

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF TEXTILE TECHNOLOGY
END OF SECOND SEMESTER EXAMINATIONS – MAY 2011**

TXT 1208 – WEAVING TECHNOLOGY I

TIME: 3 HOURS

TOTAL MARKS: 100

INSTRUCTIONS

1. Answer **Question 1** and **ANY OTHER FOUR** questions. Each question carries **20 marks**.
2. The first fifteen minutes should be spent reading the question paper and making notes.
3. Do not open your answer sheet until told to do so.
4. Marks will be awarded for skill in appreciating the scope of questions, clarity of argument and conciseness of presentation as well as for the knowledge displayed by the candidate.

QUESTION 1

Describe the function of each of the mechanisms in Fig Q1 (a) and Fig Q1 (b).

(20)

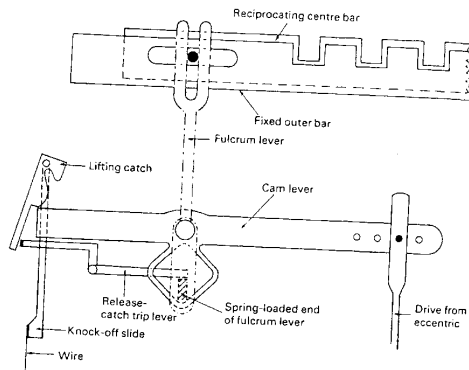


Figure Q1 (a)

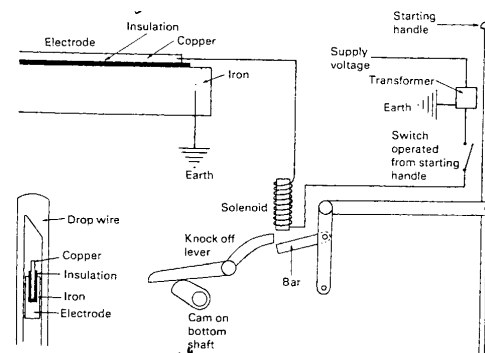


Figure Q1 (b)

QUESTION 2

Using diagrams and formulae, explain the tensions experienced by the warp during weaving.

(20)

QUESTION 3

With the aid of diagrams and formula, make a detailed analysis of the rigid rapier driving mechanisms.

(20)

QUESTION 4

Discuss the function of jet looms and their timing. (20)

QUESTION 5

Use illustrations to describe the:

(a). Causes of variations in pick-spacing.

(b). Negative Take- up. (20)

QUESTION 6

With the help of diagrams, explain the Jacquard harness and its lift. (20)

QUESTION 7

Write notes on the following:

(a). Disturbing weaving conditions. (10)

(b). Bumping conditions. (3)

(c). Method of pick spacing. (7)

END OF THE EXAMINATION QUESTION PAPER