Register Number:……..

KUMARAGURU
college of technology
character is life

B.TECH DEGREE EXAMINATIONS: MAY 2018

(Regulation 2015)

Fourth Semester

FASHION TECHNOLOGY

U15FTT401**:** Weaving Technology

COURSE OUTCOMES

CO1: Acquire knowledge in the objectives and working principles of various machines used for yarn preparation for weaving
CO2: Describe the working principle of beam preparatory machines for weaving.
CO3: Develop knowledge in the selection of sizing ingredients for different fibres
CO4: Discuss the objectives and working principles of various shuttle and shuttle less looms
CO5: Develop knowledge in selection suitable preparatory processes for weaving
CO6: Acquire knowledge on the process and quality control in the preparatory processes as well as in weaving.

Time: Three Hours **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Matching type item with multiple choice code CO1 [K_2]

List I	List II
A. Sizing	i. Yarn dyeing
B. Beam warping	ii. Checks & Stripes
C. Cheese winding as loose package	iii. Plain fabric
D. Sectional Warping	iv. Starch application

	A	B	C	D
a)	ii	i	iii	iv
b)	iii	iv	ii	i
c)	iv	iii	i	ii
d)	iii	i	ii	iv

2. The number of spinning cops required to complete 1.6 kg of cone package if the average cops weight is 50 grams. CO1 [K_3]

a) 34 b) 32

c) 42 d) 44

3. In warping machine the yarn is passed from CO2 [K_3]

1. Stop motions 2. Tension discs 3. Yarn clearers 4. Adjustable reeds 5. Cone drum

a) 1,3,5 b) 1,4,5

c) 1,2,4 d) 2,3,5

4. A warping machine can have the creel capacity upto _____ cones. CO2 [K_2]

a) 400 b) 1500

c) 1000 d) 600

5. Assertion (A): The size should be easily removable during weaving. CO2 [K_2]

Reason (R): Size film properties should not be affected drastically by extreme humidity changes.

a) Both A and R are Individually true and R is the correct explanation of A

b) Both A and R are Individually true but R is not the correct explanation of A

c) A is true but R is false

d) A is false but R is true

6. When the sley moves forward _____ taking place. CO3 [K_2]

a) Picking b) Take-up

c) Beat-up d) Let-off

7. The weaving taking place in the sequence of CO3 [K_3]

1. Picking 2. Shedding 3. Beat-up 4. Secondary motions

a) 2-3-4-1 b) 1-3-2-4

c) 3-4-2-1 d) 2-1-3-4

8. When existing warp and the new warp count and number of ends, ends/inch are similar, then _____ can be done instead _____. CO5 [K_3]

a) Knotting , Drawing-in b) Splicing, Denting-in

c) Denting-in, Knotting d) Drawing-in, splicing

9. Assertion (A): Air-jet loom is running at higher speed than shuttle looms CO5 [K_2]

Reason (R): The picking taking place by high pressure air nozzles throughout the width.

a) Both A and R are Individually true and R is the correct explanation of A

b) Both A and R are Individually true but R is not the correct explanation of A

c) A is true but R is false

d) A is false but R is true

10. The fabric width after the temple after fell of the cloth _____ CO6 [K_2]

a) Remains unaltered b) Reduces

c) Increases d) Both a & c

PART B (10 x 2 = 20 Marks)
(Answer not more than 40 words)

11.	List the types of yarn faults based on Classimat II.	CO1	[K_2]
12.	Brief the advantages of Auto Cone winding machine.	CO1	[K_2]
13.	Calculate the number of warp beams and threads per beam, if a total ends per fabric is 5800 and the warping machine capacity is 600 ends.	CO2	[K_4]
14.	Brief on single end sizing machine.	CO2	[K_2]
15.	Discuss on synthetic sizing requirements.	CO3	[K_3]
16.	What is a headstock in a sizing machine? And what it consisting of?	CO3	[K_2]
17.	List out the advantages of shuttle less looms.	CO4	[K_2]
18.	Discuss on demerits of water jet looms.	CO4	[K_2]
19.	Define Loom data system. What are all the data available in the system?	CO6	[K_3]
20.	Brief the advantages of the computerized fabric inspection system.	CO5	[K_2]

Answer any FIVE Questions:-

PART C (5 x 14 = 70 Marks)

(Answer not more than 300 words)

Q.No. 21 is Compulsory

21.	Elaborate the process sequence from yarn to fabric for a weaving process.	CO1	[K_2]
22.	With neat diagram explain the working and passage of material through a auto cone winding machine.	CO1	[K_2]
23.	Enumerate on different creel systems available in high speed warping machines. Explain with neat sketches.	CO2	[K_3]
24.	Explain with a neat sketch the working principles and the stages of a multi cylinder sizing machine.	CO2	[K_3]
25.	Discuss in detail with a neat sketch, the negative tappet shedding mechanism in weaving.	CO3	[K_3]

26. Explain with neat diagram the rapier mechanism with their advantages. CO4 [K_3]

27. List out the different process control measures taken in the following processes 1. Cone winding, 2. Warping, 3. Sizing 4. Weaving. CO5 [K_3]

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