DIPLOMA - COMMON ENTRANCE TEST-2019

TX	COURSE	DAY : SUNDAY DATE : 21-07-2019
	TEXTILE TECHNOLOGY	TIME : 10.00 a.m. to 1.00 p.m.

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	225433

Dos :

1. Candidate must verify that the DCET number and Name printed on the OMR Answer Sheet is tallying with the DCET number and Name printed on the Admission Ticket. Discrepancy if any, report to invigilator.
2. This question booklet is issued to you by the invigilator after the **2nd bell i.e., after 9.50 am**.
3. The Version Code of this Question Booklet should be entered on the OMR Answer Sheet and the respective circle should also be shaded completely.
4. The Version Code and Serial Number of this question booklet should be entered on the Nominal Roll without any mistakes.
5. Compulsorily sign at the bottom portion of the OMR answer sheet in the space provided.

DONTs :

1. **THE TIMING AND MARKS PRINTED ON THE OMR ANSWER SHEET SHOULD NOT BE DAMAGED / MUTILATED / SPOILED.**
2. The **3rd Bell rings at 10.00 am, till then;**
   - Do not remove the seal 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.

IMPORTANT INSTRUCTIONS TO CANDIDATES

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 10.00 am**, remove the paper seal 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.**

ಸರಿಯಾದ ಕ್ರಮ CORRECT METHOD	ತಪ್ಪು ಕ್ರಮಗಳು WRONG METHODS
(A) ● (C) (D)	(A) (B) (C) (D) (A) (B) (C) ✓ (A) ● ● (D)
	(A) (B) (C) (D) (A) ● (C) (D)

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 1.00 pm**, 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**.

TX-A

PART – A

APPLIED SCIENCE

1. One of the basic unit in SI is

   (A) Newton (B) Joule

   (C) Kilometer (D) Ampere

2. The pitch of screw is $\frac{1}{2}$ mm. The number of divisions on head scale of screw gauge is 50. The least count of screw gauge is

   (A) 0.1 mm (B) 0.5 mm

   (C) 0.01 mm (D) 0.05 mm

3. Which one of the following is a vector quantity ?

   (A) Speed (B) Density

   (C) Velocity (D) Mass

4. The magnitude of resultant of two forces $\vec{P}$ & $\vec{Q}$ acting perpendicular to each other is

   (A) $\sqrt{P^2 + Q^2}$ (B) $\sqrt{P^2 - Q^2}$

   (C) $P^2 - Q^2$ (D) $P^2 + Q^2$

5. A force of 50 N acts at a point making an angle of 30° with the horizontal. The vertical component is

   (A) 50 N (B) 25 N

   (C) 150 N (D) 1.6 N

Space For Rough Work

6. A couple produces

(A) pure linear motion (B) pure rotational motion

(C) both linear and rotational motion (D) neither linear nor rotational motion

7. The resultant of two like parallel forces acts in the direction of

(A) same as that of two forces (B) opposite to two forces

(C) perpendicular to two forces (D) direction cannot be specified

8. The reciprocal of bulk modulus of elasticity is called

(A) Compressibility (B) Rigidity

(C) Modulus of elasticity (D) Viscosity

9. A steel wire has a cross sectional area of 0.05 m^2. If the maximum stress of steel wire is 1000 N/m^2. The force is

(A) 20×10^3 N (B) 50 N

(C) 200 N (D) 20 N

10. The pressure at a point on surface of a liquid is

(A) minimum (B) maximum

(C) zero (D) infinity

11. The pressure exerted by sea water of density 1025 kg/m^3 on a fish at a depth of 10 m ($g = 10\ m/s^2$) is

(A) 1025 kPa (B) 10.25 kPa

(C) 1.025 kPa (D) 102.5 kPa

Space For Rough Work

12. A drop of rain assumes spherical shape due to

(A) Density (B) Viscosity

(C) Surface tension (D) Humidity

13. The phenomenon of rise or fall of liquid in a capillary tube is

(A) Viscosity (B) Capillarity

(C) Density (D) Elasticity

14. The S.I. unit of coefficient of viscosity is

(A) Ns/m^2 (B) Nm^2/s

(C) m^2s/N (D) Ns/m

15. The expression that represents Boyle's law is

(A) PV = constant (B) PT = constant

(C) VT = constant (D) PVT = constant

16. The volume of gas at 30 °C is 2 litres. To what temperature the gas must be heated for its volume to become 4 litres at constant pressure.

(A) 300 °C (B) 273 °C

(C) 333 °C (D) 606 °C

17. Working of pressure cooker is based on the principle of

(A) Boyle's law (B) Charle's law

(C) Laplace's law (D) Gay-Lussac's law

Space For Rough Work

18. Land and sea breeze is an example of

(A) Conduction (B) Convection

(C) Condensation (D) Radiation

19. The measure of average kinetic energy of all the particles in a gas is

(A) Heat (B) Mechanical energy

(C) Chemical energy (D) Temperature

20. When a wave travels through the medium, the particles of the medium are

(A) displaced in the direction of wave

(B) displaced opposite to the direction of wave

(C) mean position remains same

(D) starts rotating

21. Two waves with very little difference in their frequencies overlap on one another to produce

(A) Stationary waves (B) Progressive waves

(C) Beats (D) Transverse waves

22. The acceleration of the particle executing simple harmonic motion is directly proportional to its

(A) displacement from its mean position

(B) period of motion

(C) frequency of vibration

(D) amplitude of wave

Space For Rough Work

23. In the expression for velocity of sound in air, $V = \sqrt{\frac{\gamma P}{\rho}}$, notation γ is equal to

(A) $C_P + C_V$ (B) $C_P - C_V$

(C) $C_P \times C_V$ (D) $\frac{C_P}{C_V}$

24. Velocity of sound in outer space is

(A) 3×10^8 m/s (B) 330 m/s

(C) zero (D) 360 m/s

25. A string of length 1 m and mass 0.04 kilogram vibrates with fundamental frequency of 100 Hz then the tension in the string is

(A) 4000 N (B) 1600 N

(C) 400 N (D) 1000 N

26. Nodes and antinodes are characteristics of

(A) Stationary waves (B) Longitudinal waves

(C) Transverse waves (D) Beats

27. Natural frequency of a string does not vary with

(A) thickness (B) applied force

(C) tension (D) length

28. The electromagnetic radiation used in Forensic Department to study the finger print is

(A) Ultraviolet Ray (UV Ray) (B) Radio wave

(C) Micro wave (D) X-ray

Space For Rough Work

29. The type of light used to study Holography is

(A) Visible light (B) Laser light

(C) Sodium light (D) Mercury light

30. Which technology is used to develop Sun Screen lotion and cosmetics ?

(A) Geo-technology (B) Nano-technology

(C) Electro-technology (D) Micro-technology

31. The process of separating the information signal from the carrier wave at the receiver is known as

(A) Amplification (B) Modulation

(C) Attenuation (D) Demodulation

32. Optical fibre is used in

(A) Pressure sensors (B) Drilling

(C) Holography (D) Welding

33. The mass of copper deposited on the cathode of a copper voltmeter by a current of 2 amperes in 30 minutes is

(Given ece of copper (Z) = 0.0003 gm / coulomb)

(A) 3.2 gm (B) 4.3 gm

(C) 1.08 gm (D) 2.5 gm

34. The process of coating zinc over iron or steel is known as

(A) Galvanizing (B) Tinning

(C) Alloying (D) Non-Metallic coating

Space For Rough Work

35. SOFC is a type of

(A) Primary cell (B) Secondary cell

(C) Fuel cell (D) Solar cell

36. Magnalium is an alloy made by the combination of aluminium and

(A) Phosphorous (B) Zinc

(C) Tin (D) Magnesium

37. Zinc-carbon battery is an example for

(A) Secondary Battery (B) Fuel cell

(C) Primary Battery (D) Solar cell

38. Which of the following is not a polymer ?

(A) Teflon (B) Nylon

(C) Bakelite (D) Glass

39. Ceramic is which type of material ?

(A) Composite material (B) Alloy

(C) Polymer (D) Bio-material

40. The pH value of distilled water is

(A) 13 (B) 7

(C) 2 (D) 11

Space For Rough Work

PART – B

ENGINEERING MATHEMATICS

41. If $A = \begin{bmatrix} -3 & 4 \\ 2 & 0 \end{bmatrix}$ and $B = \begin{bmatrix} -1 & 2 \\ -2 & 1 \end{bmatrix}$, then $B^T \cdot A^T$ is

(A) $\begin{bmatrix} 3 & 8 \\ -4 & 0 \end{bmatrix}$

(B) $\begin{bmatrix} -5 & -2 \\ -2 & 4 \end{bmatrix}$

(C) $\begin{bmatrix} 5 & 2 \\ -2 & -4 \end{bmatrix}$

(D) $\begin{bmatrix} 5 & 2 \\ 2 & 4 \end{bmatrix}$

42. The value of the $\begin{vmatrix} \tan\theta & 0 & -1 \\ 1 & 0 & \tan\theta \\ 2 & -1 & 3 \end{vmatrix}$ is

(A) $-\sec^2\theta$

(B) $\operatorname{cosec}^2\theta$

(C) 1

(D) $\sec^2\theta$

43. The values of x and y in the simultaneous equations $2x - 3y = 13$ and $3x + 4y = -6$ are

(A) $x = -3, y = 2$

(B) $x = -2, y = -3$

(C) $x = 2, y = -3$

(D) $x = 2, y = 3$

44. If $\begin{vmatrix} 3 & -2 & 4 \\ 4 & 0 & x \\ 2 & -5 & 4 \end{vmatrix} = -4$, then the value of x is

(A) 4

(B) -4

(C) $\frac{44}{19}$

(D) $-\frac{44}{19}$

Space For Rough Work

45. The characteristics roots of the matrix $\begin{bmatrix} 2 & 0 \\ 0 & -3 \end{bmatrix}$ are

(A) $\lambda = 2$ and $\lambda = 3$ (B) $\lambda = -2$ and $\lambda = -3$

(C) $\lambda = 2$ and $\lambda = -3$ (D) $\lambda = -2$ and $\lambda = 3$

46. The adjoint of the matrix $\begin{bmatrix} 4 & 2 \\ -3 & 1 \end{bmatrix}$ is

(A) $\begin{bmatrix} 1 & -2 \\ 3 & 4 \end{bmatrix}$ (B) $\begin{bmatrix} 1 & 3 \\ -2 & 4 \end{bmatrix}$

(C) $\begin{bmatrix} 4 & 2 \\ -3 & 1 \end{bmatrix}$ (D) $\begin{bmatrix} 4 & -3 \\ 2 & 1 \end{bmatrix}$

47. If A = (1, 2, –3) and B = (2, 0, –1) then $\overrightarrow{AB}$ is

(A) $i - 2j + 2k$ (B) $-i + 2j - 2k$

(C) $3i + 2j - 4k$ (D) $i + 2j - 2k$

48. The work done by the force $\vec{F} = 2i + 6j - 8k$, whose displacement is $\vec{S} = -2i + 3j - k$ is

(A) 26 units (B) –22 units

(C) 22 units (D) 30 units

49. The vector product of $\vec{a} = 4i - j + k$ and $\vec{b} = 3i - 2k$ is

(A) $2i - 11j + 3k$ (B) $2i + 11j + 3k$

(C) $2i + 5j + 3k$ (D) $2i + 11j - 3k$

50. When a fair coin is tossed two times, the event A "getting exactly one tail" is given by

(A) {HT, TH} (B) {TT}

(C) {TH} (D) {TT, HT}

Space For Rough Work

51. If $\tan\theta = \frac{5}{12}$ and $\pi < \theta < \frac{3\pi}{2}$, then the value of $\sin\theta - \cos\theta$ is

(A) $\frac{17}{13}$ (B) $\frac{7}{13}$

(C) $-\frac{17}{13}$ (D) $-\frac{7}{13}$

52. The value of $\tan 225° \times \cot 405°$ is

(A) 1 (B) –1

(C) 2 (D) $\frac{1}{2}$

53. The value of $\sin 50° \cos 20° - \cos 50° \cdot \sin 20°$ is

(A) $\sin 70°$ (B) $\frac{\sqrt{3}}{2}$

(C) $\frac{1}{2}$ (D) $-\frac{1}{2}$

54. If $\cos A = \frac{15}{17}$ and $\sin B = \frac{3}{5}$, then the value of $\cos(A + B)$ is

(A) $\frac{84}{85}$ (B) $-\frac{36}{85}$

(C) $-\frac{84}{85}$ (D) $\frac{36}{85}$

55. The value of $\sqrt{\frac{1+\sin 2A}{1-\sin 2A}}$ is

(A) $\cot\left(\frac{\pi}{4}+A\right)$ (B) $\cot\left(\frac{\pi}{4}-A\right)$

(C) $\tan\left(\frac{\pi}{4}-A\right)$ (D) $\cot\left(\frac{\pi}{2}-A\right)$

Space For Rough Work

56. The value of $\cos 40° + \sin 10°$ is

(A) $\sin 20°$ (B) $-\cos 20°$

(C) $\cos 20°$ (D) $-\sin 20°$

57. The value of $i + i^2 + i^3 + i^4$ is

(A) i (B) –i

(C) 1 (D) 0

58. $\lim_{x \to 0} \frac{x}{\sqrt{1+x}-1}$ is equal to

(A) 0 (B) 1

(C) 2 (D) ∞

59. $\lim_{x \to \infty} \frac{3x^3 + 4x + 7}{(6 + x^2)(x - 1)} =$

(A) 3 (B) –3

(C) $\frac{1}{2}$ (D) $\frac{1}{6}$

60. $\lim_{x \to 0} \frac{3x + \sin 4x}{2 \sin 3x - 5x} =$

(A) $\frac{4}{3}$ (B) 7

(C) $\frac{3}{5}$ (D) $\frac{7}{11}$

Space For Rough Work

61. The slope and y-intercept of the line $6x - 4y + 3 = 0$ are respectively

(A) $\frac{3}{2}$ and $\frac{3}{4}$ (B) $\frac{2}{3}$ and $\frac{4}{3}$

(C) $\frac{-3}{2}$ and $\frac{4}{3}$ (D) $\frac{3}{2}$ and $\frac{2}{3}$

62. The equation of the line joining the points (1, 3) and (2, –4) is

(A) $7x - y - 10 = 0$ (B) $7x + y - 10 = 0$

(C) $x + 7y + 10 = 0$ (D) $x - 7y - 10 = 0$

63. If $y = e^{-2x} + 4a^x$, then $\frac{dy}{dx} =$

(A) $\frac{e^{-2x}}{2} + \frac{4a^x}{\log a}$ (B) $e^{-2x} + 4x\, a^{x-1}$

(C) $-2e^{-2x} + 4a^x \log a$ (D) $2e^{-2x} - 4a^x \log a$

64. If $y = \log(\log 3x)$ then $\frac{dy}{dx} =$

(A) $\frac{1}{x \log 3x}$ (B) $\frac{3}{x \log 3x}$

(C) $2 \log 3x$ (D) $\frac{1}{\log x}$

65. If $xy = x + y^2$, then $\frac{dy}{dx} =$

(A) $\frac{x - 2y}{1 - y}$ (B) $\frac{1 - y}{x - 2y}$

(C) $\frac{2y - x}{y - 1}$ (D) $\frac{1 + y}{x + 2y}$

Space For Rough Work

66. If $x = \tan^{-1} t$ and $y = 3t + t^3$ then $\frac{dy}{dx} =$

(A) 3

(B) $3(1 + t^2)^2$

(C) $\frac{3}{(1 + t^2)^2}$

(D) $\frac{1}{3(1 + t^2)^2}$

67. If $y = (x)^{\frac{1}{x}}$, then $\frac{dy}{dx} =$

(A) $y\left[\frac{1 + \log x}{x^2}\right]$

(B) $\frac{1 + \log x}{x^2 y}$

(C) $\frac{1 - \log x}{x^2 y}$

(D) $\frac{y[1 - \log x]}{x^2}$

68. Which of the following equations satisfy for the function $y = e^{\tan^{-1} x}$ with usual notations ?

(A) $(1 + x^2)y_2 + (2x - 1)y_1 = 0$

(B) $(1 + x^2)y_2 + 2xy_1 = 0$

(C) $(1 - x^2)y_2 - xy_1 - y = 0$

(D) $xy_2 - 2y_1 - xy = 0$

69. The equation of a normal to the curve $y = 4x^3 + 3x^2 + 4$ at the point $(-1, 3)$ is

(A) $6x + y - 19 = 0$

(B) $x + 6y - 17 = 0$

(C) $x - 6y + 17 = 0$

(D) $6x - y + 19 = 0$

70. The rate of change of surface area of a sphere is 12 cm^2/s. The rate at which the radius is changing when the radius of the sphere is 2 cm is equal to

(A) $\frac{\pi}{4}$ cm/s

(B) $\frac{3\pi}{4}$ cm/s

(C) 3π cm/s

(D) $\frac{3}{4\pi}$ cm/s

Space For Rough Work

71. $\int \left(1 + x - \frac{1}{x} + e^x\right) dx$

(A) $1 - \frac{1}{x^2} + e^x + c$

(B) $1 + \frac{x^2}{2} - \frac{1}{x^2} + e^x + c$

(C) $x + \frac{x^2}{2} - \log x + e^x + c$

(D) $x + 1 - \frac{1}{x^3} - e^x + c$

72. $\int e^{\tan x} \cdot \sec^2 x \, dx =$

(A) $e^{\tan x} + c$

(B) $e^{\sec^2 x} + c$

(C) $e^{\tan^2 x} + c$

(D) $e^{\sec x} + c$

73. $\int \cot^2 x \, dx =$

(A) $-\text{cosec}\, x + c$

(B) $-\cot x - x + c$

(C) $-\cot x + x + c$

(D) $\cot x + x + c$

74. $\int x \sin x \, dx =$

(A) $x \sin x - \cos x + c$

(B) $x \cos x - \sin x + c$

(C) $x \sin x + \cos x + c$

(D) $-x \cos x + \sin x + c$

75. $\int \sqrt[3]{x^2} \, dx =$

(A) $\frac{5}{2} x^{\frac{5}{2}} + c$

(B) $\frac{3}{5} x^{\frac{5}{3}} + c$

(C) $\frac{5x^{\frac{2}{5}}}{2} + c$

(D) $\frac{x^2}{2} + c$

Space For Rough Work

76. $\int_0^{\pi/2} \cos^2 x \, dx =$

(A) $\frac{\pi}{2}$ (B) $\frac{\pi}{6}$

(C) $\frac{\pi}{3}$ (D) $\frac{\pi}{4}$

77. The volume of a solid generated when the curve $y = \sqrt{x^2 + 4}$ is rotated about x-axis between the ordinates $x = -1$ and $x = 1$ is

(A) $\frac{23\pi}{3}$ cubic units (B) $\frac{26\pi}{3}$ cubic units

(C) $\frac{16\pi}{3}$ cubic units (D) 0

78. The order and degree of the differential equation $\frac{dy}{dx} = \sqrt{1 + \frac{d^2y}{dx^2}}$ respectively are

(A) 1 and 1 (B) 1 and 2

(C) 2 and 1 (D) 2 and 2

79. The differential equation formed from the equation $y = ae^x + be^{-x}$ by eliminating arbitrary constants is

(A) $\frac{d^2y}{dx^2} - y = 0$ (B) $\frac{d^2y}{dx^2} + y = 0$

(C) $\frac{dy}{dx} + y = 0$ (D) $\frac{dy}{dx} - y = 0$

80. Solution of the differential equation $\frac{dy}{dx} = \frac{1 + y^2}{1 + x^2}$ is

(A) $\tan^{-1} y + \tan^{-1} x = k$ (B) $\tan^{-1} y - \tan^{-1} x = k$

(C) $\sin^{-1} y + \sin^{-1} x = k$ (D) $\sin^{-1} y - \sin^{-1} x = k$

Space For Rough Work

PART – C

TEXTILE TECHNOLOGY

81. Cellulosic fiber is

(A) Silk (B) Wool

(C) Jute (D) Nylon

82. Cuticle is present in

(A) Cotton fibre (B) Silk fibre

(C) Nylon fibre (D) Wool fibre

83. Monomer of Nylon 6 polymer is

(A) Adipic acid (B) Cyclohexane

(C) Caprolactum (D) Benzene

84. Which fibre contains sulphur atom in its chemical structure ?

(A) Nylon (B) Wool

(C) Jute (D) Polyester

85. Crystalline percentage in cotton fibre is

(A) 40 % (B) 33 %

(C) 67 % (D) 75 %

86. Scales are visible in

(A) Cotton fibre (B) Silk fibre

(C) Nylon fibre (D) Wool fibre

87. Melting point of polyester fibre is

(A) 100 °C (B) 70 °C

(C) 130 °C (D) 260 °C

Space For Rough Work

88. In which fibre manufacturing carbon disulphide is made used ?

(A) Acrylic fibre (B) Nylon 6 fibre

(C) Viscose rayon fibre (D) Polyester fibre

89. Retting process is carried out for

(A) Jute (B) Flax

(C) Hemp (D) All of these

90. Stiffeing process is used for

(A) Silk (B) Wool

(C) Cotton (D) Jute

91. Pitch is raw material used to manufacture

(A) Glass (B) Teflon

(C) Carbon (D) Nomex

92. The solvent used in dry spinning of acrylic is

(A) Acetone (B) Chlorobenzene

(C) DMF (D) PVA

93. Which of the following is high performance fibre ?

(A) Tencel (B) Bt cotton

(C) Kevlar (D) Nylon 6

94. Which type of waste removed by comber ?

(A) Card waste (B) Bonda waste

(C) Noil waste (D) Sweep waste

Space For Rough Work

95. Diameter of shell roller in scutcher is

(A) 11" (B) 13"

(C) 8" (D) 9"

96. Which type of clothing is used in High speed modern card ?

(A) Flexible (B) Nylon

(C) Metallic (D) Fabric

97. Different type of fibres are mixed together is called

(A) Cleaning (B) Opening

(C) Blending (D) Both opening and cleaning

98. In which type of machine fibre to fibre Individualisation occurs ?

(A) Blow room (B) Draft frame

(C) Carding (D) Speed frame

99. In L.R. Draw frame, the drafting system used is

(A) $\frac{4}{4}$ drafting system (B) $\frac{3}{5}$ of polar drafting system

(C) $\frac{2}{2}$ drafting system (D) $\frac{4}{5}$ drafting system

100. Auto levelers used in spinning for the purpose of

(A) To increase parallelisation of fibres

(B) To improve short fibres

(C) To improve uniformity

(D) To draft the fibres

Space For Rough Work

101. Roving frame is also known as

(A) Opening machine (B) Card

(C) Simplex (D) Ring frame

102. Limitation of Rotor spinning is

(A) Irregular yarn. (B) Yarn cost is high.

(C) Production is less. (D) Cannot produce finer yarn.

103. Input material used in open end spinning is

(A) Roving (B) Sliver

(C) Yarn (D) Fibres

104. Which type of clothing used in conventional M.M.C. card ?

(A) Metallic (B) Flexible

(C) Nylon (D) Sawtooth

105. Which type of drafting system is used in Ring frame ?

(A) $\frac{3}{4}$ (B) $\frac{2}{2}$

(C) $\frac{3}{3}$ (D) $\frac{4}{4}$

106. Cleaning efficiency is associated with

(A) Blow room (B) Card

(C) Both blow room and card (D) Neither blow room nor card

107. Another name of projective loom is

(A) Dobby loom (B) Sulzer loom

(C) Airjet loom (D) Water jet loom

Space For Rough Work

108. In which Jacquard bottom closed shed produce ?

(A) Single lift single cylinder Jacquard

(B) Single lift double cylinder Jacquard

(C) Double lift double cylinder Jacquard

(D) None of these

109. Side weft fork motion is used to check the weft yarn for how many picks ?

(A) Every pick (B) Once in every three pick

(C) Every alternate pick (D) None of these

110. Which type of tensioner is called as universal tensioner ?

(A) Disc or washer type (B) Gate type

(C) Round type (D) None of these

111. In cone winding coils are laid exactly on the top of the previous coils and this fault is called

(A) Wild yarn (B) Stitching

(C) Slough off (D) Ribboning/patterning

112. In modern cone winding joining, the two broken threads is called

(A) Knotting (B) Splicing

(C) Twisting (D) Doubling

113. Three try motion is associated with

(A) Automatic loom (B) Airjet loom

(C) Water Jet loom (D) Sulzer loom

114. Stickiness is the defect of

(A) Warp winding (B) Sizing

(C) Warping (D) Weft winding

Space For Rough Work

115. One of the groove drum function in winding, the yarn on cone and another one is

(A) Twisting the yarn (B) Doubling the yarn

(C) Traversing the yarn (D) None of these

116. When a weaver faces the fabric in loom, the starting handle in his right hand side, the dobby is

(A) Right Hand Dobby (B) Left Hand Dobby

(C) Front Hand Dobby (D) All of these

117. Where Drop wires are used ?

(A) Weft stop motion (B) Warp protector motion

(C) Break thread stop motion (D) Warp stop motion

118. Where Lingoes are used ?

(A) Dobby (B) Shuttle change loom

(C) Jacquard (D) Airject loom

119. Which of the following is a balanced twill ?

(A) $\frac{1}{3}$ (B) $\frac{2}{1}$

(C) $\frac{3\ 1\ 1}{1\ 3\ 1}$ (D) $\frac{1\ 1}{3\ 1}$

120. 'Ginghams' are associated with

(A) Check fabric (B) Figured fabric

(C) Elaborate patterns (D) Zig-Zag patterns

121. Which of the following twill is firm, compact, has good strength, durability and warmthness ?

(A) Pointed twill (B) Diamond twill

(C) Herringbone twill (D) Corck Screw twill

Space For Rough Work

122. 'Duck cloth' is a/an

(A) Light weight fabric (B) Heavy weight fabric

(C) Medium weight fabric (D) Openly set fabric

123. Gaberdines are produced using

(A) 3 – end twill (B) 4 – end twill

(C) 5 – end twill (D) 8 – end twill

124. Hardness of water is due to the presence of salts of

(A) Au and Cr (B) Co and Ni

(C) Ca and Mg (D) Cu and Ag

125. For which fabrics singeing is carried after dyeing ?

(A) Cotton (B) Wool

(C) Silk (D) Polyester/cotton blend

126. Oxidative desizing method is

(A) Acid (B) Chlorine

(C) Rot (D) Enzyme

127. During hypochlorite bleaching on cotton which brings bleaching action ?

(A) CO_2 (B) H_2

(C) [O] (D) N_2

128. During sodium hydroxide boiling of cotton fabric, air exposed cotton converts to

(A) Hydrocellulose (B) Oxycellulose

(C) Hemi cellulose (D) Metacellulose

Space For Rough Work

129. During hydrogen peroxide bleaching of cotton, contamination of iron particles with hydrogen peroxide liberates

(A) Oxygen molecules
(B) Nascent oxygen
(C) Hydrogen molecules
(D) Nascent hydrogen

130. The process of mercerization makes easy accessible for

(A) Carboxyl group
(B) Hydroxyl group
(C) Nitro group
(D) Dimethyl group

131. Localisation of dye molecules on the surface of fibre refers to

(A) Fixation
(B) Adsorption
(C) Absorption
(D) Penetration

132. The naphthols are made soluble by boiling with

(A) Acetic Acid
(B) NaCl
(C) Oxalic acid
(D) NaOH

133. The cotton material dyed with Direct Red colour is topped with Basic blue colour, then the material appears with

(A) Red colour
(B) Blue colour
(C) Violet colour
(D) Green colour

134. Which of the dye on cotton shows alround fastness properties ?

(A) Sulphur Dye
(B) Indigosol Dye
(C) Direct Dye
(D) Azoic Dye

135. The Sulphur dyed goods show very poor fastness to

(A) Salt solution
(B) Bleaching solution
(C) Acid solution
(D) Hard water

Space For Rough Work

136. The working principle of jet Dyeing machines :

(A) Material stationary, but liquor moving.

(B) Material moving, but liquor stationary.

(C) Material and liquor both are moving.

(D) Material and liquor both are stationary.

137. Rot proof finish is given to

(A) Polyester (B) Nylon

(C) Acrylic (D) Cotton

138. Which of the following is flame retardant ?

(A) DMDHEW (B) Rangolit C

(C) THPC (D) PVA

139. The finish imparted by Rigmel process is

(A) Anti crease (B) Anti shrink

(C) Rot proof (D) Fire proof

140. Which of the following is industrial fabric ?

(A) Garments (B) Tarpaulins

(C) Innerwear (D) Kidswear

141. Dye sampling technique is generally suitable for

(A) Cotton (B) Polyster

(C) Wool (D) Silk

142. The moisture regain of a blend is 5%. The moisture content of a blend is

(A) 3.5 (B) 4.76

(C) 5.38 (D) 6.44

Space For Rough Work

143. The Uniformity ratio is measured on

(A) Bear sorter (B) Comb sorter

(C) Uster stapler (D) Fibrograph

144. Micronaire value is a measure of

(A) Fibre strength (B) Fibre length

(C) Fibre uniformity (D) Fibre fineness

145. The work factor value for elastic material is

(A) 0.25 (B) 0.50

(C) 0.75 (D) 1.00

146. The thinnest classimat fault among the following is

(A) D_4 (B) A_4

(C) B_4 (D) A_1

147. Densimeter instrument is used to measure

(A) Fabric thickness (B) Thread Selt

(C) Yarn Crimp (D) Fabric Length

148. The time limit for spraying 250 ml of water is spray tester is

(A) 10 sec's (B) 20 sec's

(C) 30 sec's (D) 40 sec's

149. Kawabata system is associated with

(A) Fabric handle (B) Abrasion resistance

(C) Fabric length (D) Fabric width

Space For Rough Work

150. The value of 10 Tex means

(A) 10 grams/km (B) 10 grams/9 km

(C) 10 grams/840 yds (D) 10 grams/560 yds

151. The length used to determine count of yarn on quadrant balance is

(A) 12 yds (B) 24 yds

(C) 40 yds (D) 80 yds

152. Elmendorf tester is used to measure

(A) Fabric tear strength (B) Fabric stiffness

(C) Abrasion resistance (D) Fabric bursting strength

153. Instron is used to measure

(A) Fibre strength (B) Yarn strength

(C) Fabric strength (D) All of these

154. Which of the following is central tendency measure ?

(A) Arithmetic mean (B) Median

(C) Model value (D) All of these

155. The upper control limit in $\overline{C}$ -chart is

(A) $\overline{C} + 3\sqrt{\overline{C}}$ (B) $\overline{C} + 3\overline{C}$

(C) $\overline{C} + \sqrt{3}\,\overline{C}$ (D) $\sqrt{\overline{C}} + 3\overline{C}$

156. The maximum wash fastners value is

(A) 2 (B) 3

(C) 4 (D) 5

Space For Rough Work

157. Serviceability of fabric is measured on

(A) Martindale abrasion tester (B) True meter

(C) Densimeter (D) Stiffness tester

158. Two set of needles are used on _____ machine.

(A) Single Jersey (B) Lacoste

(C) Rib (D) Tricot

159. Most Dimensionally stable fabric among the following is

(A) Plain Jersey (B) Purl

(C) Rib (D) Interlock

160. The fabric which has alternate face and back loops in vertical direction is

(A) Single Jersey (B) Rib

(C) Purl (D) All of these

161. The tem 'Haute Couture' means

(A) High Fashion (B) Mass Fashion

(C) Designer Wear (D) Classic fashion

162. The spreading table is provided with vacuum to facilitate

(A) Alignment of the lay (B) Compression of the lay

(C) Direction of the lay (D) Distortion of the lay

163. A high velocity Jet of high temperature ionised gas is used in

(A) Plasma cutting (B) Water Jet cutting

(C) Ultrasonic cutting (D) Laser cutting

Space For Rough Work

164. To attach inserted elastic on the leg of a swimsuit, which seam is used ?

(A) Class-1 (B) Class-3

(C) Class-5 (D) Class-7

165. Variable stitch density arises from insufficient

(A) Needle pressure (B) Foot pressure

(C) Thread pressure (D) Feed dog pressure

166. Which of the following is not a responsibility of Industrial Engineer ?

(A) Fair pay system (B) Planning layouts

(C) Over processing (D) Operator training

167. The AQL's most widely used in apparel industry are

(A) 2.5, 3.5, 4.5 and 6.5 (B) 3.5, 4.5, 5.5 and 10.5

(C) 2.5, 4.0, 6.5 and 10.0 (D) 2.0, 4.5, 6.5 and 10.5

168. A schematic diagram of a process, including all the steps or operations in the sequence as they occur is known as

(A) Control charts (B) Cause and effect diagram

(C) Pareto chart (D) Flow chart

169. In which of the following areas of garment, interlinings are not used ?

(A) Sleeves (B) Cuffs

(C) Facings (D) Waist bands

Space For Rough Work

170. Which of the following is not a part of sewing needle ?

(A) Shoulder (B) Scarf

(C) Point (D) Presser foot

171. Which of the following is not an element of communication process ?

(A) Channel (B) Feedback

(C) Receiver (D) Noise

172. Maximum number of defects per million in six sigma limit is

(A) 3 (B) 6

(C) 12 (D) 18

173. Cause and effect diagram is a tool of

(A) Supervision (B) Planning

(C) Organising (D) Total quality management

174. Who conducted the test for material ?

This question is an example for

(A) Conceptual Inquiry (B) Normative Inquiry

(C) Factual Inquiry (D) All of these

175. Koulberg theory is related to

(A) Motivation (B) Communication

(C) Behaviour (D) Moral development

Space For Rough Work

176. Future courses of action is known as

(A) Planning (B) Organising

(C) Directing (D) Controlling

177. Typical qualities expected by a professional is

(A) Profession (B) Professional

(C) Professionalism (D) Expertism

178. 14 principles of Management were proposed by

(A) F.W. Taylor (B) Henry Fayol

(C) F. Herzberg (D) A. Maslow

179. Wage fixation is based on

(A) Experience (B) Qualification

(C) Position (D) All of these

180. Conflict situation of morals is defined as

(A) Confusion (B) Dilemma

(C) Error (D) Non-sense

Space For Rough Work

Space For Rough Work