



GENERAL INSTRUCTIONS TO THE CANDIDATES

1. Candidates are instructed to answer the questions as per Bloom's Taxonomy knowledge level (K₁ to K₆)
2. Candidates are strictly instructed not to write anything in the question paper other than their roll number.
3. Candidates should search their pockets, desks and benches and handover to the Hall Superintendent/ Invigilator if any paper, book or note which they may find therein as soon as they enter the examination hall.
4. Candidates are not permitted to bring electronic watches with memory, laptop computers, personal systems, walkie-talkie sets, paging devices, mobile phones, cameras, recording systems or any other gadget / device /object that would be of unfair assistance to him / her.
5. Corrective measures as per KCT examination policies will be imposed for malpractice in the hall like copying from any papers, books or notes and attempting to elicit the answer from neighbours.

B.TECH DEGREE EXAMINATIONS: JUNE 2015

(Regulation 2014)

Second Semester

FASHION TECHNOLOGY

U14FTT202: Weaving Technology

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. The operation done before sizing is..... [K₂]
 - a) denting-in
 - b) looming
 - c) Warping
 - d) weft winding

2. Matching type item with multiple choice code [K₃]

List I	List II
process	objectives
A. warping	1. winding on to a tapered drum
B. sizing	2. section beams
C. beam warping	3. winding yarns from cone to warp beam
D. sectional warping	4. application of size and lubricants to the warp yarns.

	A	B	C	D
a)	4	1	2	3
b)	3	1	4	2
c)	3	4	2	1
d)	2	3	4	1

3. Consider the following statement, [K₄]

1. slub catches are used to transfer yarn from small to large packages.
2. slub catches are used to arrest slubs, neps in the yarn
3. slub catches are essential in knotting.
4. slub catches are used to remove the knots and thick places in the yarn.

Which of these statements are correct

- | | |
|------------------------|------------------------|
| a) 1 and 4 are correct | b) 2 and 4 are correct |
| c) 1 and 3 are correct | d) 3 and 4 are correct |

4. Warping creel is a type related to,..... [K₂]

- | | |
|------------|----------------------|
| a) sizing | b) beam warping |
| c) warping | d) single end sizing |

5. Consider the following procedure for shuttle weaving, [K₃]

- 1.back rest 2.leasrod 3.front rest 4.heald shaft

- | | |
|------------|------------|
| a) 2-4-3-1 | b) 1-4-3-2 |
| c) 1-2-4-3 | d) 3-1-4-2 |

6. Number of heald shafts can be used in tappet weaving..... [K₂]

- | | |
|------|------|
| a) 8 | b) 7 |
| c) 6 | d) 9 |

7. Relay nozzles are used in [K₂]

- | | |
|----------------------|-----------------------|
| a) water-jet weaving | b) Air jet weaving |
| c) Rapier weaving | d) Projectile weaving |

8. The following items consists of two statements, one labeled as the “Assertion (A)” and the other as “Reason (R)”. you are to examine those two statements carefully and select the answers to these items using the codes given below:

Assertion (A):rapier is a type of shuttle less weaving.

Reason (R):a method of inserting weft yarn without using shuttle

- | | |
|--|---------------------------|
| a) Both A and R are correct | b) Both A and R are wrong |
| c) Both A and R are true and R is the correct explanation of A | d) None of these. |

9. Match list I with list II and select the correct answer using the codes given below,

[K₄]

CODES:

Machine	Operation
A. Cone winding	1. eliminating the fabric faults
B. Fabric inspection	2. preparation of cone
C. Pirn winding	3. preparation of coloured warp yarns
D. sectional warping	4. winding yarn in a compact package

a) 2 1 4 3

b) 3 4 1 2

c) 4 3 1 2

d) 4 1 2 3

10. Consider the following statements,

[K₃]

1. computerized fabric inspection machine used only for knitted fabrics.
2. computerized fabric inspection machine used only for woven fabrics.
3. computerized fabric inspection machine used for both woven and knitted fabrics.
4. computerized fabric inspection machine not used for non woven.

Which of these statements are correct,

a) 1 and 4 are correct

b) 3 and 4 are correct

c) 2 and 4 are correct

d) 2 and 3 are correct

PART B (10 x 2 = 20 Marks)

(Answer not more than 40 words)

11. State the principle of cheese and cone winding machines.

[K₂]

12. List out the requirements of yarn quality for weaving.

[K₄]

13. Tell the objectives of warping.

[K₂]

14. Give the recipe for sizing.

[K₂]

15. What are the mechanisms involved in weaving.

[K₄]

16. Discuss the principle of drop box loom.

[K₂]

17. What is the function of relay nozzle?

[K₂]

18. Tell the basic principle of rapier loom.

[K₂]

19. What are the control measures to be followed in sectional warping?

[K₄]

20. Give short note on computerized fabric inspection.

[K₃]

Answer any FIVE Questions:-
PART C (5 x 14 = 70 Marks)
(Answer not more than 300 words)

Q.No. 21 is Compulsory

21. Explain the various stages of weft insertion in rapier loom with a neat diagram. [K₄]
22. (i) Explain the working principle of high speed cone winding machine with a neat diagram. (10) [K₅]
(ii) Explain the process flow in weaving with a neat flowchart. (4) [K₃]
23. (i) With a neat diagram explain the working of sizing machine. (10) [K₄]
(ii) Give the concept of single end sizing (4) [K₃]
24. (i) Give the passage of material in a loom with a neat diagram and explain it. (7) [K₄]
(ii) Explain the tappet shedding mechanism with a neat sketch. (7) [K₃]
25. Discuss in detail about the working of computerized fabric inspection machine with a neat diagram. [K₅]
26. Explain in detail about the productivity and techno economics of shuttleless weaving. [K₆]
