DIPLOMA – COMMON ENTRANCE TEST-2013

TX	COURSE	DAY : SUNDAY DATE : 30-JUNE-2013
	TEXTILE TECHNOLOGY	TIME : 9.00 a.m. to 12.00 Noon

MAXIMUM MARKS	TOTAL DURATION	MAXIMUM TIME FOR ANSWERING
180	200 Minutes	180 Minutes

MENTION YOUR DIPLOMA CET NUMBER	QUESTION BOOKLET DETAILS	
	VERSION CODE	SERIAL NUMBER
	A-1	135073

DOs :

1. Check whether the Diploma CET No. has been entered and shaded in the respective circles on the OMR answer sheet.
2. This question booklet is issued to you by the invigilator after the **2nd bell i.e., after 08.50 a.m.**
3. The serial number of this question booklet should be entered on the OMR answer sheet.
4. The version code of this question booklet should be entered on the OMR answer sheet and the respective circles should also be shaded completely.
5. Compulsorily sign at the bottom portion of the OMR answer sheet in the space provided.

DON'Ts :

1. **THE TIMING AND MARKS PRINTED ON THE OMR ANSWER SHEET SHOULD NOT BE DAMAGED / MUTILATED / SPOILED.**
2. The **3rd Bell rings at 9.00 a.m., till then;**
   - Do not remove the seal / staple present on the right hand side of this question booklet.
   - Do not look inside this question booklet.
   - Do not start answering on the OMR answer sheet.

1. This question booklet contains 180 (items) questions and each question will have one statement and four answers. (Four different options / responses.)
2. After the **3rd Bell is rung at 9.00 a.m.**, remove the paper seal / polythene bag of this question booklet and check that this booklet does not have any unprinted or torn or missing pages or items etc., if so, get it replaced by a complete test booklet. Read each item and start answering on the OMR answer sheet.
3. During the subsequent 180 minutes:
   - Read each question (item) carefully.
   - Choose one correct answer from out of the four available responses (options / choices) given under each question / item. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **only one response** for each item.
   - Completely **darken / shade** the relevant circle with a **blue or black ink ballpoint pen against the question number on the OMR answer sheet.**

Correct Method of shading the circle on the OMR answer sheet is as shown below :

① ● ③ ④

4. Use the space provided on each page of the question booklet for Rough Work. Do not use the OMR answer sheet for the same.
5. After the **last bell is rung at 12.00 Noon**, stop marking on the OMR answer sheet and affix your **left hand thumb impression** on the OMR answer sheet as per the instructions.
6. Hand over the **OMR answer sheet** to the room invigilator as it is.
7. After separating the top sheet (KEA copy), the invigilator will return the bottom sheet replica (candidate's copy) to you to carry home for self-evaluation.
8. Preserve the replica of the OMR answer sheet for a minimum period of **ONE year**.

[P.T.O.

DO NOT WRITE HERE

PART – A

It consists of **1 – 40** questions.

1. If $\begin{vmatrix} x+2 & 5 \\ 0 & x-2 \end{vmatrix} = 0$, then x =

   (1) 1 (2) 2

   (3) 3 (4) 0

2. In solving the equations by Cramer's rule for $5x - 3y = 1$ and $2x - 5y = -11$, the value of x and y is

   (1) (3, 2) (2) (– 3, – 2)

   (3) (2, 3) (4) (– 2, – 3)

3. If $A = \begin{bmatrix} 2 & 0 & 0 \\ 1 & 2 & 0 \\ 1 & 1 & 2 \end{bmatrix}$ then A adj A is

   (1) Diagonal (2) Scalar

   (3) Identity (4) Zero matrix

4. The minor of the element 6 in a matrix $A = \begin{bmatrix} 2 & -3 & 0 \\ 4 & 1 & 6 \\ 3 & 2 & 0 \end{bmatrix}$ is

   (1) 10 (2) 11

   (3) 12 (4) 13

5. The characteristic equation of the matrix $A = \begin{bmatrix} 5 & -3 \\ 2 & 1 \end{bmatrix}$ is

   (1) $\lambda^2 - 6\lambda + 11 = 0$ (2) $\lambda^2 - 6\lambda - 11 = 0$

   (3) $\lambda^2 + 6\lambda + 11 = 0$ (4) $-\lambda^2 + 6\lambda = 0$

SPACE FOR ROUGH WORK

6. The fourth term in the expansion of $\left(\sqrt{3}+2\right)^7$ is

(1) 2520 (2) -2520

(3) 1/2520 (4) $-1/2520$

7. The constant term in the expansion $(x^2 + 1/x)^{12}$ is

(1) -495 (2) 495

(3) 1/495 (4) 945

8. The projection of vector (3, 1, 3) on vector (1, – 2, 1) is

(1) $2\sqrt{6}/5$ (2) $-2\sqrt{6}/3$

(3) $2\sqrt{6}/3$ (4) $-2\sqrt{6}/5$

9. If vector a = (1, 1, 1) and vector b = (2, 2, 1) then magnitude of vector a $\times$ b is

(1) $\sqrt{26}$ (2) $\sqrt{28}$

(3) $\sqrt{24}$ (4) 1

10. The cosine of the angle between the vectors (3, – 1, 1) and vector (1, 1, – 1) is

(1) $1/\sqrt{11}$ (2) $-1/\sqrt{33}$

(3) $1/\sqrt{33}$ (4) $-1/\sqrt{11}$

11. The value of $(\sec^6 x - \tan^6 x)$ is

(1) $1 - 3\sec^2 \times \tan^2 x$

(2) $1 + \tan^2 \times \sec^2 x$

(3) $1 + 3\sec^2 \times \tan^2 x$

(4) $1 - \tan^2 \times \sec^2 x$

SPACE FOR ROUGH WORK

12. If x cot 45° cos 60° = sin 60° tan 30° then the value of x is

(1) $\sqrt{3}$ (2) $\sqrt{3}/2$

(3) 1/2 (4) 1

13. If tan x = 15/8 and x is in the III quadrant then the value of $(2 \sin x - 3 \cos x) / (2 \cos x + 3 \sin x)$ is

(1) 61/6 (2) – 61/6

(3) – 6/61 (4) 6/61

14. The value of $\{[\sin(2\pi - \theta) + \cos(-\theta)] / [\tan(-\theta) + \cot(2\pi + \theta)]\} - \{[\sin(\pi/2 + \theta) + \cos(3\pi/2 - \theta)] / [\cot(\pi + \theta) + \tan(2\pi - \theta)]\}$ is

(1) 0 (2) – 1

(3) + 1 (4) – 2

15. If sin A = 5/13 and sin B = 4/5 then the value of cos (A – B) is

(1) 65/56 (2) 56/65

(3) 16/65 (4) – 16/65

16. On simplification the value of $(\cos^3 A - \cos 3A) / \cos A + (\sin^3 A + \sin 3A) / \sin A$ is

(1) 3 (2) 1

(3) 2 (4) 0

17. The value of $(\sin 100° + \sin 20°) / (\cos 100° + \cos 20°)$ is

(1) $\sqrt{3}/2$ (2) 1/2

(3) $\sqrt{3}$ (4) 1

18. The value of $(\tan^{-1} 5/6 + \tan^{-1} 1/11)$ is

(1) 30° (2) 60°

(3) 90° (4) 45°

SPACE FOR ROUGH WORK

19. If the points (– 3, K), (5, 7) and (– 11, 1) are collinear, then the value of K is

(1) 4 (2) 3

(3) 2 (4) 1

20. The ratio of the line join of the points (2, 3) and (– 5, 6) divided by y – axis is

(1) 5 : 2 (2) 2 : 5

(3) 3 : 2 (4) 2 : 3

21. Three vertices of a triangle are (– 2, 3, 1), (– 1, 4, 2) and (– 6, 5, 2), then the centroid of the triangle is

(1) (– 3, 4, 1) (2) (0, 5/3, 1/3)

(3) (4, 3, 1) (4) (– 3, – 4, – 2)

22. The equation to the straight line passing through (3, 2) and perpendicular to the line $5x + 2y - 3 = 0$ is

(1) $2x - 5y - 4 = 0$

(2) $2x - 5y + 4 = 0$

(3) $2x + 5y + 4 = 0$

(4) $5x - 2y + 4 = 0$

23. The slope of a line passing through the points (– 4, – 5) and (2, 3) is

(1) 3/4 (2) – 3/4

(3) 4/3 (4) – 4/3

24. The acute angle between the lines $2x - y + 3 = 0$ and $x - 3y + 2 = 0$ is

(1) 30° (2) 60°

(3) 90° (4) 45°

SPACE FOR ROUGH WORK

25. The value of $\lim_{n\to\infty} [(3-n)(4-n)(2n-5)] / (4n^3-3)$

(1) $-1/2$ (2) $1/2$

(3) $3/2$ (4) $-3/2$

26. The value of $\lim_{x\to -3} (x^4-81) / (x^3+27)$ is

(1) 3 (2) -3

(3) 4 (4) -4

27. $d/dx\left(\sqrt{\sin^2 x}\right.$ is

(1) $\cos x$ (2) $\sin 2x$

(3) $\cos^2 x$ (4) $\sqrt{\cos x / \sin x}$

28. $d/dx \tan^{-1} \sqrt{(1-\cos 2x)/(1+\cos 2x)}$ is

(1) 1 (2) 0

(3) $\tan x$ (4) $\cos x$

29. If $y = \sin x^x$ then dy/dx is

(1) $x \log \sin x$

(2) $\cos x^x$

(3) $\sin x^x (x \cot x + \log \sin x)$

(4) $\cos x^x (x \tan x + \log \sec x)$

30. $d/dx\left(\sin h^{-1} x\right)$ is

(1) $1/\sqrt{1+x^2}$ (2) $1/\sqrt{1-x^2}$

(3) $1/\sqrt{x^2-1}$ (4) $1/\sqrt{x^2+1}$

SPACE FOR ROUGH WORK

31. The equation to the normal to the curve $y = 5x^2 + 4x - 11$ at the point $(-1, 2)$ is

(1) $x - 6y + 11 = 0$

(2) $x + 6y - 11 = 0$

(3) $6x - y + 11 = 0$

(4) $6x + y - 11 = 0$

32. The volume of a sphere is increasing at the rate of 4π c.c/sec, then the rate of increase of the radius is when the volume is $288\ \pi$ cc

(1) 6 cm/sec

(2) 1/6 cm/sec

(3) 1/36 cm/sec

(4) 36 cm/sec

33. $\int \sin^2 x\, dx$ is

(1) $\cos x + c$

(2) $x/2 - (\sin 2x)/4 + c$

(3) $x/2 + (\cos 2x)/4 + c$

(4) $x/2 + (\sin 2x)/4 + c$

34. $\int (3x^2 + x - 1)^6 (6x + 1)\, dx$ is

(1) $6(3x^2 + x - 1)^5 + c$

(2) $(3x^2 + x - 1)^6 + c$

(3) $(3x^2 + x - 1)^7 / 7 + c$

(4) $(3x^2 + x - 1)^7 / 21 + c$

35. $\int \tan^{-1} x\, dx$ is

(1) $x \tan^{-1} x - 1/2 \log (1 + x^2) + c$

(2) $x \tan^{-1} x + 1/2 \log (1 + x^2) + c$

(3) $\tan^{-1} x - 1/2 \log (1 + x^2) + c$

(4) $\tan^{-1} x + 1/2 \log (1 + x^2) + c$

SPACE FOR ROUGH WORK

36. $\int_0^{\pi/2} \sin 3x \cos 2x \, dx$ is

(1) 3/5 (2) – 3/5

(3) 5/3 (4) – 5/3

37. $\int_0^{2} (x-1)(x-2)\, dx$ is

(1) 2/3 (2) – 2/3

(3) 3/2 (4) – 3/2

38. The area bounded by the curve $y = 2x^2$, the x – axis and the ordinates at $x = -1$ and $x = 2$ is

(1) – 6 sq units

(2) 3 sq units

(3) – 3 sq units

(4) 6 sq units

39. The differential equation formed by eliminating a and b from $x + y = ae^x + be^{-x}$ is

(1) $d^2y/dx^2 + y = 0$

(2) $d^2y/dx^2 - y = 0$

(3) $d^2y/dx^2 - x - y = 0$

(4) $d^2y/dx^2 + x - y = 0$

40. The solution of the differential equation $dy/dx = (1 + y^2) / (1 + x^2)$ is

(1) $\tan^{-1} y + \tan^{-1} x + c = 0$

(2) $\log (1 + y^2) + \log (1 + x^2) + c = 0$

(3) $\tan^{-1} y - \tan^{-1} x + c = 0$

(4) $\log (1 + y^2) - \log (1 + x^2) + c = 0$

SPACE FOR ROUGH WORK

PART – B

It consists of **41 – 80** questions.

41. The prefix "mega" stands for

(1) 10^3 (2) 10^{-3}

(3) 10^{-6} (4) 10^6

42. Which of the following is dimensional physical quantity ?

(1) pressure (2) strain

(3) mechanical advantage (4) sp.gravity

43. The principle of vernier is

(1) n VSD = (n + 1) MSD (2) (n – 1) VSD = n MSD

(3) n MSD = (n – 1) V SD (4) (n – 1) MSD = n VSD

44. A screw gauge has a pitch of $\frac{1}{2}$ mm and 50 division on sleeve. The reading when the jaws touch is +5 division. While gripping a wire the reading is PSR = 3 PSD and HSR = 17, then the diameter of wire is

(1) 1.62 cm (2) 0.162 cm

(3) 0.162 mm (4) 16.2 mm

45. The extension of the material by itself without increase of load takes place

(1) within elastic limit

(2) beyond elastic limit

(3) beyond yield point

(4) at breaking point

46. If the strain in a wire is 0.1%, then the change in the length of the wire of length 5 m is

(1) 5×10^{-2} m (2) 5×10^{-3} m

(3) 5×10^{-4} m (4) 5×10^{-3} cm

SPACE FOR ROUGH WORK

47. Poisson's ratio is the ratio of

(1) $\frac{Lateral\ strain}{Linear\ strain}$ (2) $\frac{Linear\ strain}{Lateral\ strain}$

(3) $\frac{Lateral\ strain}{Volume\ strain}$ (4) $\frac{Volume\ strain}{Lateral\ strain}$

48. The pressure at a depth of 100 m below the surface of water density 1000 kgm^{-3} is

(1) $98 \times 10^5\ Nm^{-2}$ (2) $9.8 \times 10^4\ Nm^{-2}$

(3) $980 \times 10^4\ Nm^{-2}$ (4) $98 \times 10^4\ Nm^{-2}$

49. When two capillary tube of different diameters are dropped vertically in a liquid, the height of the liquid is

(1) More in the tube of larger diameter

(2) More in the tube of smaller diameter

(3) Lesser in the tube of smaller diameter

(4) Same in both the tubes

50. The property by virtue of which a liquid opposes relative motion between its different layers is

(1) Viscosity (2) Elasticity

(3) Surface tension (4) Inertia

51. The maximum amount of force acting for a short duration is known as

(1) Momentum (2) Inertia

(3) Power (4) Impulse

52. A bullet of mass 0.01 kg is fired from a rifle of mass 20 kg with a speed of 10 m/s , then the recoil velocity of rifle is _____ m/s.

(1) -1 (2) -0.05

(3) -200.01 (4) -0.005

SPACE FOR ROUGH WORK

53. Final velocity of a body thrown downwards is _____

(1) Maximum (2) Minimum

(3) No change (4) Zero

54. A person throws a sand bag from a boat at rest in a pond then boat moves

(1) In the same direction

(2) In the opposite direction

(3) In a perpendicular direction

(4) In circular direction

55. Two equal forces at a point, the square of their resultant is equal to three times the product of the forces. Then the angle between the forces is equal to

(1) 30° (2) 45°

(3) 60° (4) 90°

56. Equilibrant is a force

(1) Which brings a body in equilibrium

(2) Which moves the body along the resultant force

(3) in zig-zag movement of the body

(4) Which moves the body in opposite direction to equilibrant force

57. A force of 10 N acting on a body fixed at a point the distance from the fixed point to the line of force is 2 m. Then the moment of the force is _____ N-m.

(1) 0.002 (2) 0.02

(3) 2 (4) 20

58. By Lami's theorem, P Q R are three forces acting in equilibrium and angle between PR, PQ, QR, are α, β, γ respectively then which of the following is correct ?

(1) $\frac{P}{\sin\beta} = \frac{Q}{\sin\gamma} = \frac{R}{\sin\alpha}$ (2) $\frac{P}{\sin\gamma} = \frac{Q}{\sin\alpha} = \frac{R}{\sin\beta}$

(3) $\frac{P}{\sin\alpha} = \frac{Q}{\sin\beta} = \frac{R}{\sin\gamma}$ (4) $\frac{P}{\sin\alpha} = \frac{Q}{\sin\gamma} = \frac{R}{\sin\beta}$

SPACE FOR ROUGH WORK

59. If the line of action of the force passes through the point of rotation, then the moment of force is

(1) Maximum (2) Less than one

(3) Greater than one (4) Zero

60. 1 Kilo calorie of heat is equal to _____ joule.

(1) 4.186 (2) 41.86

(3) 418.6 (4) 4186

61. The correct relation between °F and K scale is

(1) $5K = 9\,(F - 32)$

(2) $9K = -5(F - 32)$

(3) $K = \frac{9}{5}\,(F - 32) - 273$

(4) $K = \frac{5}{9}\,(F - 32) + 273$

62. Absolute zero is the temperature of a gas at which, the _____ of gas is theoretically zero.

(1) Mass (2) Weight

(3) Volume (4) Density

63. When the particle is in SHM having amplitude ' r ' ,then its velocity is

(1) $v = \omega\,(r^2 - y^2)$ (2) $v = \omega\sqrt{r^2 - y^2}$

(3) $v = r\omega^2$ (4) $v = r\omega^3$

64. Ripples in water are the example for

(1) Transverse wave

(2) Longitudinal wave

(3) Sound wave

(4) Ultrasonic wave

SPACE FOR ROUGH WORK

65. The length of one ventral segment in stationary wave is equal to

(1) Full wavelength of the wave

(2) Twice the wavelength of the wave

(3) Half a wavelength of the wave

(4) Quarter a wavelength of the wave

66. A stretched string under a tension T vibrates with a frequency f. When the tension is increased by 4 times, then the frequency becomes _____

(1) same (2) doubled

(3) tripled (4) zero

67. The best value of reverberation time for speech listener _____

(1) 0.5 to 1.5 s (2) 0.15 to 0.5 s

(3) 0.05 to 0.15 s (4) 0.5 to 5 s

68. 3 strings of equal lengths but stretched with different tensions are made to vibrate, if their masses per unit length are in the ratio 3:2:1 and frequencies are same then the ratio of the tensions _____

(1) 1:2:3 (2) 2:3:1

(3) 1:3:2 (4) 3:2:1

69. Newton's formula for velocity of sound was corrected by

(1) Boyle (2) Charles

(3) Laplace (4) Hertz

70. Light waves are composed of both electric and magnetic field is proposed by

(1) Newton's corpuscular theory

(2) Huygen's wave theory

(3) Maxwell's theory of light

(4) Plank's theory

SPACE FOR ROUGH WORK

71. If 'a' and 'b' are the amplitudes of two interfering waves then for destructive interference the amplitude ' R' is

(1) $R = ab$ (2) $R = a/b$

(3) $R = a - b$ (4) $R = a + b$

72. Two coherent sources 2×10^{-4} m apart are illuminated by the light of wave length 5000×10^{-10}m. The distance between the source and screen is 0.2m, then fringe width is

(1) 0.05×10^{-3} m

(2) 5×10^{-3}m

(3) 0.5×10^{-3}m

(4) 50×10^{-3}m

73. Resolving power of microscope is

(1) Equal to the resolution of the microscope

(2) Reciprocal to the resolution of the microscope

(3) Reciprocal to the focal length of the microscope

(4) Product of wave length and semi vertical angle

74. Which of the following phenomenon confirm that light is transverse wave ?

(1) Diffraction

(2) Interference

(3) Refraction

(4) Polarization

75. In Field emission

(1) High positive voltage is used

(2) Secondary electrons are used

(3) High energy is used

(4) High radiations are used

SPACE FOR ROUGH WORK

76. Which of the following is not true ?

(1) Photoelectric emission is an instantaneous process

(2) Photoelectric emission do not takes place below threshold frequency

(3) The K.E. of the photoelectron depends on the wavelength of incident radiation

(4) Number of photoelectrons emitted is directly proportional to the intensity

77. The appearance of additional frequencies in scattered beam of light is known as

(1) Raman effect

(2) Coherent scattering

(3) Incoherent scattering

(4) Bipolar scattering

78. Two properties of LASER are

(1) Highly monochromatic and extremely intense

(2) Highly chromatic and extremely fast

(3) Very high frequency and extremely high wave length

(4) Very high power and extremely low amplitude

79. To form a galvanic cell

(1) difference in concentration of electrolyte is required

(2) difference in concentration of frequency is required

(3) difference in concentration of amplitude is required

(4) both (2) and (3)

80. pH value is not having its application in

(1) determination of quality of soil

(2) determination of quality of textile dyes

(3) determination of quality of chemicals

(4) determination of quality of electron

SPACE FOR ROUGH WORK

PART – C

. It consists of **81 – 180** questions.

81. Killing pupa is

(1) Drying (2) Sorting (3) Cooking (4) Reeling

82. Main amino acid of bombyx mori fibroin is

(1) Valine (2) Glycine (3) Threonine (4) Arginine

83. The fibres manufactured by Addition polymerisation process are

(1) Polyester & Polypropylene

(2) Nylon & Polypropylene

(3) Polyester & Nylon

(4) Polyethylene & polypropylene

84. Nomex is

(1) Natural fibre (2) Regenerated fibre

(3) Polyamide fibre (4) Polynosic fibre

85. The physical properties of the fiber depends upon

(1) Molecular weight (2) Crystallinity

(3) End groups (4) All of these

86. The monomer used to prepare Nylon-6 is

(1) Wood pulp (2) Caprolactum

(3) Carbon (4) Acrylonitrile

SPACE FOR ROUGH WORK

87. The other name of Polyester fiber is

(1) Nylon-6 (2) Polyethylene terephthalate

(3) Poly propelene (4) None

88. The smallest repeat unit of the three dimensional lattice of the crystallites is known as

(1) Crystalline region (2) Morphology

(3) Unit cell (4) Monomer

89. PTFE is also known as

(1) Teflon (2) Nylon (3) PVC (4) Orlon

90. Bast fibers are derived from

(1) Animals (2) Plants

(3) Micro organisms (4) All of these

91. Which of the following constitutes the central portion of the coarse wool ?

(1) Medulla (2) Cuticle (3) Cortex (4) Lumen

92. The sequence of steps in carbon manufacture are

(1) Oxidation, graphitization, carbonization

(2) Oxidation, carbonization, graphitization

(3) Graphitization, oxidation, carbonization

(4) Carbonization, oxidation, graphitization,

SPACE FOR ROUGH WORK

93. The typical two bladed beater speed for 20 s Ne is

(1) 850 rpm (2) 750 rpm (3) 1600 rpm (4) 1250 rpm

94. Typical fan speed for processing 60 s Ne is

(1) 2000 rpm (2) 1200 rpm (3) 600 rpm (4) 400 rpm

95. The type of Gin used for long staple cotton

(1) Mecarthy (2) Roller Gin (3) Saw Gin (4) Knife roller Gin

96. Cleaning efficiency of Unimix is

(1) 40 % (2) 60 % (3) 20% (4) 50%

97. The diameter of cylinder of Card is

(1) 500 mm (2) 5000 mm (3) 1300 mm (4) 2000 mm

98. Standard shell roller diameter in blow room is

(1) 25 inches (2) 18 inches (3) 9 inches (4) 12 inches

99. Drawframe setting is done based on

(1) Mean length (2) Modal length (3) Staple length (4) Effective length

100. The sequence of combing preparatory is

(1) Card – Drawframe – Unilap (2) Card – Unilap – Drawframe

(3) Draw frame – Card – Unilap (4) Unilap – Drawframe – Card

SPACE FOR ROUGH WORK

101. Piecing in comber is achieved by

(1) Drafting roller (2) Top comb

(3) Cylinder (4) Detaching roller

102. The hole size of hollow leg of flyer depends on

(1) Hank of roving (2) TPI

(3) Type of Material (4) All of these

103. The count production in Rotor spinning machine is

(1) 10s (2) 60s (3) 80s (4) 120s

104. The draft range in air jet spinning is

(1) 10 – 20 (2) 20 – 80 (3) 100 – 200 (4) 400 – 800

105. TPI in ring frame is reciprocal of

(1) Front roller Delivery/ Spindle Speed

(2) Spindle / Front roller Delivery

(3) Back roller speed/ Front roller Delivery

(4) Front roller Delivery/Back roller Speed

106. Metallic Clothing are used in

(1) High Speed Card (2) Conventional Card

(3) Tandem Card (4) LC300A Card

SPACE FOR ROUGH WORK

107. Multiple box looms are used for

(1) Fiber mixing (2) Warp mixing

(3) Weft mixing (4) Cloth mixing

108. Dividend is given in

(1) Take up (2) Shedding (3) Beat up (4) Picking

109. In which of the following loom "nozzles" are used ?

(1) Projectile (2) Sulzer (3) Water jet (4) Powerloom

110. Double nose tappet is used in

(1) Fast reed mechanism (2) Loose reed mechanism

(3) Warp protector mechanism (4) Pick at wheel motion

111. Self threading shuttle used in

(1) Warp changing automatic loom

(2) Weft changing automatic loom

(3) Handloom

(4) Conventional loom

112. Eccentricity of sley is found in

(1) Shedding (2) Picking (3) Beat up (4) Take up

SPACE FOR ROUGH WORK

113. Leno selvedge is found in

(1) Plain shuttle loom (2) Dobby loom

(3) Automatic loom (4) Air jet loom

114. Bunch build mechanism helps to avoid

(1) Miss pick (2) Gout (3) Slub (4) Missing end

115. For which yarn antistatic agent is required ?

(1) Natural yarn (2) Synthetic yarn

(3) Regenerated yarn (4) Wool

116. Over pick motion is used for

(1) Medium and broad loom (2) Very broad loom

(3) Narrow loom (4) Very wide

117. Variable beat up mechanism is used for

(1) Terry weaves (2) Leno (3) Gauge (4) Backed cloth

118. Buffer made from

(1) Cotton (2) Wood (3) Leather (4) Steel

119. When the event of yarn breaks in cone winding machine ?

(1) Lifting of package holder from the drum

(2) Package holder and drum contact each other

(3) Package holder and drum stops simultaneously

(4) None of these

SPACE FOR ROUGH WORK

120. Object of sizing is

(1) To improve strength (2) To remove faults

(3) To give smooth finish (4) To improve fineness

121. The process to remove hairy fibers is called

(1) Scouring (2) Desizing (3) Bleaching (4) Singeing

122. The reducing agent used for Sulphur dyeing is

(1) Sodium Sulphide (2) Sodium Sulphate

(3) Sodium Chloride (4) Sodium Hydrosulphite

123. After mercerizing fabric dimension is

(1) Extended (2) Shrinked (3) Tensioned (4) Twisted

124. The temperature use in thermsol process of dyeing is

(1) 150° C (2) 170° C (3) 180° C (4) 210° C

125. The movement in jet dyeing machine the material and dye liquor are

(1) Stationary (2) In movement

(3) Liquor stationary (4) Only material

126. Auramin, Rhodomine, Malechite are related to

(1) Basic dye (2) Acid dye (3) Azo dye (4) Reactive dye

SPACE FOR ROUGH WORK

127. The temperature recommended in wool scouring is

(1) 100° C (2) 120° C (3) 50° C (4) 85° C

128. In application of sulphur dye resembles

(1) Vat dye (2) Direct dye (3) Azoic dye (4) Basic dye

129. Naphthol and Base are used in

(1) Vat dye (2) Basic dye (3) Acid dye (4) Azoic dye

130. Which of the following defects occurring in roller printing ?

(1) Snappers (2) Lifts (3) Scrimps (4) All of these

131. Transfer printing prints the fabric in which of the following method ?

(1) Direct (2) Indirect

(3) Laminating (4) Coating

132. Which of the following is permanent chemical finishes ?

(1) Perchmentising (2) Mercerizing

(3) Soil releasing (4) All of these

133. Sueding machine is used to produce

(1) Mild effect of raising (2) Dense effect of raising

(3) Shear (4) Crabbing

SPACE FOR ROUGH WORK

134. LOI is associated with

(1) Water repellency (2) Flame repellency

(3) Air repellency (4) Soil repellency

135. Cut squaring technique is used for

(1) Roving (2) Bale (3) Lint (4) Kapas

136. The secondary standard condition for tropical countries are

(1) $20° \pm 2°$ C and $65\% \pm 2\%$ RH

(2) $27° \pm 2°$ C and $65\% \pm 2\%$ RH

(3) $24° \pm 2°$ C and $60\% \pm 2\%$ RH

(4) $30° \pm 2°$ C and $65\% \pm 2\%$ RH

137. Ratio of 50% Span length to 2.5 % Span length is

(1) Span length (2) Uniformity ratio

(3) Index of irregularity (4) Effective length

138. If the mature fibers are 62% and dead fibre is 25% then maturity ratio is

(1) 0.710 (2) 0.190 (3) 0.885 (4) 0.880

139. If 120 yard of yarn weighs 3 grams then yarn count in English system is

(1) 10s (2) 22s (3) 80s (4) 60s

SPACE FOR ROUGH WORK

140. Which of the following is direct yarn numbering system ?

(1) English system (2) Metric system

(3) French (4) Denier

141. Twist and twill interactions associated with

(1) Cloth cover and twist (2) Twill direction and twist

(3) Shrinkage and twist (4) Twist and hand

142. Pilling is a

(1) Finishing fault (2) Fabric hand fault

(3) Fabric surface fault (4) Creasing

143. Energy required to break the specimen is

(1) Stress (2) Tenacity

(3) Breaking length (4) Work of rupture

144. Amount of water used in spray test is

(1) ½ litres (2) ¼ litres (3) 1 litre (4) ¾ litre

145. n^{th} root of product of all observation is

(1) Arithmetic mean (2) Harmonic mean

(3) Geometric mean (4) Mode

SPACE FOR ROUGH WORK

146. The relative measure is

(1) Mean (2) Standard deviation

(3) Range (4) C.V%

147. The chart used for no. of defects per unit length

(1) $\vec{x}$ – Chart (2) R – Chart (3) P – Chart (4) C – Chart

148. Periodic variation occurs

(1) Randomly (2) Sequentially (3) Linearly (4) Non linearly

149. Which of the following shed is used in Leno weaving ?

(1) Open (2) Cross (3) Plain (4) All of these

150. Replacement of one color of extra weft by another in succeeding horizontal rows of design is known as

(1) Puckering (2) Sprouting (3) Chintzing (4) Figuring

151. In self stitched double cloth if the face weave is different from back weave, then how many warp beams are required ?

(1) One (2) Two (3) Three (4) Four

152. Normal twist angle in square fabric is

(1) 65 Degree (2) 45 Degree

(3) 30 Degree (4) 50 Degree

SPACE FOR ROUGH WORK

153. Symmetric designs in jacquard, uses

(1) Center tie-up (2) Straight tie-up

(3) Mixed tie-up (4) Lecy's tie-up

154. Which of the following is commercial twill fabrics ?

(1) Jean (2) Gabardine (3) Denim (4) All of these

155. Which of the following weave have alternate raised and sunk diamond shaped areas ?

(1) Mock leno (2) Distorted thread effect

(3) Honey comb (4) Huck-a-back

156. No satin or sateen weave is entirely free from

(1) Plain (2) Repp (3) Leno (4) Twill

157. Crepe weaves can be produced by which of the following methods ?

(1) Sateen base (2) Reversing (3) Super imposing (4) All of these

158. Cords running in the warp direction is in which of the following weave ?

(1) Piques (2) Bedford cards

(3) Honey comb (4) Mockleno

159. Calculate the loom state cloth width if the reed width is 60 inches and the weft crimp is 9%.

(1) 50.5 inches (2) 53.4 inches (3) 55.5 inches (4) 60.2 inches

SPACE FOR ROUGH WORK

160. In warp rib fabric ribs are produced in

(1) Warp way (2) Weft way (3) Diagonal (4) Inclined

161. Compound needle is patented by

(1) James Lee (2) Jeacock (3) Decroix (4) Wiillaim Lee

162. Which needle is self acting needle ?

(1) Latch needle (2) Sinker

(3) Compound needle (4) Bearded needle

163. Interlock is the combination of

(1) Plain X Plain (2) Rib X Rib (3) Purl X Purl (4) Plain X Rib

164. Tightness factor is expressed as

(1) $\frac{\sqrt{tex}}{l}$ (2) $\frac{l}{\sqrt{c}}$ (3) $\frac{l}{\sqrt{tex}}$ (4) tex α C

165. The gauge of raschel machine is

(1) no. of needles per inch

(2) no. of needles per four inch

(3) no. of needles per two inch

(4) no. of needles per mm

166. In diabetic shoes the fabric used in

(1) Rib fabric (2) Plain knit (3) Lecoste (4) Spacer

SPACE FOR ROUGH WORK

167. Security spring found in

(1) v bed flat knitting machine
(2) circular knitting machine
(3) rib knitting machine
(4) purl knitting machine

168. Guide bars used in

(1) Tricot (2) Rachsel (3) Rib (4) Both (1) and (2)

169. Hot notches cannot be used for

(1) Thermoplastic fibers
(2) Loosely woven tweed
(3) Natural fibre
(4) All of these

170. To attach a band or lace to the lower edge of a slip which seam class is used

(1) Class – I (2) Class – IV (3) Class – VI (4) Class – VII

171. Over edge chain stitches are commonly referred to as

(1) Interlock (2) Over lock (3) Under lock (4) Lock

172. Which part of the sewing machine needle has larger diameter ?

(1) Shoulder (2) Shank (3) Long grove (4) Eye

173. The use of fusible interlinings makes manufacturing time

(1) Increases
(2) Shorten
(3) Does not affect
(4) Increase twice

SPACE FOR ROUGH WORK

174. The art of proportionately increasing or decreasing model size pattern from one size to another is known as

(1) Drafting (2) Draping (3) Grading (4) Designing

175. Which of the following is a pouch formed by a piece of fabric stitched to a garment with top edge open ?

(1) Yoke (2) Collar (3) Pocket (4) Dart

176. In metric system the diameter of sewing needle 1.1 mm is

(1) 11 Nm (2) 100 Nm (3) 110 Nm (4) 1100 Nm

177. English equivalent of "Seiketsu" is

(1) Shine (2) Sort (3) Sustain (4) Standardize

178. A selling period is defined by an

(1) Opening date (2) Closing date

(3) Overall selling period (4) All of these

179. Six sigma was first introduced by

(1) Wall mart (2) Motorola (3) JC penny (4) Hutch

180. Which document that communicate garment specifications both within and outside the company ?

(1) Invoice (2) Shipment

(3) Specification sheet (4) Insurance policy

SPACE FOR ROUGH WORK

A-1