SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Find the arithmetic mean for the following data

marks obtained	5	8	10	15	17
no. of students	3	4	3	7	2

Q.24 Calculate the cloth cover or fabric cover of a fabric if wrap count is 20'sNe,

Weft is 20's Ne EPI = 80 and PPI = 60

Q.25 Define periodic variation in textile. How will you classify it. Explain how this classification helps in to detect the machine which cause the variation.

Roll No. .....

3rd Sem / Textile Design

Subject : Textile Mathematics

Time : 3 Hrs. M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Value of 4! - 2!.

a) 20 b) 22

c) 24 d) 42

Q.2 Value of $\log_2 16$ is

a) 1 b) 2

c) 3 d) 4

Q.3 Simplest ratio of 20:25

a) 2:5 b) 5 :2

c) 4:5 d) 5:4

Q.4 The perimeter of square is

a) 4 x side b) side x side

c) 2 x side d) none of these

Q.5 Value of ${}^5P_3$

a) 20 b) 24

c) 60 d) 42

Q.6 The Mode of the series.

7,5,2,5,3,7,7, is

a) 7 b) 5

c) 3 d) 2

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Find the mean of the series 2,3,5,7,8.

Q.8 Write the formula for the area of triangle.

Q.9 A mixing of cotton is made of two type of cotton A and B. The ratio of A and B is 2 : 4. if total mixing is 130 kg. The find weight of each type of cotton.

Q.10 Find the area of rectangle whose length is 12m and breadth is 16m.

Q.11 Value of ${}^nC_r$ is

Q.12 If a fabric is having EPI 35 and warp count is 26's Ne. Calculate the warp cover factor of this fabric.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Find mean proportion of 36 and 81.

Q.14 In how many ways the letter in a word TWO can be arranged.

Q.15 Define random variation in brief.

Q.16 Discuss the use of control chart in brief.

Q.17 Find the fencing of a square part of length 80m at the rate of Rs 15 per meter.

Q.18 Find the value of x if $3\log(X+2) - \log 3 = \log 7$.

Q.19 Find the diagonal of the rectangle whose length is 25 cm and breadth is 15cm.

Q.20 Find the area of triangle whose height is 12cm and base is 13cm.

Q.21 If $(n+1)! = 10(n+1)!$, then find the value of n.

Q.22 If the mean of x+1, x+3, x+5, x+7, x+9 is 10 then find the mean of first two number.