COMBINED TECHNICAL SERVICES EXAMINATION

(DIPLOMA / ITI)

COMPUTER BASED TEST

DATE OF EXAM 26.09.2025 FN

PAPER–II,

HANDLOOM TECHNOLOGY, TEXTILE TECHNOLOGY AND TEXTILE MANUFACTURE

(DIPLOMA) (CODE: 445)

1. In false-twist texturisation method, the spindle rotates at a speed of

(A) 5,000 to 10,000 rpm
(B) 50,000 to 1,00,000 rpm
(C) 5,000 to 15,000 rpm
(D) 1,000 to 10,000 rpm
(E) Answer not known

2. Casein can be produced by the method of

(A) Dry spinning
(B) Melt spinning
(C) Wet spinning
(D) Dref spinning
(E) Answer not known

3. Which of the following statements is true about Nylon 66 spinning process?

1. Nylon 66 yarn is melt spun at high speed
2. Nylon 66 yarn is drawn almost immediately after solidification
3. A turbine driven feed roll replaces the conventional feed and separator roll
4. The process displays unusually high drawing tension and exceptionally uniform yarn

(A) 4 only
(B) 1 and 2 only
(C) 1, 2 and 3
(D) 2 and 3 only
(E) Answer not known

4. A good fibre forming polymer should not have

(A) Linear polymeric chain
(B) Branched polymeric chain
(C) High DP
(D) High intermolecular interaction
(E) Answer not known

5. The type of fibre used for making sweater is

(A) Acrylic
(B) Nylon
(C) Polyester
(D) Viscose
(E) Answer not known

6. Production of viscose rayon comprises the following steps. Arrange the following in chronological order

1. Subsequent final regeneration and washing
2. Avivage treatment
3. Feeding of viscose solution through spinnerets into spinning bath
4. Drying

(A) 3, 1, 2 and 4
(B) 3, 2, 1 and 4
(C) 2, 1, 3 and 4
(D) 2, 3, 1 and 4
(E) Answer not known

7. Regenerated synthetic fibre is

(A) Nylon
(B) Viscose Rayon
(C) Terylene
(D) Orlon
(E) Answer not known

8. The density of silk in the raw state is

(A) 1.33 gm/cc
(B) 1.38 gm/cc
(C) 1.39 gm/cc
(D) 3.53 gm/cc
(E) Answer not known

9. Medulla is associated with the following fibre

(A) Cotton
(B) Silk
(C) Wool
(D) Nylon
(E) Answer not known

10. Which one of the following statement is incorrect?

(A) Density of cotton is 1.52 g/cm^3
(B) Density of silk is 1.34 g/cm^3
(C) Density of polyvinyl chloride is 0.9 g/cm^3
(D) Density of glass is 2.5 g/cm^3
(E) Answer not known

11. Choose the right answer :

1. Nylon – Long chain of synthetic polyamide
2. Aramaid – Long chain of synthetic polymer
3. Olefine – Long chain of synthetic polymer
4. Vinyon – Long chain of polyamide

(A) 1 is correct and 3 is correct
(B) 2 is correct and 4 is correct
(C) 1 is wrong and 4 is correct
(D) 2 is correct and 3 is wrong
(E) Answer not known

12. Among the following solvents and their boiling points which is incorrectly paired?

(A) Acetone – 56 °C
(B) DMF – 153 °C
(C) Methylchloride – 49 °C
(D) Water – 100 °C
(E) Answer not known

13. The solvent used to dissolve polypropylene is

(A) Meta xylene
(B) Meta cresol
(C) Methylene chloride
(D) Sodium zincate
(E) Answer not known

14. A cotton is a

(A) Animal fibre
(B) Vegetable fibre
(C) Mineral fibre
(D) Regenerated fibre
(E) Answer not known

15. The source of linen fibre is

(A) Cotton boll
(B) Flax stalk
(C) Hemp
(D) Agave leaf
(E) Answer not known

16. Name the defect occurred due to wrong drawing of threads

(A) Broken pick
(B) Cut weft
(C) Cracks
(D) Broken pattern
(E) Answer not known

17. Among the following fabric defects which is formed due to waste or fly falling on to the warp between the reed and the fell of the cloth.

(A) Dirty cloth
(B) Gout
(C) Hard size
(D) Reediness
(E) Answer not known

18. Choose the right answer :

Suitability of weft yarn for air jet weaving is mainly dependent on

1. Type of fibre used
2. Yarn count
3. Yarn structure
4. Yarn twist

(A) 1, 2, 3
(B) 2, 3, 4
(C) 1, 3, 4
(D) 1, 2, 4
(E) Answer not known

19. Match the following :

	I		II
(a)	Electronic dobby	1.	Profile Reed
(b)	Projectile weaving	2.	Bonas
(c)	Air jet weaving	3.	Torsion Rod
(d)	Jacquard shedding	4.	Rotary

	(a)	(b)	(c)	(d)
(A)	2	3	4	1
(B)	4	2	1	3
(C)	3	1	4	2
(D)	4	3	1	2

(E) Answer not known

20. How many rollers required in roller reversing motion in weaving, to produce 5 end sateen?

(A) 2
(B) 3
(C) 4
(D) 5
(E) Answer not known

21. Among the following multiple box motions, which is pick-at -will motion?

(A) 2×1
(B) 4×1
(C) 4×4
(D) 3×2
(E) Answer not known

22. Which is the process of passing the weft yarn through the shed?

(A) Shedding
(B) Picking
(C) Beating
(D) Drawing-in
(E) Answer not known

23. Slough-off due to

(A) Weft yarns slips off the pirn and get entangled in the fabric
(B) Fabric defect
(C) Cheese winding
(D) Loose winding of pirn and harsh picking
(E) Answer not known

24. It is the name indicating the loom stoppage

(A) Dieing time
(B) Down time
(C) Stopping time
(D) Resting time
(E) Answer not known

25. Which of the following property belongs to Bottom closed shed?

(A) Less power consumption
(B) Low cover to the fabric
(C) Equal strain put upon warp threads
(D) High cover to the fabric
(E) Answer not known

26. Shedding mechanism controlling individual warp threads

(A) Tappet
(B) Dobby
(C) CAM
(D) Jacquard
(E) Answer not known

27. Which of the following is incorrectly paired?

(A) Weaving body and border designs – cross border jacquard
(B) Single lift, single cylinder jacquard – bottom closed shed
(C) Frictional let-off motion – Negative let-off motion
(D) Double lift dobby – Black burn dobby
(E) Answer not known

28. Single lift, single cylinder jacquard has this type of shedding :

(A) Centre closed shed
(B) Bottom closed shed
(C) Open shed
(D) Semi-open shed
(E) Answer not known

29. A 500 end double lift, single cylinder jacquard has

(A) 500 hooks and 500 needles

(B) 500 hooks and 1000 needles

(C) 1000 hooks and 500 needles

(D) 1000 hooks and 1000 needles

(E) Answer not known

30. In weaving, control of each warp ends or groups of similarly interlacing warp ends within the pattern repeat across the fabric width is called :

(A) Tappet shedding

(B) Dobby shedding

(C) Jacquard shedding

(D) CAM shedding

(E) Answer not known

31. Assertion [A] : In synthetic warp yarn sizing, the size film must coat the yarn surface without excessive penetration into the body of the yarn.

Reason [R] : If the size material is penetrated deep in the yarn, complete desizing would not be possible.

(A) [A] is true but [R] is false

(B) Both [A] and [R] are true and [R] is the correct explanation of [A]

(C) [A] is false, [R] is true

(D) Both [A] and [R] are true, but [R] is not the correct explanation of [A]

(E) Answer not known

32. The basic ingredients of a size liquour are

(A) Dyes and chemicals
(B) Adhesives, lubricants and solvent
(C) Caustic soda
(D) Enzyme
(E) Answer not known

33. Among the following sizing ingredients which is used as an antiseptic?

(A) Polyvinyl alcohol
(B) CMC
(C) Copper sulphate
(D) Sodium carboxymethyl cellulose
(E) Answer not known

34. The order in which warp ends are drawn through the eye of the healds.

(A) Denting-in
(B) Lifting-out
(C) Reeling-out
(D) Drawing-in
(E) Answer not known

35. For which fabric production the ball warping is used?

(A) Voile fabric
(B) Elastic tape
(C) Denim fabric
(D) Polyester fabric
(E) Answer not known

36. An extra length of weft wound on the base of a pirn is called

(A) Nose
(B) Bunch
(C) Tip
(D) Base
(E) Answer not known

37. EYC is

(A) Electrical Yarn Cleaning
(B) Electronic Yarn Clearer
(C) Electrical Yarn Clearer
(D) English Yarn Count
(E) Answer not known

38. The splice is a

(A) Longer piecing than a knot
(B) Knot
(C) Tie and dye
(D) Fault
(E) Answer not known

39. Among the following types of tensioning devices, which is most commonly found on warping machine.

(A) Capstan
(B) Multiplicative
(C) Additive
(D) Combined
(E) Answer not known

40. Among the following processes which is used to improve the strength and abrasion of the yarn?

(A) Warping
(B) Pirn winding
(C) Drum winding
(D) Sizing
(E) Answer not known

41. The traditional finishing step in Sungudi sarees after dyeing to fix colours and soften fabric involves :

(A) Stenter dyeing
(B) Soaping and washing
(C) Heat setting
(D) Resin finishing
(E) Answer not known

42. Characteristic of the Kanchipuram weave that distinguishes it structurally :

(A) Two shuttle wave with plain body
(B) Extra weft jacquard insertion
(C) Three shuttle interlocked border technique
(D) Pattern formed by extra weft threads
(E) Answer not known

43. Yarn type predominantly used in the handloom longis for strength and smooth texture :

(A) Carded yarn
(B) Combed yarn
(C) Filament yarn
(D) Core-spun yarn
(E) Answer not known

44. Factor increase pilling tendency in handloom bedsheet fabric is :

(A) Coarse yarn count
(B) Loose fabric construction
(C) Long staple yarn
(D) Tight fabric construction
(E) Answer not known

45. Key difference exist between hand loom sarees and power loom sarees.

(A) Uniform weave pattern
(B) Aligned motifs
(C) Slight irregularities in spacing
(D) Even selvedge edges
(E) Answer not known

46. Identify the reasons olefin fibres are preferred in automotive trunk liners and door panels :

(A) Excellent sound absorption
(B) High moisture retention
(C) Enhanced UV production
(D) Excellent chemical resistance
(E) Answer not known

47. Density of Nomex fibre for producing ballistic protective fabric is

(A) 1.47 g/cm^3
(B) 1.45 g/cm^3
(C) 1.38 g/cm^3
(D) 1.40 g/cm^3
(E) Answer not known

48. The fibre used for Ballistic protection is

(A) Wool
(B) Cotton
(C) Kevlar
(D) Silk
(E) Answer not known

49. Main technique applied to improve the mechanical strength of geo textiles :

(A) Needle punching
(B) Chemical coating
(C) Spun bond
(D) Melt blown
(E) Answer not known

50. Determine the main raw material used in the manufacturing of shade nets :

(A) HDPE
(B) Nylon
(C) Polyester
(D) Jute
(E) Answer not known

51. The fabrics extensively used agricultural end uses is

(A) Woven fabrics
(B) Weft knitted cotton fabrics
(C) Non-woven
(D) Warp knitted man made textiles
(E) Answer not known

52. Sports fabrics designed with ceramic particles contribute to

(A) UV transmission
(B) High absorbency
(C) Thermal regulation
(D) High elasticity
(E) Answer not known

53. The fibre used as Artificial liver is

(A) Hollow polyester
(B) Hollow polypropylene
(C) Hollow viscose
(D) Silicone membrane
(E) Answer not known

54. The three-layer silicon laminated fabrics preferred for (a layer of silicone sandwiched between polyester warp knitted layers)

(A) Wound dressing
(B) Soft contact lenses
(C) Surgical drapes and gowns
(D) Artificial skin
(E) Answer not known

55. The fibres used for sutures in medical textiles is

(A) Cotton fibre
(B) Glass fibre
(C) Collagen fibre
(D) Polyethelene fibre
(E) Answer not known

56. Name the fibres which is not used for medical textile application

(A) Collagen
(B) Kevlar
(C) Calcium Alginate
(D) Chitin / Chitosan
(E) Answer not known

57. Nylon tyre cord is the best for the

(A) Manufacturing of tyre
(B) Manufacturing of belt
(C) Manufacturing of hose
(D) Manufacturing of seat
(E) Answer not known

58. _____ man made fibre dominate medical field.

(A) Nylon
(B) Polypropylene
(C) Nomex
(D) Polyester
(E) Answer not known

59. A non woven fabric is a manufactured sheet of

(A) Sliver
(B) Lap
(C) Roving
(D) Web
(E) Answer not known

60. In non woven manufacturing, mechanical bonding is done by

(A) Spun bonding method
(B) Chemical bonding method
(C) Melt blown method
(D) Needle punching method
(E) Answer not known

61. Arrange the following items according to the % use of non wovens in descending order

(a) Medical / surgical

(b) Hygiene

(c) Civil Engineering

(d) Garments

(A) (a), (b), (c), (d)

(B) (b), (c), (a), (d)

(C) (a), (c), (d), (b)

(D) (b), (a), (c), (d)

(E) Answer not known

62. Barbed needle are used in which process

(A) Spunbond

(B) Melt blowing

(C) Fibrillated film

(D) Needle punching

(E) Answer not known

63. Continuous filament webs are called

(A) Wet-laid

(B) Dry-laid

(C) Random-laid

(D) Spun-laid

(E) Answer not known

64. In needle punching process, higher punch density cannot cause

(A) Lower web thickness
(B) Higher changes in fabric dimension
(C) Higher damage of fibres
(D) Higher permeability of fibres
(E) Answer not known

65. Identify the web formation method most suitable for incorporating a high proportion of short fibres (< 5 mm)

(A) Melt blown
(B) Wet-laid
(C) Dry-laid
(D) Spunbond
(E) Answer not known

66. Water vapour permeability = permeance × l where l is

(A) Pore size of membrane
(B) Thickness of membrane
(C) Length of membrane
(D) Thickness of fabric
(E) Answer not known

67. What will be the cloth cover factor for a cotton fabric whose warp cover factor is 14 and weft cover factor is 10

(A) 19
(B) 22
(C) 24
(D) 26
(E) Answer not known

68. The formula for specific work of rupture is given by

(A) Specific work of rupture = $\frac{\text{Work of rupture}}{(\text{Mass/Unit length}) \times \text{Initial length}}$

(B) Specific work of rupture = $\frac{(\text{Mass/Unit length})}{\text{Work of rupture} \times \text{Initial length}}$

(C) Specific work of rupture = $\frac{\text{Work of rupture} \times \text{Initial length}}{(\text{Mass / Unit length})}$

(D) Specific work of rupture = $\frac{\text{Work of rupture}}{\text{Mass} \times \text{Initial length}}$

(E) Answer not known

69. The property of fabric which influences drape the most is

(A) Tensile
(B) Compressional
(C) Shear
(D) Surface
(E) Answer not known

70. A fabric was marked for the length of 80 cm warp way while on table. The yarn taken our from the fabric measures 83 cm in the crimp testing. What is the crimp %?

(A) 3.61%
(B) 3.62%
(C) 3.80%
(D) 3.75%
(E) Answer not known

71. Variations showing regularly spaced thick and thin places

(A) Periodic
(B) Random
(C) Ordinary
(D) Perfect
(E) Answer not known

72. Yarn diameter (in inches) is equal to

(A) $1 \div \left[28\sqrt{N}\right]$ (B) $28\sqrt{N}$

(C) $1 \div \left[\sqrt{28 \times N}\right]$ (D) $1 \div \left[\sqrt{28} \times N\right]$

(E) Answer not known

73. With an increase in gauge length, the tenacity of a spun yarn would

(A) Increase

(B) Decrease

(C) Remain the same

(D) First increase and then decrease

(E) Answer not known

74. For single yarn twist testing, which method is used to check the twist

(A) Straightened fibre method

(B) Crimp rigidity tester

(C) Single thread strength testing

(D) Uster evenness tester

(E) Answer not known

75. NQP count in a cotton fibre sample is measured by

(A) AFIS (B) HVI

(C) Uster (D) Stelometer

(E) Answer not known

76. Wet samples will have _____ regain value than the dry sample.

(A) Lower
(B) Higher
(C) Equal
(D) Finer
(E) Answer not known

77. SFI means

(A) Staple Fibre Index
(B) Synthetic Fibre Index
(C) Surface Fibre Index
(D) Short Fibre Index
(E) Answer not known

78. Which of the fibre shows high dimensional change due to absorption of moisture?

(A) Cotton
(B) Viscose
(C) Wool
(D) Silk
(E) Answer not known

79. The standard testing relative humidity value is

(A) 85%
(B) 75%
(C) 65%
(D) 45%
(E) Answer not known

80. In periodic variation short term variation means

(A) Wave length is 1 to 10 times the length of the fibre
(B) Wave length is 100 to 1000 times the length of the fibre
(C) Wave length is 10 to 100 times the length of the fibre
(D) Wave length is 0.1 to 1 times the length of the fibre
(E) Answer not known

81. Which of the following statement is true about 'Zoning' technique of sampling?

(i) It is used for the bulk of material is not homogeneous

(ii) It is used for the material is composed of fibres in parallel order

(iii) It is suitable for sampling from slivers and webs in which fibres are entangled

(A) (ii) only
(B) (iii) only
(C) (ii) and (iii) only
(D) (i) only
(E) Answer not known

82. Coefficient of variation is equal to

(A) Ratio between mean and standard deviation
(B) Ratio between mean and variance
(C) Ratio between standard deviation and mean
(D) Ratio between variance and mean
(E) Answer not known

83. The number of tests required to give the standard deviation to an accuracy of a percent at the 95 per cent confidence level. The 95 percent confidence interval for the population standard deviation is given by

(A) Sample standard deviation ± 1.56 Standard error

(B) Sample standard deviation ± 1.90 Standard error

(C) Sample standard deviation ± 1.86 Standard error

(D) Sample standard deviation ± 1.96 Standard error

(E) Answer not known

84. Expand AATCC

(A) American Association of Testing Colour and Chemicals

(B) American Association of Textile Chemists and Colorists

(C) All Association of Textile Chemical and Colours

(D) American Association of Textile Colour and Control

(E) Answer not known

85. Among the following which represent the 'median' in a series of values?

(A) The smallest value in a series

(B) The average of all the values

(C) The middle of a series of values arranged in order of magnitude

(D) The most frequently occurring value

(E) Answer not known

86. The result can be achieved by calendaring process

(A) Increase Lusture and smoothness
(B) Increase moisture regain
(C) Reduce cross linking
(D) Reduce fabric handle
(E) Answer not known

87. _____ can be applied to Acetate rayon, viscose rayon and Nylon fabric to impart water repellency, soft handle and improved draping quality.

(A) Silicones
(B) Paraffin Wax
(C) Aluminium stearate
(D) Wax emulsion
(E) Answer not known

88. Aluminium stearate is used in _____ finishing process.

(A) Anti crease
(B) Anti shrink
(C) Resin
(D) Water repellent
(E) Answer not known

89. Origin of Batik print

(A) India
(B) Indonesia
(C) China
(D) Japan
(E) Answer not known

90. The expansion of R.F. in drying

(A) Refractive frequency
(B) Resolution frequency
(C) Reactive frequency
(D) Radio frequency
(E) Answer not known

91. Maximum how many colours are present in the roller printing machine

(A) 12
(B) 14
(C) 16
(D) 18
(E) Answer not known

92. The fabric is printed and than dyed is called as

(A) Direct style
(B) Resist style
(C) Tie and dye
(D) Discharge style
(E) Answer not known

93. The cabinet dyeing machines are used to dye the yarn in _____ form.

(A) Beam
(B) Cone
(C) Hank
(D) Lea
(E) Answer not known

94. The sequence of operation of a continuous dyeing machines is

(A) After treatment – Developing – Drying – Padding
(B) Developing – Drying – Padding – After treatment
(C) Padding – Drying – Developing – After treatment
(D) Padding – Developing – Drying – After treatment
(E) Answer not known

95. HTHP stands for

(A) Hydro Toluene Hydro Pentol
(B) High Toxic High Print
(C) Hydro Temperature High Pentol
(D) High Temperature High Pressure
(E) Answer not known

96. Hydrose the common name of

(A) Sodium carbonate
(B) Sodium hydroxide
(C) Sodium hypochlorite
(D) Sodium hydrosulphite
(E) Answer not known

97. Basic Dyes are also known as

(A) Anionic dyes
(B) Cationic dyes
(C) Non-ionic dyes
(D) Insoluable dye
(E) Answer not known

98. In reactive dyeing application exhaustion from an aqueous bath is enhanced by

(A) Sodium silicate
(B) Electrolyte
(C) Sodium Hydroxide
(D) Sodium Carbonate
(E) Answer not known

99. The Majority of Vat dyes are derivatives from

(A) Anthraquinone
(B) Triphenyl methane
(C) Diazonium compound
(D) Sulphonated group
(E) Answer not known

100. Disperse dyes are

(A) Soluble in water
(B) Soluble in hot water
(C) Insoluble in water
(D) Sparingly soluble in water
(E) Answer not known

101. _____ dye having poor light fastness.

(A) Vat dye
(B) Disperse dye
(C) Basic dye
(D) Sulphur
(E) Answer not known

102. The set containing reducing bleaching agents is

1. Sodium Sulphite
2. Sodium Hydrosulphite
3. Sodium Peroxide
4. Potassium Persulphate

(A) 1 and 2 (B) 2 and 3
(C) 3 and 4 (D) 1 and 4
(E) Answer not known

103. The object of bleaching is

(A) To remove the natural colouring matter
(B) To remove the natural and added impurities
(C) To remove the protruding fibres
(D) To remove the size paste
(E) Answer not known

104. Choose the correct statement

1. Copper salts improve working fastness
2. Chromium salts improve working fastness
3. Copper salts improve light fastness and chromium salts improve working fastness
4. Chromium salts improve light fastness.

(A) Only 2 is correct (B) Only 4 is correct
(C) Both 2 and 3 are correct (D) Both 1 and 4 are correct
(E) Answer not known

105. The concentration of caustic soda solution used for effective mercerization is

(A) 40-50° TW
(B) 60-70° TW
(C) 10-20° TW
(D) 50-55° TW
(E) Answer not known

106. 'Electrostatic precipitators' are used to control the which of the following pollutions?

(A) Water
(B) Noise
(C) Air
(D) Water and Noise
(E) Answer not known

107. Expand TDS

(A) Total Dissolved Solids
(B) Typical Dyeing System
(C) Textile Dyeing System
(D) Total Dyeing Software
(E) Answer not known

108. Who among these is the beneficiary under LC?

(A) Buyer's bank
(B) Importer
(C) Exporter
(D) Consignor
(E) Answer not known

109. Which LC allows pre-shipment financing and storage at port?

(A) Back to back letter
(B) Confirmed LC
(C) Green clause LC
(D) Blue Clause LC
(E) Answer not known

110. The highest noise level in a spinning mill is

(A) Blow Room
(B) Carding
(C) Draw frame
(D) Ring Frame
(E) Answer not known

111. The minimum space provided for a worker as per the Factories Act 1948

(A) 4.8 cu.m
(B) 4.2 cu.m
(C) 4.0 cu.m
(D) 10.2 cu.m
(E) Answer not known

112. The employee provident fund act was introduced in the year

(A) 1956
(B) 1952
(C) 1950
(D) 1954
(E) Answer not known

113. Name the country from which total quality management system is initially derived world wide

(A) United States of America
(B) Japan
(C) Germany
(D) Netherland
(E) Answer not known

114. The test used to find out the cleverness to work with hands and fingers of a person is

(A) Intelligence tests
(B) Aptitude tests
(C) Dexterity tests
(D) Personality tests
(E) Answer not known

115. 'SEIRI' means

(A) Keep machinery and working environments clean
(B) Sort and throw away unnecessary items
(C) Make cleaning and checking as a routine practice
(D) Arrange the essential things in order
(E) Answer not known

116. 'ISO 14001' – Environmental Management Systems indicates

(A) Life Cycle assessment – Inventory analysis
(B) Life cycle assessment – Principles and framework
(C) Guidelines for environmental auditing – General principles
(D) EMS – Specification with guidance for use
(E) Answer not known

117. The quality control circle was introduced by

(A) Dr. K. Ishikawa
(B) Taguchii
(C) Deming
(D) Dr. Juran Thomas
(E) Answer not known

118. Which inventory management approach in textile aims to reduce costs by ordering materials only when needed rather than holding excess inventory?

(A) Just-in-time
(B) Batch production
(C) Economic order quantity
(D) Material requirements planning
(E) Answer not known

119. In 'ABC Analysis' the percentage of A-items generally account for _____ of the total inventory cost.

(A) 50-55%
(B) 70-80%
(C) 60-65%
(D) 100-200%
(E) Answer not known

120. If the bobbin lift is 12" and full bobbin diameter is 6", then the standard norms for roving content in kg is

(A) 1.3
(B) 1.5
(C) 1.8
(D) 2.0
(E) Answer not known

121. Production per spindle per 8 hours in grams adjusted to 40^S count is

(A) 110
(B) 120
(C) 116
(D) 126
(E) Answer not known

122. Among the following types of productions which system is followed where products are taken in small number of groups?

(A) Job production
(B) Mass production
(C) Batch production
(D) Continuous production
(E) Answer not known

123. Among the following plant layout, which is used for a large volume of production with a staple product design?

(A) Fixed position layout
(B) Product layout
(C) Process layout
(D) Group technology
(E) Answer not known

124. What are the factors considered for weaving mill plant layout among the following?

(i) Transport Alley
(ii) Sound Insulation
(iii) Ergonomics
(iv) Air-conditioning

(A) (i), (ii), (iv)
(B) (ii), (iii), (iv)
(C) (i), (ii), (iii)
(D) (i), (iii), (iv)
(E) Answer not known

125. The process layout is also known as

(A) Line layout
(B) Sequential layout
(C) Functional layout
(D) Bias layout
(E) Answer not known

126. What will be the count of healds for weaving a 4 shaft plain fabric using 64s stockport reed drawn 4 in a dent?

(A) 64
(B) 128
(C) 256
(D) 1024
(E) Answer not known

127. Calculate the cloth cover factor (K_C) if (K_1) warp cover factor = 13.06, weft cover factor (K_2) = 12.52

(A) 18.74
(B) 19.74
(C) 20.74
(D) 22.74
(E) Answer not known

128. One thread of unknown count, when folded together with another of 72^s cotton, gives a two folded yarn of 31.5^s cotton. Calculate the count of the unknown thread

(A) 53^s Cotton
(B) 54^s Cotton
(C) 55^s Cotton
(D) 56^s Cotton
(E) Answer not known

129. Two cotton yarn of 24 and 36 Ne are folded. Find the resultant count

(A) 12.4 Ne
(B) 14.4 Ne
(C) 16.4 Ne
(D) 15.8 Ne
(E) Answer not known

130. If the weight of 400 meters of yarn is 6 grams. Calculate its count in tex system.

(A) 15
(B) 42
(C) 26
(D) 24
(E) Answer not known

131. A 150 denier continuous filament yarn is used as weft in a fabric with a cotton warp. Calculate the linear density in tex of the continuous filament yarn.

(A) 3.93 Tex
(B) 14.8 Tex
(C) 15.2 Tex
(D) 16.66 Tex
(E) Answer not known

132. "If there are 20160 yd in 1 lb of yarn, Calculate the worsted count.

(A) 38 s
(B) 40 s
(C) 36 s
(D) 34 s
(E) Answer not known

133. Convert 40 s cotton count into tex system.

(A) 14.76
(B) 0.14
(C) 1/40
(D) 40
(E) Answer not known

134. In direct system

(A) A coarser yarn will have a higher number while a finer yarn will have a lower number
(B) A finer yarn will have a higher number while a coarser yarn will have a lower number
(C) Higher the count, finer is the yarn
(D) Lower the count, Coarser is the yarn
(E) Answer not known

135. Calculate the weight of 816 hanks of 60^s cotton

(A) 10.5 lbs
(B) 12.3 lbs
(C) 13.6 lbs
(D) 14.2 lbs
(E) Answer not known

136. In yarn numbering system _____ length and weight unit used for linen (wet spun) yarn.

(A) Hank of 840 yards and weight in 1 lbs
(B) Hank of 560 yards and weight in 1 lbs
(C) Hank of 300 yards and weight in 1 lbs
(D) Spindle of 11520 yards and weight in 24 lbs
(E) Answer not known

137. The formula for Tex count is

(A) $\frac{\text{Mass (grams)}}{\text{Length (km)}}$
(B) $\frac{\text{Length (km)}}{\text{Mass (grams)}}$
(C) Length in km × Mass in grams
(D) Length in km – Mass in grams
(E) Answer not known

138. Calculate the production in yard per shift of 8 hours of a loom running at 200 ppm with 90% efficiency the number of picks per inch inserted on the cloth is 56.

(A) 45.8
(B) 42.9
(C) 48.5
(D) 41.8
(E) Answer not known

139. The rate of winding of yarn $V_f\,(m/\min)$ in ring spinning machine is

if N_s – Spindle speed (rpm)

N_t – Traveller speed (rpm)

D_r – Ring diameter (Meter)

D_b – Bobbin diameter (meter)

(A) $V_f = (N_t - N_s)\,\pi \times D_b$
(B) $V_f = (N_t - N_s)\,\pi \times D_r$
(C) $V_f = (N_s - N_t)\,\pi \times D_r$
(D) $V_f = (N_s - N_t)\,\pi \times D_b$
(E) Answer not known

140. Calculate the loom efficiency, if the actual running time of a loom = 555.5 mints, total running time of a loom = 577.72 mints.

(A) 85.16%
(B) 90.16%
(C) 95.16%
(D) 96.16%
(E) Answer not known

141. A cone made on a modern high speed cone winding machine contains 4 lbs of 20^s cotton yarn. Calculate the length of yarn in yards.

(A) 67,100 yds
(B) 67,150 yds
(C) 67,200 yds
(D) 76,000 yds
(E) Answer not known

142. A 25 tex yarn is spun with a twist factor of 30. How many turns/cm are there in this yarn?

(A) 4 turns/cm
(B) 8 turns/cm
(C) 6 turns/cm
(D) 9 turns/cm
(E) Answer not known

143. Calculate the draft of the carding machine if lap hank = 0.00126, hank of sliver = 0.157, waste in carding machine = 5%

(A) 108.4
(B) 118.4
(C) 128.4
(D) 138.4
(E) Answer not known

144. The exact surface - speed ratio of cylinder and doffer is

(A) 18 : 1
(B) 15 : 1
(C) 19 : 1
(D) 28 : 1
(E) Answer not known

145. The lap fed to a card has a mass per meter of 500 g. The linear density of the card sliver delivered is 5 K tex. What is the draft of the card?

(A) 5
(B) 10
(C) 50
(D) 100
(E) Answer not known

146. Wavy edged knives are preferred in straight knife cutting machine for cutting

(A) Cotton fabric
(B) Polyester fabric
(C) Wool fabric
(D) Silk fabric
(E) Answer not known

147. The method of placing the number of plies of fabric for cutting is

(A) Stitching
(B) Spreading
(C) Ironing
(D) Packing
(E) Answer not known

148. The sewing machine used for attaching patch pocket is

(A) Flat bed
(B) Post bed
(C) Cylinder bed
(D) Overedge bed
(E) Answer not known

149. Curved needles suitable for

(A) Lock stitch sewing machine
(B) Overlock sewing machine
(C) Blind stitch sewing machine
(D) Interlock sewing machine
(E) Answer not known

150. The term CMT means

(A) Cutting, Making, Trimming
(B) Cutting, Modify, Threading
(C) Clothing, Making, Threading
(D) Correction, Making, Trimming
(E) Answer not known

151. In pattern making, the angle line that intersects with the lengthwise and crosswise grain at a ———— angle is called True bias.

(A) 30°
(B) 45°
(C) 60°
(D) 90°
(E) Answer not known

152. Triangular shaped fold of fabric stitched to control fullness are called

(A) Gather
(B) Pleats
(C) Dart
(D) Hem
(E) Answer not known

153. ———————— type of knitting machines are used for stitch bonding non-woven production.

(A) single jersey
(B) rib machine
(C) v-bed flat knitting machine
(D) warp knitting machine
(E) Answer not known

154. The term not related to warp knitting is

(A) Lacoste
(B) Raschel
(C) Tricot
(D) Milanese
(E) Answer not known

155. The butt portion of spring-beard needle is also called as

(A) stem
(B) eye
(C) head
(D) shank
(E) Answer not known

156. In circular weft knitting machine, the device which is used to feed the yarn at a constant rate to needle is

(A) Guide Bar
(B) Positive-feed system
(C) Creel
(D) Jack
(E) Answer not known

157. Choose the incorrect statement

(i) Single jersey fabric curls at the edges

(ii) Rib fabric does not curl at the edges

(iii) Single jersey fabric is heavier and thicker than rib with similar gauge

(iv) Rib fabric has maximum extensibility in width way

(A) Option (i) and (ii) only
(B) Option (iii) and (iv) only
(C) Option (iii) only
(D) Option (iv) only
(E) Answer not known

158. The type of welt produced by knitting approximately four courses on one set of needles only whilst continuing to hold the setting-up course of loops on the other set of needles is called

(A) Roll welt
(B) Tubular welt
(C) Racked welt
(D) Inturned welt
(E) Answer not known

159. Assertion [A] : Compared with rib knitting machine, a plain knitting machine is simpler and more economical.

Reason [R] : Plain knitting machine has potential for more feeders, high running speeds and knitting wider range of counts.

(A) [A] is true but [R] is false
(B) [A] is false but [R] is true
(C) Both [A] and [R] are true, and [R] is the correct explanation of [A]
(D) Both [A] and [R] are true, but [R] is not the correct explanation of [A]
(E) Answer not known

160. The self acting needle is

(A) Spring bearded needle
(B) Latch needle
(C) Compound needle
(D) Sewing needle
(E) Answer not known

161. Identify incorrect statement with respect to the methods of width-wise shaping during knitting.

(A) Varying the number of needles in action in the knitting width
(B) Changing the knitting construction
(C) Altering the stitch length
(D) Altering the stitch density
(E) Answer not known

162. Consider the following statements

Ascertain [A] : The plain knitted fabric production rate is high

Reason [R] : Plain knit simplicity and machine simplicity

(A) Both [A] and [R] are true and [R] is the reason for [A]
(B) Both [A] and [R] are true [R] is not the correct reason for [A]
(C) [A] is true but [R] is false
(D) Both [A] and [R] are false
(E) Answer not known

163. Positive storage feed is installed in a knitting machine

(A) To hold the cone
(B) To give upward movement to the needle
(C) To feed the yarn to hook of the needle
(D) To overcome the effects of yarn tension variation
(E) Answer not known

164. In weft knitted fabric horizontal lines of fault results due to

(A) Faulty stop motion
(B) Lint in yarn path
(C) Uneven yarn
(D) Defects in design elements
(E) Answer not known

165. In knitted fabric, the ratio between area covered by the yarn in one loop and the loop to the area covered by that loop is called

(A) Fabric area density
(B) Texture
(C) Tightness factor
(D) Twist factor
(E) Answer not known

166. Corduroy is a _____ variety of fabric.

(A) Cut pile
(B) Canvas
(C) Georgette
(D) Crepe
(E) Answer not known

167. Clipped spot effect is found in

(A) Backed cloths
(B) Extra weft figured cloths
(C) Bedford cord fabrics
(D) Double cloths
(E) Answer not known

168. Treble cloths are made by this technique

(A) Self stitching
(B) Centre Stitching
(C) Stitching by pried yarn
(D) Side stitching
(E) Answer not known

169. Fabric are produced by hand twist yarn having broken surface appearance

(A) Calico
(B) Crepe
(C) Damask
(D) Denim
(E) Answer not known

170. A ———— is a simple modification of the welt structure in which the indentations are not in a horizontal line but are arranged in alternate groups.

(A) Weft wadded welts
(B) Fast-back welts
(C) Waved pique
(D) Crepon Bedford cords
(E) Answer not known

171. Bed Ford Cord weave fabric is used for

(A) military dresses
(B) bed spread fabric
(C) towels cloth
(D) denim cloth
(E) Answer not known

172. The weave permits both stripe and check effect on fabric is

(A) Honey comb
(B) Twill
(C) Huck a back
(D) Brighton Honey Comb
(E) Answer not known

173. In a Twill weave, when the warp ends/inch exceeds the weft picks/inch the twill angle formed is

(A) <45°
(B) >45°
(C) <30°
(D) >90°
(E) Answer not known

174. Among the following weaves, which is variously known as 'Hopsack' weaves

(A) Irregular weft rib
(B) Matt rib
(C) Regular warp rib
(D) Regular weft rib
(E) Answer not known

175. The suitable move number for 12 end satin weave is

(A) 3
(B) 4
(C) 5
(D) 2
(E) Answer not known

176. Among the following weaves, which is variously known as 'Tabby' weave

(A) Crepe
(B) Plain
(C) Sateen
(D) Twill
(E) Answer not known

177. The colour not belongs to complementary colour is

(A) Blue
(B) Yellow
(C) White
(D) Green
(E) Answer not known

178. Match the following drafting systems with their suitable cloths

(a)	Pointed draft	1.	Warp backed cloth
(b)	Divided draft	2.	Checked cloth
(c)	Grouped draft	3.	Herringbone Twill cloth
(d)	Broken draft	4.	Ordinary Honeycomb cloth

	(a)	(b)	(c)	(d)
(A)	4	1	2	3
(B)	4	2	1	3
(C)	4	3	1	2
(D)	1	3	2	4

(E) Answer not known

179. Identify the correct statements relevant to woven fabric design

I. The design indicates the interlacement of warp and weft threads

II. The draft indicates the manner of drawing the ends through the heald eyes

III. The pegplan indicates the order of lifting the heald shafts

IV. In a graphical design representation each square indicates intersection of warp and weft

(A) I, II, III and IV
(B) only I, II and III
(C) only I, II and IV
(D) only II, III and IV
(E) Answer not known

180. In which of the following drafting systems, the drafting order progresses successively from first to the last heald frame

(A) Broken
(B) Curved
(C) Grouped
(D) Straight
(E) Answer not known

181. Generally Rotor spun yarns are ———— than ring spun yarns.

(A) Bulkier

(B) Finer

(C) Stronger

(D) Less extensible

(E) Answer not known

182. Which of the following is correctly paired?

Where, Rotor diameter in mm, yarn twist in twist per meter

(A) Back doubling = $\frac{\text{Rotor circumference} \times \text{Yarn Twist}}{1000}$

(B) Back doubling = $\frac{\text{Rotor circumference}}{\text{Yarn twist} \times 1000}$

(C) Back doubling = $\frac{\text{Rotor circumference} \times \text{Yarn twist}}{100}$

(D) Back doubling = $\frac{\text{Yarn twist}}{\text{Rotor circumference} \times 100}$

(E) Answer not known

183. Air Jet Yarn also termed as

(A) Ring yarn

(B) Fasciated yarn

(C) Rotor yarn

(D) Dref yarn

(E) Answer not known

184. ———— is the widely used one for separation of air and fiber material in blowroom process.

(A) Gravity separators
(B) Suction pump
(C) Condensers
(D) Metering pumps
(E) Answer not known

185. The increase in traveller weight leads to an increase in

(A) Yarn Twist
(B) Traveller lag
(C) Balloon diameter
(D) Yarn Tension
(E) Answer not known

186. The ratio of winding coils : Binding coils in ring frame cop building

(A) 1:2
(B) 2:2
(C) 3:2
(D) 2:1
(E) Answer not known

187. In modern ring frames, piecing becomes a problem if roller stand angle α increased beyond

(A) 60°
(B) 40°
(C) 50°
(D) 45°
(E) Answer not known

188. Choose the incorrect statement(s) with respect to combed yarn manufacturing process sequence

(i) Card → Sliver lap M/C → Ribbon lap M/C → Comber

(ii) Card → Drawframe → Sliver lap M/C → Comber

(iii) Card → Drawframe → Sliver doubling M/C → Comber

(iv) Card → Ribbon lap M/C → Sliver doubling M/C → Comber

(A) Option (i) only
(B) Option (i) and (iii) only
(C) Option (iii) only
(D) Option (ii) and (iv) only
(E) Answer not known

189. In laying down of the silver in large coils (over centre coiling), the

(A) Sliver coil diameter < can radius
(B) Sliver coil diameter > can radius
(C) Sliver coil diameter = can radius
(D) Sliver coil diameter = can radius – 2 inches
(E) Answer not known

190. The type of irregularity can be controlled by using Autoleveler is,

(A) Short and medium term sliver irregularity
(B) Medium-term sliver irregularity
(C) Long-term sliver irregularity
(D) Short-term sliver irregularity
(E) Answer not known

191. In a drafting system, an eccentric top roller causes

(A) Change in draft with oscillation of nip line
(B) Change in draft without oscillation of nip line
(C) Oscillation of nip line only
(D) Neither change in draft nor oscillation of nip line
(E) Answer not known

192. In modern ring frame, the traveller speed is

(A) 20 m/s
(B) 40 m/s
(C) 60 m/s
(D) 80 m/s
(E) Answer not known

193. Proportion of trailing, leading, both end and no hook fibres at card

(A) 25 : 25 : 25 : 25
(B) 15 : 50 : 15 : 20
(C) 50 : 15 : 15 : 20
(D) 15 : 15 : 15 : 55
(E) Answer not known

194. The most widely used grid bar shape is

(A) slotted sheet

(B) perforated sheet

(C) Triangular section

(D) blades

(E) Answer not known

195. How many times a fibre rotates in the cylinder before it passes to the doffer?

(A) 1

(B) 5-10

(C) 50

(D) 100

(E) Answer not known

196. Match the following, with respect to carding wire angle

(a)	Licker-in	1.	18°
(b)	Cylinder	2.	5°
(c)	Doffer	3.	28°

	(a)	(b)	(c)
(A)	2	1	3
(B)	1	2	3
(C)	2	3	1
(D)	3	1	2

(E) Answer not known

197. Which of the following statement is correct with respect to fibre configuration in carding

(A) High percentage of fibres without hooks are present in cylinder surface

(B) Double hooks are high in cylinder surface

(C) Trailing hooks are high in cylinder surface

(D) Leading hooks are high in cylinder surface

(E) Answer not known

198. Match the following

Operations	Functions
(a) Opening	1. To increase sliver evenness
(b) Cleaning	2. To individualise the fibre
(c) Carding	3. To make small tuft
(d) Drawing	4. To remove trash

	(a)	(b)	(c)	(d)
(A)	3	4	2	1
(B)	4	3	2	1
(C)	3	4	1	2
(D)	4	3	1	2

(E) Answer not known

199. The production rate of the mixing bale opener for short staple process is

(A) 400 kgs/hour
(B) 600 kgs/hour
(C) 800 kgs/hour
(D) 1000 kgs/hour
(E) Answer not known

200. The type of ginning machine is used for long-staple cotton is

(A) Saw gin
(B) Single acting macrathy gin
(C) Roller gin
(D) Double acting macrathy gin
(E) Answer not known
