title	Author	Publisher	Year
Technology of Textile Processing, Vol.2 Chemistry of dyes & Principles of dyeing	Shenai V.A.	Shevak Publications Mumbai-37	1983
Textile Printing	Miles L.W.C.	Society of Dyers & Colourist West Yorkshire, England	
An Introduction to Textile Finishing	Marsh J.T.	B.I.Publications Delhi 110001	

MODEL QUESTION PAPER – I

Term : V Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Textile Wet Processing Course Code : N1GT307

**[N.B.: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. Mention the impurities present in Grey Cotton.
2. What is Singeing?
3. Define Insoluble dyes.
4. Name of the used for Wool fiber.
5. Mention the ingredients of printing paste?
6. Write the objectives of Finishing.
7. Define Mercerisation.
8. What are different types of Environment pollution?

PART- B

9. Briefly explain the full bleaching of cotton fabric.
10. Write short note on Optical Brightening Agent Treatment.
11. Write the classification of dyes based on their mode of application.
12. Give the advantages of soft flow jet dyeing machines.
13. Give the principle of Discharge printing.
14. Comparison between dyeing and printing.
15. What short note on softeners used in finishing?
16. Write the computer colour matching?

[Turn over...

- 2 -
PART- C

17. (a) Explain the sequence of wet processing treatment.

(Or)

(b) Explain the continuous scouring and bleaching of cotton using CBR with diagram.

18. (a) Explain the dyeing procedure of cotton fabric with Reactive dyes.

(Or)

(b) Explain with neat sketch the working of Jigger dyeing machine.

19. (a) Explain the printing of cotton with pigments in direct style.

(Or)

(b) Explain with neat sketch the working of Rotary screen printing machine.

20. (a) Explain in detail the working of chainless fabric mercerizing machine.

(Or)

(b) Explain the UV Protective finish and DMDHEU Resin.

21. (a) Write the importance and need of Environment protection.

(Or)

(b) Explain the effluent treatment process with suitable flow chart.

MODEL QUESTION PAPER – II

Term : V

Time : 3 Hours

Programme : Diploma in Garment Technology

Max. Marks : 75

Course : Textile Wet Processing

Course Code : N1GT307

- [N.B.: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. Mention the impurities present in Grey Cotton.
2. What is Scouring?
3. Define soluble dyes.
4. Name of the dye suitable for Silk fiber.
5. Mention the ingredients of printing paste?
6. Write the objectives of Finishing.
7. Write the advantages of Mercerisation.
8. Define Air Pollution.

PART- B

9. Explain the sequence of wet processing treatment.
10. Write short note on Optical Brightening Agent Treatment.
11. Write the classification of dyes based on their mode of application.
12. Briefly explain about HTHP beam dyeing machine.
13. Give the principle of Resist style printing.
14. Comparison between dyeing and printing.
15. Write the importance of Quality control.
16. Write the computer colour matching?

[Turn over...

PART- C

17. (a). Explain the process of Gas singeing machine for woven fabric with neat sketch.

(Or)

(b) Explain the continuous scouring and bleaching of cotton using CBR with diagram.

18. (a) Explain the dyeing procedure of cotton fabric with Vat dyes.

(Or)

(b) Explain in detail about dyeing of polyester with disperse dyes..

19. (a) Explain the printing of cotton with pigments in direct style.

(Or)

(b) Explain with neat sketch the working of Flat bed screen printing machine.

20. (a) Explain in detail about sanforizing.

(Or)

(b) Explain the UV Protective finish and antimicrobial Finish.

21. (a) Explain in detail about Wash fastness.

(Or)

(b) Explain the effluent treatment process with suitable flow chart.

VIRUDHUNAGAR S. VELLAICHAMY NADAR POLYTECHNIC COLLEGE**(AUTONOMOUS)****(Affiliated to Directorate of Technical Education, Chennai-25)****VIRUDHUNAGAR-626001****N1-SCHEME**

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT206
Term : V Term
Course Name : PATTERN DRAFTING AND CONSTRUCTION –II

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
PATTERN DRAFTING AND CONSTRUCTION-II	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	PATTERN DRAFTING FOR MEN'S WEAR I	15
II	PATTERN DRAFTING FOR MEN'S WEAR-II	15
III	PATTERN DRAFTING FOR LADIES' WEAR-I	15
IV	PATTERN DRAFTING FOR LADIES' WEAR-II	15
V	PATTERN GRADING, FITTING & ALTERATION	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

C206.1 Know the drafting for men's style.

C206.2 Learn the layout and construction of men's style.

C206.3 Know the drafting for ladies' style.

C206.4 Learn the layout and construction of ladies' style.

C206.5 Learn about pattern alterations.

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C206.1	Know the drafting for men's style.	R/U/A	1,2,3,4,6,7	15
C206.2	Learn the layout and construction of men's style.	R/U/A	1,2,3,4,6,7	15
C206.3	Know the drafting for ladies' style.	R/U/A	1,2,3,4,6,7	15
C206.4	Learn the layout and construction of ladies' style.	R/U/A	1,2,3,4,6,7	15
C206.5	Learn about pattern alterations.	R/U/A	1,2,3,4,6,7	15
			Total sessions	75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hour	Max. Marks per Unit	Questions to be set for			Marks weightage (%)
				R	U	A	
I	PATTERN DRAFTING FOR MEN'S WEAR I	15	25	2	18	5	17.86%
II	PATTERN DRAFTING FOR MEN'S WEAR-II	15	25	2	18	5	17.86%
III	PATTERN DRAFTING FOR LADIES' WEAR-I	15	25	2	18	5	17.86%
IV	PATTERN DRAFTING FOR LADIES' WEAR-II	15	25	2	18	5	17.86%
V	PATTERN GRADING, FITTING & ALTERATION	15	25	2	18	5	17.86%
I to V*			15	6	9	0	10.70%
	Total	75	140	16	99	25	100%

*3×2Marks and 3×3Marks from any unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
PATTERN DRAFTING CONSTRUCTION-II	3	2	2	2	-	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.
 Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
PATTERN DRAFTING AND CONSTRUCTION - II	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

- IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
 IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
 IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
 IF $< 5\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS CONSIDERED NOT-ADDRESSED.

DETAILED SYLLABUS

Contents: Theory

Unit	Name of the topic	Hours
I	PATTERN DRAFTING FOR MEN'S WEAR I Pattern drafting procedure for Full sleeve shirt - Pleated trousers - Nehru's Kurta with chinese mandarin collar – Jeans – Pattern layout - Calculation of material consumption - Construction procedure	15
II	PATTERN DRAFTING FOR MEN'S WEAR II Pattern drafting procedure for SB Waist Coat – Nehru Jakit - Sherwani – Dressing Gown - Pattern layout - Calculation of material consumption – Construction procedure.	15
III	PATTERN DRAFTING FOR LADY'S WEAR I Pattern drafting procedure for 6 panels Sari petticoat – Garara skirt - Cut Choli – Ladies shirt - Straight jacket with front open and Leg-o-mutton sleeve-Pattern layout-Calculation of material consumption - Construction procedure.	15
IV	PATTERN DRAFTING FOR LADY'S WEAR II Pattern drafting procedure for Night dress with Front full opening and shawl collar - Survar on bias cutting - Full Maxi with Magyar sleeve – Culottes (Divided skirt) - Pattern layout-Calculation of material consumption - Construction procedure.	15
V	PATTERN GRADING, FITTING & ALTERATIONS Define pattern grading - Pattern grading procedure for bodice front, back & sleeve-Variables for fitting-Importance of altering patterns- General principles for pattern alteration- Study of fitting problems and alterations in the following parts- Bust line- Neckline- Shoulder line- Armhole- Bodice back- Sleeves- Study of fitting problems and alterations in Trousers	15

Text Book:

Title	Author	Publisher	Year
The Art Of Sewing	Anna Jacob Thomas.	Ubs Publishers, Delhi.	2001
Practical Clothing Constructions Part I & II	Mary Mathews	Paprinpack Printers,Chennai.	1982
Zarapkar System Of Cutting.	K.R.Zarapkar	Navneet Publications (I) Ltd.,Dantali. Gujarat.	2005
Sew it Yourself	Lippman (Gidon)	Prentice Hall Inc New Jersey	2002

Reference:

Comparative Clothing Construction Techniques	Virginn Stolpe Lewis	Surjeet Publications, Delhi	1985
Scientific Garments Cutting	K.M. Hedge	K.M. Hedge&Sons., Poona	1998
Pattern Cutting For Women's Outer Wear	Gerry Cooklin	BlackwellScience Publication, London	2001
Metric Pattern Cutting	Winfred Aldrich	BlackwellScience Publication, London	2003
Metric Pattern Cutting For Children's wear	W e a r P u b l i c a t i o n , Winfred Aldrich	Blackwell Science London	2004
Pattern grading for Mens' Clothes	Gerry Cooklin	BlackwellScience Publication, London	2000
Pattern grading for Children's Clothes	Gerry Cooklin	BlackwellScience Publication, London	1991
Pattern Grading for womens' Clothing	Gerry Cooklin	BlackwellScience Publication, London	2004
Step by Step Dress	Leela Aitken	BBC Books, London	1992

MODEL QUESTION PAPER – I

Term : V Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Pattern Drafting and Construction -II Course Code : N1GT206

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. What is the feature of jeans?
2. What is the style feature of Nehru's Kurta?
3. What is Sherwani?
4. What is the style feature of Dressing Gown?
5. What is the function of straight jacket?
6. Define Pattern layout.
7. What is shawl collar?
8. What are the fitting variables?

PART- B

9. Define pattern drafting .
10. Write drafting procedure of Chinese mandarin Collar.
11. Draw a style of Nehru Jacket and mention its parts.
12. Calculate the fabric consumption of Sherwani (M size) based on pattern layout.
13. Write the pattern drafting procedure of Leg-o-mutton sleeve.
14. Write the technical aspects of Culottes.
15. Write the construction procedure of survar.
16. What are the principles of pattern grading?

[Turn over...

- 2 -
PART- C

17. a. Explain the pattern drafting procedure of Men's full sleeve shirt.

(OR)

b. Explain the pattern drafting procedure of Jeans.

18 . a. Explain the pattern drafting procedure of Dressing Gown.

(OR)

b. Explain the pattern drafting procedure of sherwani.

19. a. Explain the pattern drafting and construction procedure of 6 panel petticoat.

(OR)

b. Explain the pattern drafting procedure of cut choli.

20. a. Explain the pattern drafting procedure of divided skirt.

(OR)

b. Explain the pattern drafting procedure of maxi.

21 a. Explain the importance and principles of pattern alteration.

(OR)

b. Explain the fitting problems and alterations in trouser

MODEL QUESTION PAPER – II

Term : V

Time : 3 Hours

Programme : Diploma in Garment Technology

Max. Marks : 75

Course : Pattern Drafting and Construction -II

Course Code : **N1GT206**

**[N.B.: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. What is the feature of Pleated trousers?
2. What is the style feature of Nehru's Kurta?
3. What is SB Waist Coat?
4. What is the style feature of Dressing Gown?
5. What is the function of Sari Petticoat?
6. Define Pattern layout.
7. What is shawl collar?
8. What are the fitting variables?

PART- B

9. Define pattern drafting.
10. Write drafting procedure of Full sleeve shirt.
11. Draw a style of Nehru Jacket and mention its parts.
12. Calculate the fabric consumption of Sherwani (M size) based on pattern layout.
13. Write the pattern drafting procedure of Garara Skirt.
14. Write the technical aspects of Culottes.
15. Write the construction procedure of full maxi.
16. What are the principles of pattern grading?

[Turn over...

- 2 -
PART- C

17. a. Explain the pattern drafting procedure of Nehru's Kurta.

(OR)

b. Explain the pattern drafting procedure of Jeans.

18 . a. Explain the pattern drafting procedure of Dressing Gown.

(OR)

b. Explain the pattern drafting procedure of sherwani.

19. a. Explain the pattern drafting and construction procedure of Ladies shirt.

(OR)

b. Explain the pattern drafting procedure of cut choli.

20. a. Explain the pattern drafting procedure of Night dress with Shawl Collar.

(OR)

b. Explain the pattern drafting procedure of maxi.

21 a. Explain the importance and principles of pattern alteration.

(OR)

b. Explain the fitting problems and alterations in trouser

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VIRUDHUNAGAR-626001**

N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT401
Term : V Term
Course Name : ELECTIVE THEORY - I
 APPAREL MERCHANDISING

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
APPAREL MERCHANDISING	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	INTRODUCTION TO MERCHANDISING	15
II	RETAIL MERCHANDISING	15
III	VISUAL MERCHANDISING	15
IV	MERCHANDISE PLANNING	15
V	MARKETING TECHNIQUES & SALES PROMOTION	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

- C401.1 Understand the duties of Merchandiser
- C401.2 Know about the retail Merchandising
- C401.3 Understand the visual Merchandising
- C401.4 Study the Merchandise Planning
- C401.5 Study the sales promotion

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C401.1	Understand the duties of Merchandiser	R/U/A	1,2,3,4,5,6,7	15
C401.2	Know about the retail Merchandising	R/U/A	1,2,3,4,5,6,7	15
C401.3	Understand the visual Merchandising	R/U/A	1,2,3,4,5,6,7	15
C401.4	Study the Merchandise Planning	R/U/A	1,2,3,4,5,6,7	15
C401.5	Study the sales promotion	R/U/A	1,2,3,4,5,6,7	15
		Total sessions		75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hour	Max. Marks per Unit	Questions to be set for			Marks weightage (%)
				R	U	A	
I	INTRODUCTION TO MERCHANDISING	15	25	2	18	5	17.86%
II	RETAIL MERCHANDISING	15	25	2	18	5	17.86%
III	VISUAL MERCHANDISING	15	25	2	18	5	17.86%
IV	MERCHANDISE PLANNING	15	25	2	18	5	17.86%
V	MARKETING TECHNIQUES & SALES PROMOTION	15	25	2	18	5	17.86%
I to V*			15	6	9	0	10.70%
	Total	75	140	16	99	25	100%

*3×2Marks and 3×3Marks from any unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
Elective Theory-II 1. APPAREL MERCHANDISING	1	2	2	1	2	2	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
APPAREL MERCHANDISING	1	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2

IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1

IF $< 5\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS CONSIDERED NOT-ADDRESSED.

DETAILED SYLLABUS

Contents: Theory

Unit	Name of the topic	Hours
I	<p>INTRODUCTION TO MERCHANDISING Merchandising – Definition – Principles & Techniques – Role of merchandiser – Skills of Merchandiser - Functions of Merchandiser – Types of approval - Sampling – Types samples- development sample, salesman sample, Approval sample, Preproduction sample, Production sample, shipment sample – Check points for a proper approval – Approving sewing operations and various processes. Product Research – Product Development – Planning – Presentation.</p>	15
II	<p>RETAIL MERCHANDISING Introduction to Retail Merchandising – Types of retail merchandising- Department stores – Discounters – Off-price retailers – Outlet source – Close out - Warehouse clubs. Garment Costing – Fabric consumption – Sewing thread consumption - CMT charges for various styles – Costing Of woven garment full Sleeve shirt and Trouser– Costing of Knitted garment - T shirt, night gown. Retail pricing – Mark up – Price point – Markdown – Promotional pricing – Deceptive pricing – Non-store retailing – Mail order Merchants – E Tailing – Tele shopping.</p>	15
III	<p>VISUAL MERCHANDISING Definition – Elements of Visual Merchandising – Displays – Principles of Displays – Window display – Interior Display – Mannequins – Department displays – Signs – Lighting,Fixtures. Special events –The Environments of visual presentation– Trends in visual merchandising – Small store applications – Boutique - Assessment of Visual Merchandising Programme</p>	15
IV	<p>MERCHANDISE PLANNING Merchandising plan – Planning sales goals –Buying plan – Assortment Planning – Open to buy – Purpose of a six months plan, Elements of a six month plan – Analysis of previous merchandising plan and developing a new plan - Planning components - Merchandising calendar and scheduling. Direct order - Merchant order - CMT order - Vendor and sub- contractor - Requirement of a purchase order – Amendment sheet – Types of Buyer and buying offices- Buyer seller meet.</p>	15
V	<p>MARKETING TECHNIQUES & SALES PROMOTION Marketing – definition - principles – objectives - strategies Advertisement Techniques – Broadcast Advertising – Radio advertising – Television Advertising – Advantages & Disadvantages – Magazines – Out-of-home advertising – Direct mail. Advertisement effectiveness. Brief study of E marketing. Sales promotion approaches, effectiveness -Distribution channels – Consumer behaviour in fashion.</p>	15

Text Book:

Title	Author	Publisher	Year
Marketing Management	Philip. Kotler Kevin Lane Keller	Prentice Hall	2006
Fashion Marketing & Merchandising	Manmeet Sodhia	Kalyani Publishers	
Fashion buying & Merchandising	Tim Jackson & David Shaw	Palgrave Master Series	2001
Apparel Manufacturing	Ruth E. Glock Grace I. Kunz	A Simson & Schuster company, Singapore	1995

Reference:

Title	Author	Publisher	Year
Export management	Balagopal.T.A.S	Himalaya Publishing House, Bombay.	1984
Inside the fashion business	Kitty G. Dicerson	Dorling Kindsley(India) Pvt Ltd., New Delhi	2007
Fashion Retailing	Ellen Diamond	Dorling Kindsley(India) Pvt Ltd., New Delhi	2007
Foundations of advertising Theory & Practice	Chunnawala Sethia	Himalaya Publishing House, Bombay	1985
Retail Merchandising	Ernest H Rich	Merrill Publishing company company, New Jersey	
Fashion Sales Promotion	Pamela M.Phillips	A Simson & Schuster	1985
Fashion Marketing	Mike Easey	Blackwell Publishing	2005
Fashion Marketing	Hines & Bruce	Butter worth - Heinemann	2006
Merchandise Buying and Management	Donnellecen	Fairchild Publication Inc.,	1999

MODEL QUESTION PAPER – I

Term	: V	Time	: 3 Hours
Programme	: Diploma in Garment Technology	Max. Marks	: 75
Course	: Elective: Apparel Merchandising	Course Code	: N1GT401

**[N.B.: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. Define apparel merchandising.
2. Define Development sample.
3. Define Close Out.
4. Define Retail Pricing.
5. Define trend in visual merchandising.
6. What is Purchase Order?
7. Write about marketing strategies.
8. What is out of home advertising?

PART- B

9. Give the types of approval.
10. Briefly explain about check points for a proper approval.
11. Briefly explain about Mail order merchants.
12. Write the types of Retail merchandising.
13. Write about interior and Window displays.
14. What is buyer seller meet?
15. Define marketing.
16. Briefly explain about E- Marketing?

[Turn over...

- 2 -
PART- C

17. a) Elaborate on functions of merchandiser in a apparel industry.

(OR)

b) Explain (i) Product Research (ii) Planning (iii) Presentation (iv) Product Development.

18. a) Write thje costing of Woven full shirt and trouser.

(OR)

b) Explain the various types of pricing policy followed in retail pricing.

19. a) Explain detail about the principles of Display?

(OR)

b) Explain the elements of visual mXCerchandising with its examples.

20.a) How will you develop a new six month merchandising plan? Explain

(OR)

b) Explain in detail the requirements of purchase order.

21. a) Explain the types of advertisement technique

(OR)

c) Explain detail about the consumer behavior in fashion

MODEL QUESTION PAPER – II

Term : V Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Elective : Apparel Merchandising Course Code : N1GT401

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. Write principles and techniques of merchandising.
2. Define Shipment sample.
3. Define Markdown.
4. Define Outlet Source.
5. Define trend in visual merchandising.
6. What is Buying Plan?
7. What is CMT order?
8. What is out of home advertising?

PART- B

9. Give the types of approval.
10. Write about the approving sewing operations in various processes.
11. Define fabric and sewing thread consumption.
12. Write the types of Retail merchandising.
13. Write about interior and Window displays.
14. Define boutique.
15. Explain assortment planning.
16. Briefly explain about E- Marketing?

[Turn over...

- 2 -
PART- C

17. a) Explain skills of merchandiser in a apparel industry.

(OR)

b) Explain (i) Product Research (ii) Planning (iii) Presentation (iv) Product Development.

18. a) Write the costing of Woven full shirt and trouser.

(OR)

b) Explain the types of retail merchandising.

19. a) Explain detail about elements of visual merchandising.

(OR)

b) Explain environments of visual presentation and trends in visual merchandising.

20.a) Write about the purpose of six month plan and elements of six month plan.

(OR)

b) Write about (i) Amendment Sheet (ii) Types of buyer (iii) Buyer, seller meet
(iv) Vendor and Sub Contractor

21. a) Explain about sales promotion approaches and effectiveness.

(OR)

c) Explain detail about the consumer behavior in fashion

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT402
Term : V Term
Course Name : ELECTIVE THEORY - II
 INDIAN AND WESTERN COSTUMES

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
INDIAN AND WESTERN COSTUMES	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	INTRODUCTION TO COSTUMES	15
II	COSTUMES OF ANCIENT WORLD	15
III	COSTUMES OF ANCIENT WESTERN CIVILIZATION	15
IV	TRADITIONAL COSTUMES OF INDIA	15
V	COSTUMES OF MODERN WORLD	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

- C402.1 Understand the origin and need of clothing
- C402.2 Know about the costumes of ancient world
- C402.3 Study the costumes of ancient western civilization
- C402.4 Study the traditional costumes of India
- C402.5 Study the costumes of modern world

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C402.1	Understand the origin and need of clothing	R/U/A	1,5,6,7	15
C402.1	Know about the costumes of ancient world	R/U/A	1,5,6,7	15
C402.1	Study the costumes of ancient western civilization	R/U/A	1,5,6,7	15
C402.1	Study the traditional costumes of India	R/U/A	1,5,6,7	15
C402.1	Study the costumes of modern world	R/U/A	1,5,6,7	15
		Total sessions		75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hour	Max. Marks per Unit	Questions to be set for			Marks weightage (%)
				R	U	A	
I	INTRODUCTION TO COSTUMES	15	25	2	18	5	17.86%
II	COSTUMES OF ANCIENT WORLD	15	25	2	18	5	17.86%
III	COSTUMES OF ANCIENT WESTERN CIVILIZATION	15	25	2	18	5	17.86%
IV	TRADITIONAL COSTUMES OF INDIA	15	25	2	18	5	17.86%
V	COSTUMES OF MODERN WORLD	15	25	2	18	5	17.86%
I to V*			15	6	9	0	10.70%
	Total	75	140	16	99	25	100%

*3×2Marks and 3×3Marks from any unit limited to maximum of 2 Questions in each unit

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
INDIAN AND WESTERN COSTUMES	1	-	-	-	2	2	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
INDIAN AND WESTERN COSTUMES	1	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2

IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1

IF $< 5\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS CONSIDERED NOT-ADDRESSED.

DETAILED SYLLABUS

Contents: Theory

Unit	Name of the topic	Hours
I	<p>INTRODUCTION TO COSTUMES Origin of clothing –dress out of painting, cutting and other methods- Growth of dress, Need for clothing- factors influencing costume changes- role of costumes as a status symbol, sex appeal, fashion and seasons.</p>	15
II	<p>COSTUMES OF ANCIENT WORLD Pre-historic period- discussions on costumes- Sumerian costumes- Cloak- Kaunakas- outer garments- Roman costumes- Tunic- Toga- Stola- Palla- Byzantine costumes- Cloaks- Hose- Pallium- Brief study of costumes on Socio-political and economic point of view- study on colour combinations- view on society reflections.</p>	15
III	<p>COSTUMES OF WESTERN COUNTRIES Costumes of Ancient Western Civilization – Egypt, Roman, English, French empires during Renaissance 1500 – 1600 A.D. Jewellery of the period – color combination- Materials – Accessories. Brief study of costumes on Socio-political and economic point of view</p>	15
IV	<p>TRADITIONAL COSTUMES OF INDIA Costumes of India, History of Indian Costumes upto Mughal Period, Traditional Costumes of different states in India. Accessories and Garments used in India. Study of Dacca Muslin, Jandhani, Himrus & Amrus Carpets, Kashmir Shawls, Kanchipuram & Baluchari Sarees, Paithani sarees, Bandhani, Patola, Ikat, Kalamkari and other styles of Printing & Dyeing Textiles.</p>	15
V	<p>COSTUMES OF MODERN WORLD Costumes of 20th century-factors influencing on costume changes – Wears- Evening dress- Sleep wear- Religious wear- Seasonal wear - Specialized wears- Bridal wear – Sportswear- Industrial wear- Party wear- Brief study of costumes on Socio-political and economic point of view- study on colour combinations.</p>	15

Text Book:

Title	Author	Publisher	Year
Historic Costumes	Lester K.I.	Chas A Bennet & Co	1991
Costume & Fashion	Laver J	Thames & Hudson	1997
Costume & Fashion	Jack Cassin - Scott	Brockhampton press, London	1999
Costumes of India & Pakistan	Das S N		1984
Indian Costume	G.S Ghurye	Popular Prakasham	1987
History of Fashion	Garland		2001

Reference:

Title	Author	Publisher	Year
The encyclopaedia of Fashion	Georgina'O' Hara		2002
Fashion in western world	Yarwood Doreep		2002
Costume, Text i les and J e w e l l e r y o f I n d i a	Vandana B h e n d e r i	Prakash Books, New Delhi,	2004.

MODEL QUESTION PAPER – I

Term : V Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Elective : Indian and Western Costumes Course Code : **N1GT402**

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. What is the role of costume in social status?
2. What types of method are followed for clothing in ancient period?
3. Define Sumerian Costumes.
4. Define Tunic.
5. What is the basic garment structure in Egypt?
6. What is the basic garment structure during Mughal period?
7. What is Industrial Wear?
8. What are the factors influence the costume changes in 20th Century?

PART- B

9. Briefly explain the factors influencing costume changes.
10. Define Pre-historic period.
11. Briefly explain about Byzantine costumes.
12. Briefly explain about colour combination in ancient western civilization.
13. Briefly explain about Kashmir Shawls.
14. Define Ikat.
15. Define Party Wear.
16. Define Bridal Wear.

[Turn over...

- 2 -
PART- C

17. (a) Explain the role of costumes as social, sexual and fashion aspects.

(Or)

(b) Explain in detail about the origin of clothing.

18. (a) Explain in detail about the Sumerian Costumes .

(Or)

(b) Explain the role of costumes in socio-political & economic point of view.

19. (a) Explain in detail about the English Costumes.

(Or)

(b) Explain in detail about the French Costumes.

20. (a) Explain in detail about different types of traditional saris in India.

(Or)

(b) Explain in detail about Bandhani and Patola.

21. (a) Explain the various factors which influence the costume changes in modern India.

(Or)

(b) Explain in detail about the business wears and seasonal wears.

MODEL QUESTION PAPER – II

Term : V Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Elective : Indian and Western Costumes Course Code : N1GT402

**[N.B.: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. What is the role of costume in social status?
2. What types of method are followed for clothing in ancient period?
3. Define Roman Costumes.
4. Define Toga.
5. What is the basic garment structure in French?
6. What is the basic garment structure during Mughal period?
7. What is Sports Wear?
8. What are the factors influence the costume changes in 20th Century?

PART- B

9. Briefly explain the factors influencing costume changes.
10. Define Pre-historic period.
11. Briefly explain about Cloaks.
12. Briefly explain about colour combination in ancient western civilization.
13. Briefly explain about Amrus Carpets.
14. Define Kalamkari.
15. Define Party Wear.
16. Define Seasonal Wear.

[Turn over...

- 2 -
PART- C

17. (a) Explain the role of costumes as social, sexual and fashion aspects.

(Or)

(b) Explain in detail about the origin of clothing.

18. (a) Explain in detail about the Sumerian Costumes .

(Or)

(b) Explain the role of costumes in socio-political & economic point of view.

19. (a) Explain in detail about the EgyptCostumes.

(Or)

(b) Explain in detail about the French Costumes.

20. (a) Explain in detail about different types if traditional saris in India.

(Or)

(b) Explain in detail about Himrus carpets, Kashmir Shawls and Paithani Sarees.

21. (a) Explain the various factors which influence the costume changes in modern India.

(Or)

(b) Explain in detail about the business wears and seasonal wears.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT312
Term : V Term
Course Name : TEXTILE TESTING AND WET PROCESSING PRACTICAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
TEXTILE TESTING AND WET PROCESSING PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C312.1 Prepare fabric for processing
- C312.2 Dye the fabric
- C312.3 Printing the fabric
- C312.4 Draw the fabric structure
- C312.5 Determine quality parameters of yarn and fabric.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs.
C312.1	Prepare fabric for processing	1,2	A	1,2,3,4,5,6,7	3
C312.2	Dye the fabric	3	A	1,2,3,4,5,6,7	9
C312.3	Printing the fabric	4	A	1,2,3,4,5,6,7	27
C312.4	Draw the fabric structure	5,6,7,8	A	1,2,3,4,5,6,7	9
C312.5	Determine quality parameters of yarn and fabric.	9,10,11,12	A	1,2,3,4,5,6,7	12
			Total sessions		60

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
TEXTILE AND WET PROCESSING PRACTICAL	2	2	2	2	2	1	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course-PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
TEXTILE TESTING AND WET PROCESSING PRACTICAL	1	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

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IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1

IF $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

LIST OF EXPERIMENTS

1. De-size & Scour the given woven fabric.
2. Bleach the given cotton fabrics with Hydrogen peroxide.
3. Dye the given Cellulosic fabric with Reactive dyes.
4. Print the given cotton fabrics with Reactive dyes.
5. Draw Design, Draft and Peg plan for Plain weave fabric and determine the quality particulars.
6. Draw Design, Draft and Peg plan for Twill weave fabric and determine the quality particulars.
7. Draw Design, Draft and Peg plan for Regular Sateen weave fabric and determine the quality particulars.
8. Determine the Lea strength of yarn using Lea tester and calculate the Count Strength product.
9. Determine the Twist per Inch of Single yarn using Twist tester.
10. Determine the Tensile strength of fabric using Tensile strength tester.
11. Determine the Tearing strength of fabric using Tearing strength tester.
12. Determine the Bursting strength of the fabric using Bursting tester.

CONTENT BEYOND SYLLABUS

1. Dye the given Cellulosic fabric using tie and dye technique.
2. Determine the single yarn strength of fabric using Unistretch tester.

LIST OF EQUIPMENT

Equipment / Machines / Instruments required:

Wet processing

Beaker	-	30	N0s.
Glass rod	-	30	N0s.
Steel tumbler	-	30	N0s.
Dye bath (6 tumbler/ Bath)	-	30	N0s.
Physical balance	-	1	No
Electronic balance*	-	1	No
Burners	-	5	Nos.
HTHP dyeing machine	-	1	No
Screens	-	5	Nos.
Squeezer	-	5	Nos.
Printing table	-	1	No
Padding mangles*	-	1	No
Crock meter	-	1	No
Tensile strength tester- fabric	-	1	No
Tearing strength tester	-	1	No
Bursting strength tester	-	1	No
Yarn Lea strength tester	-	1	No
Twist tester- single yarn	-	1	No
Beesley balance	-	1	No
Wrap reel	-	1	No
Counting glass	-	30	Nos

* Optional

Material required :

meters of fabric/ expt./ batch of 30 students.

20S- 40S Yarn, Plain, Twill, regular Sateen fabrics for testing

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Experiment	50 marks
Write up	20 marks
Viva	05 marks
Total	75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT211
Term : V Term
Course Name : PATTERN DRAFTING -II PRACTICAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board Examination	Total	
PATTERN DRAFTING-II PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C211.1 Prepare paper pattern for Garara Skirt and Divided Skirt.
- C211.2 Prepare paper pattern for Gents wear.
- C211.3 Draft the paper pattern for Nehru's Kurtha with Chinese Mandarin Collar.
- C211.4 Prepare paper pattern for the garment Sari petticoat, Survar, Full maxi and Ladies Shirt.
- C211.5 Develop paper patterns as per the required styles for Night Dress and Cutcholi.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs.
C211.1	Prepare paper pattern for Garara Skirt and Divided Skirt.	2,3	A	1,2,3,4,6,7	10
C211.2	Prepare paper pattern for Gents wear.	1,11,12	A	1,2,3,4,6,7	15
C211.3	Draft paper pattern for Nehru's Kurtha with Chinese Mandarin Collar.	7	A	1,2,3,4,6,7	5
C211.4	Prepare paper pattern for the garment Sari petticoat, Survar, Full maxi and Ladies Shirt.	4,6,9,10	A	1,2,3,4,6,7	30
C211.5	Develop paper patterns as per the required styles for Night Dress and Cutcholi.	5,8	A	1,2,3,4,6,7	15
			Total sessions		75

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
PATTERN DRAFTING-II PRACTICAL	3	2	2	2	-	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
PATTERN DRAFTING - II PRACTICAL	2	3

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

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IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1

IF $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

LIST OF EXPERIMENTS

1. Prepare the paper pattern for the Garment – Men’s full sleeve shirt
2. Prepare the paper pattern for the Garment - Garara Skirt
3. Prepare the paper pattern for the Garment – Divided skirt (culottes)
4. Prepare the paper pattern for the Garment – Sari petti-coat - 6 panels
5. Prepare the paper pattern for the Garment - Night dress -Front full opening
6. Prepare the paper pattern for the Garment – Survar – bias cutting
7. Prepare the paper pattern for the Garment – Nehru’s Kurta with Chinese mandarin collar
8. Prepare the paper pattern for the Garment – Cut choli.
9. Prepare the paper pattern for the Garment – Full maxi.
10. Prepare the paper pattern for the Garment – Ladies shirt.
11. Prepare the paper pattern for the Garment – Pleated trouser
12. Prepare the paper pattern for the Garment – Sherwani

CONTENT BEYOND SYLLABUS

1. Prepare the paper pattern for the Garment – Sari petti-coat - 8 panels
2. Prepare the paper pattern for the Garment – One piece Night dress

LIST OF EQUIPMENT

Equipment required:

Pattern table- 8'x4' table- 4 nos.

Materials required:

Pattern paper-30 nos. /expt /batch of 30 students

Measuring, drafting & general tools-30/ batch of 30 students

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Pattern preparation	50 marks
Drafting procedure	20 marks
Viva	05 marks
Total	75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT212
Term : V Term
Course Name : GARMENT CONSTRUCTION -II PRACTICAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
GARMENT CONSTRUCTION-II PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C212.1 Cut, stitch and finish the Children's wear.
- C212.2 Assemble the suitable components sari petticoat and full maxi.
- C212.3 Construct the garments for Sherwani.
- C212.4 Construct the garment components for pleated trousers full sleeve shirt.
- C212.5 Practice the construction of garments for various styles for Ladies wear.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs.
C212.1	Cut, stitch and finish the Children's wear.	1,2	A	1,2,3,4,5,6,7	16
C212.2	Assemble the suitable components sari petticoat and full maxi.	3,7	A	1,2,3,4,5,6,7	16
C212.3	Construct the garments for Sherwani.	12	A	1,2,3,4,5,6,7	7
C212.4	Construct the garment components for pleated trousers and full sleeve shirt.	10,11	A	1,2,3,4,5,6,7	14
C212.5	Practice the construction of garments for various styles for Ladies wear.	4,5,6,8,9	A	1,2,3,4,5,6,7	37
			Total sessions		90

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
GARMENT CONSTRUCTION-II PRACTICAL	3	2	2	2	1	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
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Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
GARMENT CONSTRUCTION – II PRACTICAL	2	3

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

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IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1

If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

LIST OF EXPERIMENTS

1. Using the paper pattern cut, stitch and finish the Garment – Men’s f/s shirt.
2. Using the paper pattern cut, stitch and finish the Garment - Garara Skirt
3. Using the paper pattern cut, stitch and finish the Garment - Divided skirt (culottes)
4. Using the paper pattern cut, stitch and finish the Garment – Sari petti-coat - 6 panels
5. Using the paper pattern cut, stitch and finish the Garment - Night dress -Front full opening
6. Using the paper pattern cut, stitch and finish the Garment - Survar – bias cutting
7. Using the paper pattern cut, stitch and finish the Garment – Nehru’s Kurta with Chinese mandarin collar
8. Using the paper pattern cut, stitch and finish the Garment – Full Maxi
9. Using the paper pattern cut, stitch and finish the Garment – Cut choli
10. Using the paper pattern cut, stitch and finish the Garment – Ladies’ shirt.
11. Using the paper pattern cut, stitch and finish the Garment – Pleated trouser
12. Using the paper pattern cut, stitch and finish the Garment – Sherwani

CONTENT BEYOND SYLLABUS

1. Using the paper pattern cut, stitch and finish the Garment – Full Maxi with panel skirt
2. Using the paper pattern cut, stitch and finish the Garment – Cut choli with designed neck

LIST OF EQUIPMENT

Equipment / Machines required:

Sewing machines-

Lock stitch- 15 m/cs. Over lock- 2 m/cs Flat lock- 1 m/c Button hole- 1 m/c Button stitch- 1 m/c

4- Needle trimmer*- 1 m/c Chain stitch*- 1 m/c Feed- off-arm* - 1 m/c Iron press- 1m/c *Optional

Material required:

1.5 – 2 meters of fabric/ expt. / batch of 30 students. Sewing threads- white, assorted
Decorative materials

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Garment construction	50 marks
Layout & construction procedure	20 marks
Viva	05 marks
Total	75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT308
Term : VI Term
Course Name : TEXTILE MANAGEMENT

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
TEXTILE MANAGEMENT	5Hrs	75Hrs	25	75	100	3Hrs

Topics and allocation of hours:

Unit	Topic	Time
I	INTRODUCTION TO MANAGEMENT, SITE SELECTION, PLANT LAY OUTS	15
II	PRODUCTION AND FINANCIAL MANAGEMENT	15
III	HUMAN RESOURCE MANAGEMENT	15
IV	SUPERVISORY AND SAFETY MANAGEMENT	15
V	EXPORT AND CONTEMPORARY MANAGEMENT	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

C308.1 Learn about site selection for textile industry.

C308.2 Learn about work study and method study in textile industry

C308.3 Learn about the Labour grievances in textile industry.

C308.4 Learn the role of supervisor.

C308.5 Know the industrial safety measures.

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C308.1	Learn about site selection for textile industry	R/U/A	1,5,7	15
C308.2	Learn about work study and method study in textile industry.	R/U/A	1,5,7	15
C308.3	Learn about the Labour grievances in textile industry.	R/U/A	1,5,7	15
C308.4	Learn the role of supervisor.	R/U/A	1,5,7	15
C308.5	Know the industrial safety measures.	R/U/A	1,5,7	15
		Total sessions		75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	INTRODUCTION TO MANAGEMENT, SITE	15	25	2	18	5	17.86 %
II	PRODUCTION AND FINANCIAL MANAGEMENT	15	25	2	18	5	17.86 %
III	HUMAN RESOURCE MANAGEMENT	15	25	2	18	5	17.86 %
IV	SUPERVISORY AND SAFETY MANAGEMENT	15	25	2	18	5	17.86 %
V	EXPORT AND CONTEMPORARY MANAGEMENT	15	25	2	18	5	17.86 %
I to V*			15	6	9	0	10.70 %
	Total		140	16	99	25	100 %

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
TEXTILE MANAGEMENT	1	-	-	-	2	-	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.
Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
TEXTILE MANAGEMENT	-	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.
METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
IF $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

DETAILED SYLLABUS

Unit	Name of the topic	Hours
I	<p>INTRODUCTION TO MANAGEMENT, SITE SELECTION, PLANT LAY OUTS</p> <p>Definition of Management. Functions of management – Organising, Staffing, Directing, and Controlling. Organisation structure-line, staff, line and staff, committee organisation. Selection of site-advantage and disadvantages and various factors of site selection for various textile industries. Importance and types industrial buildings, lightings, ventilations and humidification. Control of air, water and land pollution in textile industry. Plant layout-process, product, combined and fixed layouts-their merits and demerits. Type of layout suitable for spinning, weaving, textile processing and garment industries</p>	15
II	<p>PRODUCTION AND FINANCIAL MANAGEMENT</p> <p>Factors affecting production. Productivity- Factors affecting productivity. Labour productivity and machine productivity. Work Study–Method Study and Work Measurement. Procedures of method study and work measurement. Importance of Material handling and various machineries of it in textile industry. Production Planning and Control (PPC) – Functions of PP&C. Inventory control - Economic Order Quantity (EOQ), ABC and VED Analysis. Financial Management – Capital Cost and Working Capital - Sources of Finance. Elements of Cost - Method of calculating Ex Mill Price. Break even analysis. Depreciation. Enterprise Resource Planning (ERP)</p>	15
III	<p>HUMAN RESOURCE MANAGEMENT</p> <p>Importance of Human Resource management in an industry. Man power planning –Definition of job analysis and Job description – methods of job description and job analysis. Recruitment – Sources, merits and demerits. Selection process in recruitment. Training of Employees – advantages and types of training. Wages and its Components-Basic pay, DA, HRA, bonus, incentive. Method of wage payment- time rate, piece rate, combination of time and piece rate. Incentives – types and their merits and demerits. Labour Welfare activities – Role of Labour Welfare Officer. Labour grievances - causes and effects of grievances. Grievance handling procedures. Grievance handling mechanisms.</p>	15
IV	<p>SUPERVISORY AND SAFETY MANAGEMENT</p> <p>Define Supervision-Role of supervisor, characteristics of effective supervision. Role and characteristics of leadership. Difference between leader and manager. Motivation- need, importance and types of motivation- Maslow’s theory, XYZ theory in motivation. Communication- Principle of effective communication - types of communication - barriers of communication. Labour welfare activities with respect to factories act. Industrial safety- Causes for accidents, preventive measures. Guards and safety devices in textile mill. Types of fire and fire prevention. Application of 5 S and Kaizen principles for effective supervision.</p>	15

V	<p>EXPORT AND CONTEMPORARY MANAGEMENT Importance and benefits of international marketing. World Trade Organization (WTO) – functions of WTO. Various export promotion measures by government of India. Functions of TEXPROCIL, AEPC, PEDEXIL, HEPC, Textile committee, Textile commissioner’s office. Export procedure-receipt of confirmed order-export production-export documentation - Export incentives. Importance of Shipping bill and bill of lading. Export finance –pre shipment finance and post shipment finance. Letter of Credit. Export price composition. Export pricing-Ex factory, Free Along Side (FAS), Free On Board (FOB), Cost Insurance Freight (CIF) 15 and Franco pricing. Management Information System (MIS),Just In Time (JIT),Total Quality Management (TQM),</p>	15
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TEXT BOOKS:

S.NO	TITLE	AUTHOR	PUBLISHERS	YEAR
1	Principles Of Management	P.C.Tripathi	Tata Mcgraw Publishing Company Ltd,New Delhi	2001
2	Management Of Textiles	DudegA.V.D	Trade Press, Textile Industry ,Ahemadabad	1981

REFERENCE:

S.NO	TITLE	AUTHOR	PUBLISHERS	YEAR
1	Industrial Eng. And Management	Balasundaram.K	Sri. Ramalinga sowdeswari Publications,Coimbatore.	2005
2	Personnel Management O f Humun Resoures	M a m o r i A . C . B	Himalaya Publishing House, Mumbai	1999
3	Organisation Theory & Behavior	Luthans.F	Printice Hall Of India	2001
4	Management Of Textile	Ormerod.A	Butter Worth &Company	1979
5	Industrial Eng. &Management Science	BaugA.T.R;Etal	Khanna Publisher New Delhi	1996
6	Business Management Theory	SingA. J.C & Mugali.V.N	Edition (5) R.Chand & Co, New Delhi	2002

MODEL QUESTION PAPER – I

Term : VI Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Textile Management Course Code : N1GT308

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. Define Management.
2. List out the types of organization structure.
3. Define Labour Productivity.
4. Define Work Measurement.
5. Define Job Description.
6. What do you mean by Basic pay?
7. List out the types of Fire.
8. What is CIF?

PART- B

9. Give any three advantages of site selection.
10. Define Ventilations.
11. Explain the VED Analysis.
12. Give the basic idea about ERP.
13. Define Labour Grievances.
14. Write any three characteristics of Leadership.
15. Briefly explain about WTO.
16. Write about Post shipment Finance?

[Turn over...

- 2 -
PART- C

17. (a). Explain in detail about the functions of management.

(OR)

(b). Define Layout and Explain the type of layout suitable for Garment Industry.

18. (a). Explain the Production Planning and Control (PPC).

(OR)

(b). Explain ERP.

19. (a). Explain the different methods of training in Industry?

(OR)

(b). Explain in detail about grievances handling mechanisms?

20. (a). Explain the theory in Motivation.

(OR)

(b). Explain 5S and Kaizen principles for effective supervision.

21. (a). Explain a detail note on Export Finance.

(OR)

(b). Explain the procedures involved in export.

MODEL QUESTION PAPER – II

Term : VI Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Textile Management Course Code : N1GT308

**[N.B.: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART- A

1. What do you mean by Management?
2. List out the types of organization structure.
3. Define Machine Productivity.
4. Define Method Study
5. Define Job Analysis.
6. What do you mean by Incentive?
7. List out the types of Fire.
8. What is FAS?

PART- B

9. Give any three advantages of site selection.
10. Define Humidification.
11. Explain the ABC Analysis.
12. Give the basic idea about ERP.
13. Define Labour Grievances.
14. Write any three differences between Leader & Manager.
15. State any 3 benefits of International marketing.
16. Write about Preshipment Finance?

[Turn over...

17. (a). Explain in detail about the functions of management.

(OR)

(b). Define Layout and Explain the type of layout suitable for Garment Industry.

18. (a). Explain the Production Planning and Control (PPC).

(OR)

(b). Define Method Study and Explain the procedures of Work measurement?

19. (a). Explain the different methods of training in Industry?

(OR)

(b). Explain in detail about Grievance Handling Mechanisms?

20. (a). Explain the theory in Motivation.

(OR)

(b). what are the factors governing effective Communication. Explain different types of communication.

21. (a). Explain a detail note on Export Finance.

(OR)

(b). Explain the procedures involved in export.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT309
Term : VI Term
Course Name : APPAREL QUALITY CONTROL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
APPAREL QUALITY CONTROL	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	INTRODUCTION AND INSPECTION METHODS	15
II	TESTING OF GARMENTS	15
III	PACKING ACCESSORIES	15
IV	CARE LABELLING AND GARMENT DEFECTS	15
V	GARMENT INDUSTRY CERTIFICATION	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

C309.1 Know the inspection in garment industry.

C309.2 Learn the testing of garments.

C309.3 Know about the Packing.

C309.4 Know about the care labeling.

C309.5 Learn about the tools in quality control.

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C309.1	Know the inspection in garment industry.	R/U/A	1,2,4,6,7	15
C309.2	Learn the testing of garments.	R/U/A	1,2,4,6,7	15
C309.3	Know about the Packing.	R/U/A	1,2,4,6,7	15
C309.4	Know about the care labeling.	R/U/A	1,2,4,6,7	15
C309.5	Learn about the tools in quality control.	R/U/A	1,2,4,6,7	15
Total sessions				75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	INTRODUCTION AND INSPECTION METHODS	15	25	2	18	5	17.86 %
II	TESTING OF GARMENTS	15	25	2	18	5	17.86 %
III	PACKING ACCESSORIES	15	25	2	18	5	17.86 %
IV	CARE LABELLING AND GARMENT	15	25	2	18	5	17.86 %
V	GARMENT INDUSTRY CERTIFICATION	15	25	2	18	5	17.86 %
I to V*			15	6	9	0	10.70 %
	Total		140	16	99	25	100 %

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
APPAREL QUALITY CONTROL	2	2	-	2	-	2	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
APPAREL QUALITY CONTROL	-	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2

IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1

If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

DETAILED SYLLABUS

Contents: Theory

Unit	Name of the topic	Hours
I	<p>INTRODUCTION TO INSPECTION METHODS Quality control - Definition - Importance of quality – Inspection process - Raw material Inspection - Fabric Inspection - 4 point System - 10 point System - Inspection of Sewing Thread, Zippers, Button, Buckles, Snap Fasteners. In process Inspection - During production checks in Spreading, Cutting, Sewing, Pressing / Finishing. Final Inspection - AQL random sampling inspection - Sampling Plans - Acceptance Sampling - Product Quality Audit - Documents required before inspection.</p>	15
II	<p>PACKING AND ACCESSORIES FOR PACKING. Classification of Packing - Stand up pack - Flat pack - Hanger pack - Hanger with sandwich pack - Dead man pack - its importance. Mass packing – Ratio pack, Size wise pack, Colour wise pack, Assorted pack and Un-assorted pack. Different types of packing materials and its quality parameter - Poly bag – plain / gazette bag - Back support board - Window board - Plain board - Inner collar patty – PVC patty - Outer patty - Butterfly - Plastic clips - Pins - plain and ball head - Hang tags - Price ticket - Fabric tag - Tissue paper -Size sticker – Warning sticker- Cello tape – Cartons.</p>	15
III	<p>TESTING OF GARMENTS Seam strength Testing - Testing of Fabric Stretch properties - Dimensional changes due to Laundering, Dry cleaning and Steaming Pressing - Durable Press Evaluation of Fabrics and Apparel - Needle cutting / yarn severance - Sew ability of fabrics - Bow and Skewness in Woven and Knitted fabrics - Distortion of yarn in Woven Fabrics – Testing of Water Resistance and Water Repellency – Testing for Soil / Stain releasing - Testing of Fusible Interlinings and Elastic Waist Band - Pantyhose Testing - Wear Testing.</p>	15
IV	<p>CARE LABELING & GARMENT DEFECTS. Introduction to Care labels - its importance - Different systems of Care labelling - American - British - Canadian - Japanese - and International labelling – Eco-labelling. Shade sorting - Introduction -importance Instrumental shade sorting. Flammability - Introduction - Degree Flammability Test method - 450 and Vertical Flammability Tests. Defects in garments – Classification of major, minor and critical defects, pattern defects, spreading defects, cutting defects, stitching defects and seam defects.</p>	15
V	<p>GARMENT INDUSTRY CERTIFICATION Quality Control Program - Seven tools of quality controls – Importance of Garment Industry certification – TQM - ISO 9000 standards - Procedure of obtaining ISO 9000 series standards -WRAP Certification & Procedures - SA 8000 certification – GOTS certificate – Eco label certification – Green leaf mark for Garment.</p>	15

Text book

Title	Author	Publisher	Year
An Introduction to Quality control for The Apparel Industry	Pradip V Mehta	ASQC Quality Press., Newyork.	2002
Managing Quality in the Apparel Industry	Pradip V Mehta Satis k Bhardwaj	New Age International Publishers	1998

Reference

Title	Author	Publisher	Year
ISO 9000 Series Manual		New Delhi.	
Knitted cloth Technology	Terry Brackenbary	Black well science Ltd	1996

MODEL QUESTION PAPER – I

Term : VI Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Apparel Quality Control Course Code : N1GT309

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. What does 4 point system mean?
2. What is sampling plan?
3. Define Flat Pack.
4. Define Warning Sticker.
5. Define seam strength testing.
6. Give the care label symbol for tumble dry.
7. What is WRAP?
8. What is TQM?

PART- B

9. State the importance of quality.
10. List the packing materials used in shirt.
11. Give the parameters while inspecting sewing thread.
12. Briefly explain about Poly bag.
13. Briefly explain Pantyhose Testing.
14. Write the importance of care labels?
15. Mention some pattern defects.
16. Briefly explain about ISO 9000.

[Turn over...

PART- C

17 .a. Explain in detail about the In Process Inspection.

(OR)

b. Write a note on AQL random sampling and Acceptance sampling.

18. a. Explain in detail about different types of packing.

(OR)

b. Write a detailed note on packing materials

19. a. Evaluate the dimensional changes in fabric due to laundering and dry cleaning

(OR)

b. Explain the testing of fusible interlining & elastic waist band

20. a. Explain in detail about International care labeling system.

(OR)

b. Explain the various causes for any five major and minor defects in Garments

21. a. Explain the seven tools of quality control

(OR)

b. Explain the daily work management SA8000 Certification

MODEL QUESTION PAPER – II

Term : VI Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Apparel Quality Control Course Code : N1GT309

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. What does 10 point system mean?
2. What is sampling plan?
3. Define Dead Man Pack.
4. Define Plastic Clips.
5. Define seam strength testing.
6. Give the care label symbol for tumble dry.
7. What is GOTS certification?
8. What is Green leaf mark?

PART- B

9. State the importance of quality.
10. Give the parameters while inspecting sewing thread.
11. List the packing materials used in shirt.
12. Briefly explain about Inner Collar patty.
13. Briefly explain Wear Testing.
14. Write the importance of care labels?
15. Mention some pattern defects.
16. Briefly explain about ISO 9000.

[Turn over...

PART- C

17 .a. Explain in detail about the Raw material Inspection.

(OR)

b. Write a note on AQL random sampling and Acceptance sampling.

18. a. Explain in detail about different types of packing.

(OR)

b. Write a detailed note on packing materials

19. a. Evaluate the dimensional changes in fabric due to Steaming and Pressing

(OR)

b. Explain the testing of fusible interlining & elastic waist band

20. a. Explain in detail about International care labeling system.

(OR)

b. Explain in detail about Flammability Test Method.

21. a. Explain the seven tools of quality control

(OR)

b. Explain the daily work management SA8000 Certification

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT 403
Term : VI Term
Course Name : Elective Theory -II
 1. HOME TEXTILES

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per Semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board Examination	Total	
HOME TEXTILES	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	INTRODUCTION, WALL & FLOOR COVERINGS	15
II	FUTURE COVERINGS	15
III	KITCHEN & BATH LINEN	15
IV	PACKING AND PRODUCT CARE	15
V	INTERIOR DECORATION	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

- C403.1 Familiarize the wall coverings and Floor coverings
- C403.2 Understand about Furniture coverings.
- C403.3 Understand the kitchen and bath linen.
- C403.4 Know about packing & product care
- C403.5 Familiarize interior decoration

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C403.1	Familiarize the wall coverings and Floor coverings	R/U/A	1,3,6,7	15
C403.2	Understand about Furniture coverings.	R/U/A	1,3,6,7	15
C403.3	Understand the kitchen and bath linen.	R/U/A	1,3,6,7	15
C403.4	Know about packing & product care	R/U/A	1,3,6,7	15
C403.5	Familiarize interior decoration.	R/U/A	1,3,6,7	15
			Total sessions	75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	INTRODUCTION, WALL & FLOOR COVERINGS	15	25	2	18	5	17.86 %
II	FUTURE COVERINGS	15	25	2	18	5	17.86 %
III	KITCHEN & BATH LINEN	15	25	2	18	5	17.86 %
IV	PACKING AND PRODUCT CARE	15	25	2	18	5	17.86 %
V	INTERIOR DECORATION	15	25	2	18	5	17.86 %
I to V*			15	6	9	0	10.70 %
	Total		140	16	99	25	100 %

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
HOME TEXTILES	1	-	2	-	-	2	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
HOME TEXTILES	1	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
 IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
 IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
 IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
 IF $< 5\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS CONSIDERED NOT-ADDRESSED.

DETAILED SYLLABUS

Contents: Theory

Unit	Name of the topic	Hours
I	<p>INTRODUCTION, WALL & FLOOR COVERINGS Home textiles- definition, Classification- Domestic and international market needs- India's home textile exports. Wall coverings:- Draperies & Curtains- Plain, with Loop, Loop with Button, Tier curtain, valance, window panel, Tab top curtain, Eyelid, Rod Pocket Panel (RPP)- Brief study of Front and back Curtains, Day and night curtains. Floor coverings- Mats, Carpets, Rugs- types- features- Different types of surface, appearance and Texture used in Floor coverings- Study of decorative methods, quality parameters and costing of the above products.</p>	15
II	<p>FURNITURE COVERINGS Chair Linen: - Chair Pad, Chair Cushion, Chair cover, Seat pad (Sutton), Arm cap. Cushions: - Classification-Types -with tassels, piping and border, Bolsters. Cushion Filling:- Types, properties. Upholstery - Types- Sofa cover, Automobile Seat Cover. Bed Linen: - Bed Spread, Duvet, Flat sheet, Fitted sheet, Pillow Shan, Quilt, Bed ruffle- Classification of Mattresses and pillows, Comforters and Blankets- Study of decorative methods, quality parameters and costing of the above products</p>	15
III	<p>KITCHEN & BATH LINEN Kitchen articles: - Apron, Mitten, Pot Holders, Kitchen Towel, Bread basket, Tea cozy- Table cloth, Napkin, Mat, Runner. Bath Linen: -Shower curtains, Bath rope, Bath Towel, Pool / Beach Towel, Bath Mat, Bath Sheet- Study of decorative methods, quality parameters and costing of the above products.</p>	15
IV	<p>PACKING & PRODUCT CARE Folding and Packing- importance- materials used- specification- folding machines used- Types of Folding and Packing –Wall Covering, Curtains, Chair Linen, Floor Covering, Upholstery, Kitchen Articles, Table Linen and Bed Linen. Care labelling- Washing, Bleaching, Drying, Ironing and Dry Cleaning Instructions- Placement of labels on Home textiles- Consumer care guide to home textiles- Practices in storage of house hold linen- Pressing and Airing, Storing.</p>	15
V	<p>INTERIOR DECORATION Definition- factors affecting the selection of Home furnishing- Role of colours in interior decoration- lighting arrangements in living room- furniture selection- dining room- decorative methods- pictures for interior decoration- types- flower arrangements- types- interior decoration for Hotel & marriagehall- recommendation for good interior decoration.</p>	15

Text Book:

Title	Author	Publisher	Year
Textiles – Fibre to Fabric	P.Corbaman	TATA Mcgraw Hill	1983
Textile fabrics and their selection	Isabel.B.Wingate	Prentice Hall – Englewood Cliffs, New	1976
Easy bazaar crafts	Gerald.M.Knox	Meredith Corporation	1990
Furniture Upholstery	Michal Scofield Sudha Irwin Holly Lyman	Lane Publishing Co. Monlo Park, California	1980
The Complete Home Decorator	Conran’s habitat	Caroline Clifton – Mogg Portland House, New	1991
Fashion Apparel Accessories & Home	Jay Diamond & Ellen Diamond	Dorling Kindrsley Ind. Pvt. Ltd., New Delhi- 110092	2008

References:

Title	Author	Publisher	Year
ASTM Standards related to stitches and seams	Robert.F.Allen	ASTM, 100 Barr Harbour driveWest Conshohocken	1998
Hand woven carpets oriental and European	A.F.Kendrick	DoverPublicaions,INC New York	1973
Oriental carpet Designs in Full color	Saraf Friedrich Trenkwano	Dover Publications INC, New York	1979
The mccalls Book ofQuilts	John Murray	Mcall’s Needle work The mccall pattern	1964
Hand Woven fabric of India	Jasteen Dhamija & Jyotindra Jain	Mapin Publishing Pvt. Ltd., Ahmedabad.	1989
Designs and Pattern of North African Carpets and	Jacquar Rovailt	Dover Pulbication, New York	

MODEL QUESTION PAPER – I

Term : VI Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Elective Theory -II Home Textiles Course Code : N1GT403

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. Mention any two types of Wall covering.
2. What is a Mat?
3. What is Chair linen?
4. What do you mean by Bolster?
5. What is a Mitten?
6. State the use of Shower curtain.
7. Define Upholstery.
8. Define interior decoration.

PART- B

9. Write about the classification of Home textiles.
10. What is RPP?
11. Name the various types of cushion filling.
12. What are the different types of Bed linen products?
13. Write about Tea cozy.
14. What do you know about Bath rope?
15. State the importance of packing?
16. Mention the various types of lighting.

[Turn over...

PART- C

17. a) Explain in detail any two types of Draperies.

(OR)

b) Explain any two appearances and texture in floor coverings.

18. a) Explain chair pad and chair cushion.

(OR)

b) Write a note on Bed spread and a Pillow shan.

19. a) Explain in detail the Apron and Bread basket.

(OR)

b) Write about Beach towel and table cloth.

20. a) With a neat sketch explain the different care label symbols.

(OR)

b) Give a note on placement of labels in home furnishing items (any three).

21. a) Explain the factors that affect the selection of home textiles.

(OR)

b) Explain the Interior decoration of marriage hall.

MODEL QUESTION PAPER – II

Term	: VI	Time	: 3 Hours
Programme	: Diploma in Garment Technology	Max. Marks	: 75
Course	: Elective Theory -II Home Textiles	Course Code	: N1GT403

- [N.B.: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. Define Home Textiles.
2. What is rugs?
3. What is Duvet?
4. What do you mean by Bolster?
5. What is a Apron?
6. State the use of Shower curtain.
7. Define Floor Covering.
8. Give the types of Flower arrangement.

PART- B

9. Write notes on day and night curtains.
10. What is RPP?
11. What is flat sheet and fitted sheet.
12. What are the different types of Bed linen products?
13. Write about Mitten.
14. What do you know about Bath towel?
15. State the importance of packing?
16. Write notes on furniture selection.

[Turn over...

PART- C

17. a) Explain in detail different types of wall coverings.

(OR)

b) Explain any two appearances and texture in floor coverings.

18. a) Explain in detail various types of chair linen and its features.

(OR)

b) Write a note on Bed spread and a Pillow shan.

19. a) Explain in detail the Apron and Bread basket.

(OR)

b) Explain the quality parameter and costing of pot holder, Bath rope.

20. a) With a neat sketch explain the different care label symbols.

(OR)

b) Give a note on placement of labels in home furnishing items (any three).

21. a) Explain the factors that affect the selection of home textiles.

(OR)

b) Elaborate on recommendation for good interior decoration.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT404
Term : VI Term
Course Name : Elective Theory -II
 2. FASHION DRAPING

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Term	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
FASHION DRAPING	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit	Topic	Time
I	INTRODUCTION TO DRAPING	15
II	DRAPING OF BODICE BLOCKS & VARIATIONS	15
III	DRAPING OF SKIRTS& SLACKS	15
IV	DRAPING OF YOKES, SLEEVES & COLLAR	15
V	DRAPING OF ADVANCED DESIGN VARIATIONS & KNIT GARMENTS	15
Total		75

Course Outcomes:

On successful completion of the course, the student will be able to:

C404.1 Understand the Draping tools & Procedure.

C404.2 Learn about draping of basic bodice

C404.3 Understand the draping of Skirts

C404.4 Understand the draping of Sleeves.

C404.5 Understand the draping of Slacks.

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C404.1	Understand the Draping tools & Procedure.	R/U/A	1,2,3,4,6,7	15
C404.2	Learn about draping of basic bodice	R/U/A	1,2,3,4,6,7	15
C404.3	Understand the draping of Skirts	R/U/A	1,2,3,4,6,7	15
C404.4	Understand the draping of Sleeves.	R/U/A	1,2,3,4,6,7	15
C404.5	Understand the draping of Slacks.	R/U/A	1,2,3,4,6,7	15
		Total sessions		75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	INTRODUCTION TO DRAPING	15	25	2	18	5	17.86 %
II	DRAPING OF BODICE BLOCKS & VARIATIONS	15	25	2	18	5	17.86 %
III	DRAPING OF SKIRTS& SLACKS	15	25	2	18	5	17.86 %
IV	DRAPING OF YOKES, SLEEVES & COLLAR	15	25	2	18	5	17.86 %
V	DRAPING OF ADVANCED DESIGN VARIATIONS & KNIT GARMENTS	15	25	2	18	5	17.86 %
I to V*			15	6	9	0	10.70 %
	Total		140	16	99	25	100 %

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
FASHION DRAPING	3	2	2	2	-	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
FASHION DRAPING	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2

IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1

IF $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

DETAILED SYLLABUS

Contents: Theory

Unit	Name of the topic	Hours
I	<p>INTRODUCTION TO DRAPING Definition of Draping – Draping Tools & Equipments – Draping principles – Preparation of muslin for Draping – Seam allowance – Preparation of Dress form for Draping. Draping of Basic Bodice front – Preparation of muslin – Draping steps – Marking – Truing - Draping of Basic Bodice Back – Draping of Basic Sleeve – Draping of Basic Skirt.</p>	15
II	<p>DRAPING OF BODICE BLOCKS & VARIATIONS Front Bodice with under arm Dart – Back Bodice with Neckline Dart – Dart manipulation – Waist line Dart – Dart at waistline and centre front – French Dart – Double French Dart – Flange Dart – Neckline Dart -- Neckline variations – Front & Back Armhole variations – Typical sleeveless – Squared – Cutaway Waist line variation – lowered – Empire – Shortened – Scalloped – Pointed. The Princes Bodice – Cowls -front— Under arm cowl – Wrapped neckline cowl. Twists – Butterfly Twist — Neck yoke twist – Bust twist.</p>	15
III	<p>DRAPING OF SKIRTS & SLACKS Draping of one piece basic skirt – Gored skirt – Flared skirt – Pleats in the flared skirt – Gathers in the flared skirt – Pleated skirt – Side & Box pleated skirt – Kick pleated and inverted pleated skirt. Draping of basic straight slacks – Fitted slacks – Tapered slacks – Pegged slacks – Divided skirt</p>	15
IV	<p>DRAPING OF YOKES, SLEEVES & COLLARS Draping of fitted midriff Yoke — Shirt yoke – Hip Yoke. Draping of – Mandarin Collar – Convertible collar – Peterpan collar. Draping of Basic Dolman sleeve – Long fitted Dolman sleeve — Reglan sleeve – Kimono sleeve with a gusset.</p>	15
V	<p>DRAPING OF ADVANCED DESIGN VARIATIONS & KNIT GARMENTS Draping of bias – Cut slip Dress – Bustier Designs – basic Knit Bodice Dress – Knit Halter - Knit Leotard - Knit Panties. Draping of Flounces – Circular flounce – Shirred Flounce – Draping of Ruffles – Variable Ruffle finishes – Draping of peplums. Draping of ‘A’line shift – Draping of Princess Dress – Draping of Basic Jacket.</p>	15

Text Book

Title	Author	Publisher	Year
The Art of Fashion Draping	Connie Amaden Crawford	Fair Child Publication, New York Om Books International, New Delhi	2005
Draping for Fashion Design	Hilde Jaffe & Nurie Relis	Prentice Hall career & Technology, Englewood Cliffs, USA	2002

References

Title	Author	Publisher	Year
Draping for Fashion Design	Hilde Jaffe & Nurie, Relis	Dorling Kindersley India Pvt Ltd ., New Delhi- 110092	2009

MODEL QUESTION PAPER – I

Term	: VI	Time	: 3 Hours
Programme	: Diploma in Garment Technology	Max. Marks	: 75
Course	: Elective Theory -II Fashion Draping	Course Code	: N1GT404

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. What is Draping?
2. Define Seam allowance.
3. Define Waistline Variation.
4. Define Waistline Dart.
5. Define Gored Skirt.
6. Define Tapered Slacks.
7. Define Hip Yoke.
8. What is Knit Panties?

PART- B

9. Briefly explain draping method for basic sleeve.
10. Briefly explain about lowered waistline.
11. Briefly explain about Twists.
12. Briefly explain about Pleats in the flared skirt.
13. Briefly explain about Tapered slacks.
14. What is long fitted Dolman sleeve?
15. What is fitted midriff yoke?
16. Briefly explain about draping of princess dress.

- 2 -

PART- C

17 .a. Explain the draping procedure of Basic Skirt.

(OR)

b. Explain the draping procedure of basic bodice Front.

18. a. Explain the draping procedure for any two neckline variations.

(OR)

b. Explain the draping procedure of cowls.

19. a. Explain the draping procedure of flared skirt.

(OR)

b. Explain the draping procedure of pegged slacks.

20. a. Explain the draping procedure of Peterpan collar.

(OR)

b. Explain the draping procedure of Kimono sleeve with a gusset.

21. a. Explain the draping procedure of circular flounce & Shirred flounce.

(OR)

b. Explain the draping procedure of Princes dress.

MODEL QUESTION PAPER – II

Term	: VI	Time	: 3 Hours
Programme	: Diploma in Garment Technology	Max. Marks	: 75
Course	: Elective Theory -II Fashion Draping	Course Code	: N1GT404

**[N.B.: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. What is marking?
2. What is Trueing?
3. Define Empire waistline.
4. Define French Dart.
5. Define Gored Skirt.
6. Define Pegged Slacks.
7. Define Shirt Yoke.
8. What is Ruffle?

PART- B

9. Briefly explain draping method for basic skirt.
10. Briefly explain about lowered waistline.
11. Briefly explain about Twists.
12. Briefly explain about Pleats in the Pleated Skirt.
13. Briefly explain about Tapered slacks.
14. What is long fitted Dolman sleeve?
15. What is fitted shirts yoke?
16. Briefly explain about draping of princess dress.

- 2 -

PART- C

17 .a. Explain the draping procedure of Basic Sleeve.

(OR)

b. Explain the draping procedure of basic bodice Front.

18. a. Explain the draping procedure for any two neckline variations.

(OR)

b. Explain the draping procedure of under arm cowl.

19. a. Explain the draping procedure of basic skirt.

(OR)

b. Explain the draping procedure of pegged slacks.

20. a. Explain the draping procedure of convertible collar.

(OR)

b. Explain the draping procedure of Kimono sleeve with a gusset.

21. a. Explain the draping procedure of circular flounce & shirred flounce.

(OR)

b. Explain the draping procedure of Basic Jacket.

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT405
Term : VI Term
Course Name : Elective Theory -II
 3. SOLAR AND NANO TEXTILES

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Semester	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
SOLAR AND NANO TEXTILES	5Hrs	75Hrs	25	75	100	3Hrs

Topics and Allocation of Hours:

Unit No	Unit Name	Hours
I	SOLAR TEXTILES	15
II	INTRODUCTION TO NANO TECHNOLOGY	15
III	NANO FINISHING IN TEXTILES	15
IV	MEDICAL TEXTILES	15
V	INTELLIGENT TEXTILES	15
	TOTAL	75

Course Outcomes:

On successful completion of the course, the student will be able to:

C405.1 Understand the applications of solar in clothing

C405.2 Learn about nano fibre

C405.3 Understand the Nano materials

C405.4 Learn about nano finishing

C405.5 Learn about the Intelligent textiles

Course Outcome linkage to Cognitive Level:

Cognitive Level Legend: R- Remember, U- Understand, A- Application

Course Outcome		CL	Linked PO	Teaching Hrs
C405.1	Understand the applications of solar in clothing	R/U/A	1,5,6,7	15
C405.2	Learn about nano fibre	R/U/A	1,5,6,7	15
C405.3	Understand the Nano materials	R/U/A	1,5,6,7	15
C405.4	Learn about nano finishing	R/U/A	1,5,6,7	15
C405.5	Learn about the Intelligent Textiles	R/U/A	1,5,6,7	15
		Total sessions		75

Course Content and Blue Print of Marks for End Examination:

Unit No	Unit Name	Hours	Max. Marks	Questions to be set for			Marks weightage (%)
				R	U	A	
I	SOLAR TEXTILES	15	25	2	18	5	17.86 %
II	INTRODUCTION TO NANO TECHNOLOGY	15	25	2	18	5	17.86 %
III	NANO FINISHING IN TEXTILES	15	25	2	18	5	17.86 %
IV	MEDICAL TEXTILES	15	25	2	18	5	17.86 %
V	INTELLIGENT TEXTILES	15	25	2	18	5	17.86 %
I to V*			15	6	9	0	10.70 %
	Total		140	16	99	25	100 %

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
SOLAR AND NANO TEXTILES	1	-	-	-	1	1	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
SOLAR AND NANO TEXTILES	-	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2

IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1

If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

DETAILED SYLLABUS

Unit	Topic	Time(Hrs)
I	<p>SOLAR TEXTILES</p> <p>Solar energy – Definition- three major ways of working of solar energy- PV-SHC-CSP. Solar panels-meaning-brief study of solar panels. Flexible solar cells for clothing. Solar powered smart outer wear.</p>	15
II	<p>INTRODUCTION TO NANO TECHNOLOGY</p> <p>Nano fibre –Definition- properties of Nano fibre- Physical properties and Chemical properties-electro spinning- Different structures of particles- whiskers, Net, Wrap-Nano materials-purpose of using Nano materials-Nano materials used in textiles-Titanium dioxide-Silicon-di-oxide-Silver-Zinc oxide-carbon Nano tubes.</p>	15
III	<p>NANO FINISHING IN TEXTILES</p> <p>Brief study of Nano finishing-meaning-types of Nano textiles – Nano finished textiles- UV resistant – Antibacterial – Hydrophilic – Self cleaning – flame retardant finishes. Soil repellency – Lotus effect- Water proof- Germ proof</p>	15
IV	<p>MEDICAL TEXTILES</p> <p>Medical textiles – meaning-classification of medical textiles- Constituent element of Medical Textile products- Characteristics of materials for medical use - brief study of Applications of medical textiles. Non- implantable materials-Bandages- wound care. Implantable – textile implants for unhealthy organs. Brief study of materials and applications in textile medical implants.</p>	15
V	<p>INTELLIGENT TEXTILES</p> <p>Intelligent textiles-meaning- methods of incorporating conductive materials- Wearable Electronics – benefits – Applications. Sensors - Smart jacket – Health monitoring clothing – Protective outfit – E-textiles in fashion.</p>	15

Text Books:

Title	Author	Publisher	Year
Smart fibres, Fabrics and Clothing	Xiaoming Tao	The Textile Institute, CRC press, Manchester	2005
Medical Textiles and Biomaterials for Health care	Anand S.C., Kennedy J.F. Miraftab M. and Rajendran S	WoodHead Publishing Ltd. England.	2006
Solar Energy Utilization	G.D.Rai	ISBN	2014

Reference Books:

Title	Author	Publisher	Year
Smart Textiles - Their production & Marketing Strategies	Sanjay, Gupta.	Printers Bhumica, New Delhi	2000
Intelligent Fibres	T L Vigo	J.Text. Inst. 90 Part 3, Textile Institute, Manchester	1999
Shape Memory Polymers and textiles	HVJ	Wood Head Publishing limited, England	2007
Wearable Electronics and Photonics	Xiaoming Tao	The Textile Institute, CRC press, Manchester	2005
Solar Energy the Infinite Source	G.K.Ghosh		2013

MODEL QUESTION PAPER – I

Term : VI Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Elective Theory -II Course Code : N1GT405
Solar and Nano Technology in Textiles

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. What is Solar energy?
2. What is nano material?
3. What is the meaning of Nano finishing
4. What is medical textiles?
5. What are the characteristics of material for medical use?
6. Define Sensor.
7. List out the ways of working of solar energy.
8. What are the types of nano textiles?

PART- B

9. Explain PV with a neat sketch.
10. Enumerate the Nano materials used in textiles and their function
11. Explain UV resistant nano finish.
12. Narrate the role of medical textiles in wound care.
13. Explain the methods of incorporating conductive materials.
14. Explain SHC in detail.
15. Explain Lotus effect.
16. Explain the benefits and applications of Wearable Electronics.

[Turn over...

PART- C

17 .a. Illustrate and explain CSP in detail

(OR)

b. Enumerate Solar powered smart outer wear

18. a. Explain the applications of Silicon dioxide in detail.

(OR)

b. Explain the applications of Nano technology in Textiles.

19. a. Enumerate Anti bacterial Nano finish.

(OR)

b. Elaborately explain odour fighting finish.

20. a. Enumerate Bandages in medical textiles.

(OR)

b. Explain implantable medical textiles in detail.

21. a. Elaborately explain Health monitoring clothing

(OR)

b. Explain Protective outfit in detail.

MODEL QUESTION PAPER – II

Term : VI Time : 3 Hours
Programme : Diploma in Garment Technology Max. Marks : 75
Course : Elective Theory -II Course Code : N1GT405
Solar and Nano Technology in Textiles

**[N.B: (1) Answer any FIVE Questions in each PART – A and PART – B.
Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 Marks in PART – A, 3 Marks in PART – B
and 10 Marks in PART – C.]**

PART-A

1. What is the meaning of solar panel?
2. List out the ways of working of solar energy.
3. What is self cleaning Nano finish?
4. What is Nano finished textile?
5. Which material is applied for textile medical implants?
6. What is implantable material in medical textiles?
7. List out the types of Nano particles.
8. What is the meaning of Nano finishing?

Part-B

9. Define CSP.
10. Draw the structures of Net.
11. Write any three physical properties in Nano fibre.
12. What is the use of silicon-di-oxide?
13. Define soil repellency.
14. What is the importance of smart textiles?
15. Define electro spinning.
16. What are the applications of medical textile?

[Turn over...

PART- C

17. a) Briefly explain about the flexible solar cells for clothing.

(OR)

b) Explain in detail about the solar panel.

18. a) Briefly explain Nano materials in textile.

(OR)

b) Briefly explain about the electro spinning method.

19. a) Briefly explain in detail about the lotus effect in Nano finish.

(OR)

b) Explain in detail about the antibacterial and hydrophilic?

20. a) Write about the applications of medical textiles.

(OR)

b) Explain in detail about the non-implantable materials.

21. a) Explain in detail about the working principle of smart textile.

(OR)

b) Briefly explain in detail about the colour change nano finish.

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(AUTONOMOUS)**

(Affiliated to Directorate of Technical Education, Chennai-25)

VIRUDHUNAGAR-626001

N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT313
Term : VI Term
Course Name : FASHION AND GARMENT CAD PRACTICAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Semester	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
FASHION AND GARMENT CAD PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C313.1 Ability to draw free hand sketches.
- C313.2 Ability to draw fashion figure.
- C313.3 Ability to draw seasonal wear.
- C313.4 Ability to Draft pattern.
- C313.5 To gain knowledge on Grading.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs.
C313.1	Ability to draw free hand sketches	1,2	A	1,3,4,5,6,7	10
C313.2	Ability to draw fashion figure.	3,4,5	A	1,3,4,5,6,7	25
C313.3	Ability to draw seasonal wear.	6	A	1,3,4,5,6,7	5
C313.4	Ability to Draft pattern.	7,8,9,10,11	A	1,3,4,5,6,7	25
C313.5	To gain knowledge on Grading.	12	A	1,3,4,5,6,7	10
			Total sessions		75

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
FASHION AND GARMENT CAD PRACTICAL	2	-	2	2	2	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
FASHION AND GARMENT CAD PRACTICAL	2	3

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.
 IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3
 IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2
 IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1
 IF $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

LIST OF EXPERIMENTS

1. Draw Free Hand Sketches using any relevant software.
2. Draw Fashion figure of gents & Ladies using any relevant software
3. Draw a spring wear for children using any relevant software
4. Draw a summer wear for Ladies using any relevant software
5. Draw a winter wear for senior citizen using any relevant software
6. Draw Striped, Checked Printed and One Way Fabric Design using any relevant software.
7. Practice drafting patterns of Sun Suit for the given size using any relevant software.
8. Practice drafting patterns of Shirt with full sleeves for the given size using any relevant software.
9. Practice drafting patterns of Shorts for the given size using any relevant software.
10. Practice drafting patterns of Salwar for the given size using any relevant software.
11. Practice drafting patterns of Gents Trousers for the given size using any relevant software.
12. Practice pattern for full sleeve shirt and grade it to any two sizes using any relevant software.

CONTENT BEYOND SYLLABUS

1. Practice pattern for Gent's Trousers and grade it to any two sizes using any relevant software.
2. Practice drafting patterns of Shorts for the given size using any relevant software.

LIST OF EQUIPMENT

Equipment / Machines / Instruments required:

Computer system- 10 Nos.

Colour Printer- I No Scanner- I No

Suggested Software-

Windows- Paint

Coral Draw

Photoshop

Auto CAD

Garment CAD.

Material required: Printing paper

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Fashion / Pattern/ Layout/ Grading sketching	50 marks
Write up	20 marks
Viva	05 marks
Total	75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT314
Term : VI Term
Course Name : ADVANCED PATTERN DRAFTING AND CONSTRUCTION PRACTICAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Semester	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
ADVANCED PATTERN DRAFTING AND CONSTRUCTION PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C314.1 To understand different types of patterns
- C314.2 To understand the varies model of Garments and its stitching methods
- C314.3 To enhance practical knowledge of advanced sewing technique
- C314.4 To engage in independent lifelong learning in apparel construction
- C314.5 To analyze, evaluate and apply various measurements in pattern making.

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs.
C314.1	Construct party dress using suitable fabric.	1	A	1,2,3,4,5,6,7	6
C314.2	Prepare paper pattern and construct the peplum blouse and kitchen apron	2,3,9	A	1,2,3,4,5,6,7	22
C314.3	Prepare paper pattern and stitch the sari blouse for the given style features and Designer hand bag.	4,5,8	A	1,2,3,4,5,6,7	22
C314.4	Prepare paper pattern for men's coat, Over coat.	6,7	A	1,2,3,4,5,6,7	24
C314.5	Prepare curtain with mitten and pot holder and neck tie.	10,11,12	A	1,2,3,4,5,6,7	16
			Total sessions		90

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
ADVANCED PATTERN DRAFTING AND CONSTRUCTION PRACTICAL	3	2	2	2	1	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

- If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3
- If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2
- If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1
- If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
ADVANCEDPATTERN DRAFTING AND CONSTRUCTION-II PRACTICAL	2	3

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

IF $\geq 40\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 3

IF 25 TO 40% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 2

IF 5 TO 25% OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS ADDRESSED AT LEVEL 1

IF $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

LIST OF EXPERIMENTS

1. Using the given pattern cut and Sew Party dress for kids with suitable fullness.
2. Prepare pattern of Peplum Blouse for children using the style features given below.
 - Back Open.
 - Normal Fitting.
 - Short Gathers in waist (Peplum).
 - Short Puff Sleeve.
3. Using the given pattern cut and Sew Peplum Blouse with stone work.
4. Prepare pattern of sari blouse using the style features given below.
 - Tight Fitting.
 - Front Open & Front Waist Yoke.
 - Petal Sleeve.
 - Decorative Back Neck.
5. Using the given pattern cut and Sew Sari blouse with suitable decorations.
6. Prepare pattern for Men's coat.
7. Prepare pattern for Laboratory over coat.
8. Prepare pattern and sew a Designer Hand Bag.
9. Prepare pattern and sew Kitchen apron.
10. Prepare Curtain using different types of pleats.
11. Prepare table linen with suitable decoration.
12. Prepare Tea cozy.

CONTENT BEYOND SYLLABUS

1. Prepare pattern and sew Kitchen apron with ruffles.

LIST OF EQUIPMENT

Equipment required:

Pattern table- 8'x4' table- 4 nos.

Materials required:

Pattern paper-30 nos./expt /batch of 30 students

Measuring, drafting & general tools-30/ batch of 30 students

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Pattern preparation / Garment construction 50 marks

Write up 20 marks

Viva 05 marks

Total 75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT407
Term : VI Term
Course Name : FASHION DRAPING PRACTCAL

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Semester	Examination Marks			Duration
			Internal Assessment	Board examination	Total	
FASHION DRAPING PRACTICAL	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

On successful completion of the course, the student will be able to:

- C407.1 Designed the styles garments by using Draping Technique
- C407.2 Create new models in garment making
- C407.3 Prepare Pattern in tight fitting garments
- C407.4 Prepare peplum blouse
- C407.5 Create different models of frills, gathers and shirrs

Course Outcome linkage to Cognitive Level:

On successful completion of the course, the students will be able to attain following Course Outcomes

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs.
C407.1	Designed the styles garments by using Draping Technique	1,2	A	1,2,3,4,6,7	12
C407.2	Create new models in garment making	3,4,5	A	1,2,3,4,6,7	20
C407.3	Prepare Pattern in tight fitting garments	6,7	A	1,2,3,4,6,7	12
C407.4	Prepare peplum blouse	8,9,10	A	1,2,3,4,6,7	19
C407.5	Create different models of frills, gathers and shirrs	11,12	A	1,2,3,4,6,7	12
			Total sessions		75

Legends: R = Remember U= Understand; A= Application and above levels (Bloom's revised taxonomy)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
FASHION DRAPING PRACTICAL	3	2	2	2	-	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

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Course- PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
FASHION DRAPING PRACTICAL	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

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IF $< 5\%$ OF CLASSROOM SESSIONS ADDRESSING A PARTICULAR PO, IT IS CONSIDERED THAT PO IS CONSIDERED NOT-ADDRESSED.

LIST OF EXPERIMENTS

1. Prepare basic bodies' pattern for Front & Back by Draping Technique.
2. By draping technique Prepare patterns for Basic Skirt.
3. By draping technique Prepare patterns for Basic Sleeve.
4. Using draping technique Prepare pattern for Lowered Waistline.
5. Using draping technique Prepare pattern for Pointed Waistline.
6. Using draping technique Prepare pattern for Empire Waistline.
7. Using draping technique Prepare pattern for Princess Bodice.
8. Using draping technique Prepare pattern for Pleated Skirt.
9. Using draping technique Prepare pattern for Tapered Slacks.
10. Using draping technique Prepare pattern for Skirt with Hip Yoke.
11. Using draping technique Prepare pattern for Reglan Sleeve.
12. Using draping technique Prepare pattern for Basic Jacket.

CONTENT BEYOND SYLLABUS

1. Using draping technique prepare pattern for peplum.
2. Using draping technique Prepare pattern for Kimono sleeve.

LIST OF EQUIPMENT

Equipment / Machines / Instruments required:

Dress forms

Mannequin

Pattern/ cutting table

Measuring tools

Drafting tools

Construction tools

General tools

Sewing machines-

Lock stitch- 10Nos.

Over lock- 1No

Flat lock 1No

Button hole 1No

Button stitch 1No

4- needle trimmer 1No

Chain stitch* 1No

Feed- off-arm* 1 No

*- OPTIONAL

Material required:

10 meters of fabric/ expt./ batch of 30 students. Sewing threads- white, assorted
Decorative materials.

END EXAMINATION

DETAILED ALLOCATION OF MARKS FOR EXTERNAL ASSESSMENT

Draped pattern preparation 50 marks

Write up 20 marks

Viva 05 marks

Total 75 Marks

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N1-SCHEME

Programme : DIPLOMA IN GARMENT TECHNOLOGY
Course Code : N1GT408
Term : VI Term
Course Name : PROJECT WORK AND SEMINAR

TEACHING AND SCHEME OF EXAMINATION:

No of weeks per semester: 15 weeks

Course	Instructions Hours/Week	Hours / Semester	Examination Marks			Duration
			Internal Assessment	Board Examination	Total	
PROJECT WORK AND SEMINAR	5Hrs	75Hrs	25	75	100	3Hrs

Course Outcomes:

Seminar:-

1. To have an exposure to an innovative area of technology/Information.
2. To develop presentation skills.
3. To develop creative interaction among listeners.

Project work:-

C408.1. To develop prototype/model of a product

C408.2. To enhance teamspirit and creative talents for achieving a goal.

C408.3. Implement the theoretical and practical knowledge gained through the curriculum into an application suitable for a real practical working environment perfectly in an industrial environment

C408.4. Communicate with experts and the community and use their knowledge in developing the project.

C408.5. Analyze the design of the project to ensure it meets the specifications (validate its operational viability)

Course-PO Attainment Matrix:

Course Name	Programme Outcomes						
	1	2	3	4	5	6	7
PROJECT WORK AND SEMINAR	2	2	2	2	1	3	1

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

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Course-PSO Attainment Matrix:

Course Name	Programme Specific Outcomes	
	1	2
PROJECT WORK AND SEMINAR	2	2

LEVEL 3- HIGHLY ADDRESSED, LEVEL 2-MODERATELY ADDRESSED, LEVEL 1-LOW ADDRESSED.

METHOD IS TO RELATE THE LEVEL OF PO WITH THE NUMBER OF HOURS DEVOTED TO THE COS WHICH ADDRESS THE GIVEN PO.

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Seminar topics:-

Human values
 Integrity
 Changing attitude
 Self-Confidence
 Spirituality
 Safety and risk
 Responsibility of engineers
 Types of responsibility
 Environmental Ethics
 Plastic waste disposal
 E-waste disposal
 Semi conductor waste disposal
 Industrial waste disposal
 Human rights
 Human rights of woman
 Status of woman in India
 National Human Right commission constitution
 Intellectual property Right

Internal Assessment :-

The internal assessment should be calculated based on the review of the progress of the work done by the student periodically as follows.

Detail of assessment	Period of assessment	Max.marks
First Seminar	3 rd week	05
First Review	4 th week	05
Second seminar	9 th week	05
Second review	10 th week	05
Attendance		05
		25

Project Review I & II (VI Terms) (5 + 5)	:10 Marks
Seminar I & II (5 + 5) = 10 / 2	: 5 Marks
Project report	: 5 Marks
Attendance	: 5 Marks
Total	:25 Marks

Composition of Educational Components:

Minimum marks for pass is 50 out of which minimum 35 marks should be obtained out of 75 marks in the board examinations alone.

External mark for Project work:-

S.No	Criteria Component	MARKS
1	Relevance of topic	10
2	Knowledge of methodology	20
3	Role of individual in the team	10
4	Finding of the study	10
5	Viva-voce	25
TOTAL		75

Rubrics/Criteria for Assessing Student Activities

Dimension	Scale					Student Score (ex)
	Unsatisfactory (1)	Developing (2)	Satisfactory (3)	Good (4)	Exemplary (5)	
Knowledge of Project	not capable	Capable	ok	exactly	well done	3
Basic concept	Poor	Less effective	Partially effective	Exactly	Most Effective	4
Team Work	Poor	Less effective	Partially effective	exactly	Most Effective	3
Workmanship	Poor	Less effective	Partially effective	exactly	Most Effective	3
Presentation	Poor	Less effective	Partially effective	exactly	Most Effective	4
TOTAL MARKS					17/5=3.4	4