Q.31 Calculate yarn diameter of cotton yarn, if yarn count is 20 Ne

Q.32 Find value of $^7P_2$

Q.33 If + = Find the value of x

Q.34 If log 3 + log (x+1) equal to log (2 x+7) find value of x

Q.35 Find area of sector of a circle with radius 6 cm and angle of sector is 40°

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions.   (2x10=20)

Q.36 Find arithmetic mean for the following data

Marks obtained	6	12	10	17	22
No. of Students	3	7	5	4	6

Q.37 Prove : log 2 + 16 log (16/15) + 12 log (25/24) + 7 log (81/80) = 1

Q.38 Calculate the cloth cover or fabric cover of a fabric if

Warp count is 30's Ne, Weft count is 30's Ne

EPI = 110 and PPI = 90

3rd Sem / Textile Design
Subject:- Textile Mathematics

Time : 3Hrs.   M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory   (10x1=10)

Q.1 The area of parallelogram is
a) Base x height   b) Base x height/2
c) 2(base+height)   d) 1/3 (base x height)

Q.2 The side of a square is 2mt then its perimeter will be
a) 4 m   b) 6 m
c) 8 m   d) 60 m

Q.3 The median of the series 2,3,5,7,8 is
a) 6   b) 5
c) 8   d) 7

Q.4 Area of a circle is
a) 2pr   b) $pr^2/2$
c) pr   d) pr^2

Q.5 If cost of one toy is Rs5 then cost of 12 toys is
a) 60   b) 50
c) 70   d) 48

Q.6 The simplest ratio of 15:25 is

a) 1:3   b) 5:3

c) 3:5   d) 5:1

Q.7 Area of square is

a) side x side   b) 4 x side

c) 2 x side   d) None

Q.8 A.M. of first five natural numbers is

a) 5   b) 3

c) 15   d) 2

Q.9 20% of 50 =

a) 40   b) 10

c) 30   d) 20

Q.10 Warp cover is defined as

a) EPI/ÖWarp count   b) EPI/ÖWeft count

c) PPI/ÖWarp count   d) PPI/ÖWeft count

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Find A.M. of 2,4,6,0,8

Q.12 Calculate 20% of rupees 160

Q.13 The value of 5! - 2! is

Q.14 Value of log (m n) is _____

Q.15 Divide rupees 462 in Rahul and Simran in the ratio 5:3

Q.16 The perimeter of a square is 30 cm then its area is _____

Q.17 Define mode

Q.18 Write formula for area of parallelogram

Q.19 The value of 4! is_____

Q.20 Find mode of the series 3,8,5,3,7,8,3

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 If 24% of x = 10% of Y and x:y

Q.22 Calculate median 4,10,6,8,15,12

Q.23 Find volume of the cylinder where radius is 5 cm and height is 12 cm

Q.24 Find height of a triangle if its area is 48 cm square and base is 10 cm

Q.25 If log 3 + log (x+ 1) equal to log (2 x + 7) find value of x

Q.26 In how many ways the letters in the word RAM can be arranged

Q.27 Find value of $^{15}C_4$

Q.28 Find the area of trapezium if its parallel sides are 10 m and 6 m and height is 4 m

Q.29 Define warp cover and weft cover.

Q.30 Define short term and long term variations.