

POST OF ASSISTANT TRAINING OFFICER (STENOGRAPHY-ENGLISH) IN
TAMIL NADU EMPLOYMENT TRAINING SUBORDINATE SERVICE AND
JUNIOR TECHNICAL ASSISTANT IN TEXTILE DEPARTMENT IN TAMIL NADU
GENERAL SUBORDINATE SERVICE.

COMPUTER BASED TEST

PAPER - I - HANDLOOM TECHNOLOGY / TEXTILE TECHNOLOGY / TEXTILE MANUFACTURE

(DIPLOMA STANDARD)

1. The fibre not used for producing flame resistant fabrics is
 - (A) Nomex
 - (B) Mod acrylics
 - (C) Glass
 - (D) Nylon
 - (E) Answer not known

2. The Shrinkage control treatment for woven fabric is done in _____ process
 - (A) Shearing
 - (B) Brushing
 - (C) Sanforising
 - (D) Compacting
 - (E) Answer not known

3. _____ chemical finish provide both oil and water repellency properties to fabric
 - (A) Paraffin
 - (B) Stearic acid - melamine
 - (C) Silicone
 - (D) Fluoro carbon
 - (E) Answer not known

4. The widely used catalyst in pigment printing is
- (A) Trisodium phosphate
 - (B) Zinc oxide
 - (C) Diammonium phosphate
 - (D) Ammonium hydroxide
 - (E) Answer not known
5. Name the hygroscopic agent used in printing process
- (A) Carriers
 - (B) Starch
 - (C) Glycerine
 - (D) Sodium Alignate
 - (E) Answer not known
6. The chemical used in carrying out oxidation in printing of cotton fabric with vat dye is
- (A) Sodium chloride
 - (B) Soda ash
 - (C) Sodium hydroxide
 - (D) Hydrogen peroxide
 - (E) Answer not known
7. Knitted fabric in rope form can be dyed in
- (A) Jet dyeing machine
 - (B) Drum dyeing machine
 - (C) HTHP dyeing machine
 - (D) Garment dyeing machine
 - (E) Answer not known

8. The speed of 3 bowl padding mangle is
- (A) 200 yards/min
 - (B) 300 yards/min
 - (C) 50 yards/min
 - (D) 80 yards/min
 - (E) Answer not known
9. In which of the following class of Direct dyes, do not require salt for their exhaustion
- (A) Self-levelling dyes
 - (B) Salt-controllable dyes
 - (C) Temperature - controllable dyes
 - (D) Salt and Temperature controllable dyes
 - (E) Answer not known
10. _____ process is carried out to overcome the faulty dyeing
- (A) Oxidation
 - (B) Stripping
 - (C) After treatment
 - (D) Hot wash
 - (E) Answer not known
11. Cold brand reactive dyes has _____ chlorine atoms
- (A) One
 - (B) Two
 - (C) Three
 - (D) Nil
 - (E) Answer not known

12. High pressure steam method of setting is not recommended for polyester fabric due to
- (A) High level of dimensional stability
 - (B) Loss of weight
 - (C) Loss of tensile strength and discolouration
 - (D) Loss of Length
 - (E) Answer not known
13. _____ dyes are water soluble and are mainly used to dye the acrylic fibers
- (A) Direct
 - (B) Acid
 - (C) Basic
 - (D) Vat
 - (E) Answer not known
14. The increase in fibre diameter percentage of cotton due to swelling when treated with sodium hydroxide is
- (A) 97%
 - (B) 64%
 - (C) 53%
 - (D) 78%
 - (E) Answer not known

15. _____ gives a silk-like brilliance to mercerized cotton fabrics
- (A) Chasing calendering
 - (B) Friction finish
 - (C) Schreiner finish
 - (D) Embossing calender
 - (E) Answer not known
16. Active bleaching species in the chlorite bleaching mechanism is
- (A) ClO_2
 - (B) O_2
 - (C) H^+
 - (D) HOO^-
 - (E) Answer not known
17. Sunlight is a principal bleaching aid for _____ material
- (A) Cotton
 - (B) Wool
 - (C) Linen
 - (D) Silk
 - (E) Answer not known
18. The machine used for scouring process is
- (A) Stenter
 - (B) Sanforizing machine
 - (C) Calendering machine
 - (D) Kier
 - (E) Answer not known

19. Find in correct statement

- (A) Cotton contains 0.5% of oil and wax
- (B) Raw wool contains around 50% of wool grease
- (C) Wool will not degrade by alkali treatment
- (D) Sodium hydroxide not used in wool scouring
- (E) Answer not known

20. Identify the oxidative method of desizing

- (A) Acid steep
- (B) Bromite
- (C) Enzymatic
- (D) Rot steep
- (E) Answer not known

21. The fabric grainline preferred for cowl neckline and drape closer to the body is

- (A) Lengthwise grain
- (B) Crosswise grain
- (C) Bias direction
- (D) Off-grain
- (E) Answer not known

22. _____ sewing defect is raised when the hook or looper fails to pickup the loop in the needle thread.
- (A) slip stitch
 - (B) staggered stitch
 - (C) variable stitch density
 - (D) unbalanced stitch
 - (E) Answer not known
23. The recommended spreading manner of fabric for asymmetrical pattern is
- (A) Face-to-face
 - (B) Crosswise fold
 - (C) Lengthwise fold
 - (D) Face up or face down
 - (E) Answer not known
24. In a flat pattern technique, the darts are shifted to the desired position by cutting and spreading is called
- (A) Pivot method
 - (B) Slash and spread method
 - (C) Measurement method
 - (D) Pattern grading
 - (E) Answer not known

25. Class 200 stitch is known as
- (A) Chain stitch
 - (B) Lock stitch
 - (C) Multithread chain stitch
 - (D) Hand stitch
 - (E) Answer not known
26. The most suitable cutting machine for Embroidery applique is
- (A) Die-cutting
 - (B) Laser cutting
 - (C) Band knife cutting
 - (D) Straight knife cutting
 - (E) Answer not known
27. The tool which is inserted into the collars or seams to get pointed edges is
- (A) Needle threader
 - (B) Pins
 - (C) Orange stick
 - (D) Dorn needle
 - (E) Answer not known
28. Thimble is a device used for
- (A) To fix the pattern on the cloth
 - (B) To cut the fabric
 - (C) Used for darning of cloth
 - (D) Protect the finger while hand sewing
 - (E) Answer not known

29. Choose the cutting machine for higher standard of cutting accuracy
- (A) Straight knife
 - (B) Hand shears
 - (C) Round knife
 - ~~(D) Band knife~~
 - (E) Answer not known
30. Less extensible knitted fabric is
- (A) Single jersey
 - (B) Rib
 - ~~(C) Interlock~~
 - (D) Purl
 - (E) Answer not known
31. Which laps are heavier, more compact, more opaque and less extensible in warp knitting?
- (A) Over lap
 - (B) Under lap
 - (C) Closed lap
 - ~~(D) Open lap~~
 - (E) Answer not known
32. In the cam track arrangement, which cam can be a adjustable one?
- (A) Guard cam
 - ~~(B) Stitch cam~~
 - (C) Upthrow cam
 - (D) Running cam
 - (E) Answer not known

33. The term 'links-links' is related to which of the following weft knitted structure
- (A) Plain
 - ~~(B) Purl~~
 - (C) Interlock
 - (D) Rib
 - (E) Answer not known
34. In which direction loop formation takes place in weft knitting?
- ~~(A) horizontal direction~~
 - (B) vertical direction
 - (C) cross direction
 - (D) diagonal wise
 - (E) Answer not known
35. In knitting cycle, the part of sinker holds the yarn during loop formation at
- (A) Belly
 - (B) Butt
 - (C) Neb
 - ~~(D) Throat~~
 - (E) Answer not known

36. _____ is irreversible fabric.

- (A) Single Jersey
- (B) Rib
- (C) Interlock
- (D) Purl
- (E) Answer not known

37. Choose the correct statement :

- (i) Rib has a vertical cord appearance
 - (ii) 1×1 rib has the appearance of the technical face of plain fabric on both sides
 - (iii) Interlock has the technical face of plain fabric on both sides
- (A) Option (i) only
 - (B) Option (i) and (ii) only
 - (C) Option (i), (ii) and (iii) only
 - (D) Option (ii) and (iii) only
 - (E) Answer not known

38. The needles are withdrawn/descends, so that the new loop is drawn through the old loop is called

- (A) Yarn feeding
- (B) Clearing
- (C) Knock-over
- (D) Holding-down
- (E) Answer not known

39. The function of sinker is
- (A) To give upward movement to needle
 - (B) To give downward movement to needle
 - ~~(C)~~ To hold down formed stitches
 - (D) To close the latch
 - (E) Answer not known
40. Courses are
- ~~(A)~~ rows of loops across the width of the fabric
 - (B) vertical column of needle loops
 - (C) loops across rows and vertical
 - (D) loops across vertical and rows
 - (E) Answer not known
41. The acceptance criteria for 4-point system of fabric inspection is
- (A) 4 points / 100 square yard
 - (B) 14 points / 100 square yard
 - ~~(C)~~ 40 points / 100 square yard
 - (D) 400 points / 100 square yard
 - (E) Answer not known
42. When A_D = Area of the specimen, A_d = Area of the supporting disk and A_S = Actual projected area of the specimen, calculate drupe coefficient:
- (A) $[A_D - A_S] \div [A_D - A_d]$
 - (B) $[A_D - A_d] \div [A_D - A_S]$
 - (C) $[A_D - A_d] \div [A_S - A_d]$
 - ~~(D)~~ $[A_S - A_d] \div [A_D - A_d]$
 - (E) Answer not known

43. Bundesmann test is used to measure
- (A) Fibre strength (B) Fibre fineness
(C) Fibre maturity ~~(D) Water repellency~~
(E) Answer not known
44. The fabric test length in case of strip test is
- (A) 10 inches (B) 12 inches
(C) 6 inches ~~(D) 8 inches~~
(E) Answer not known
45. In staple fibre yarn, when the yarn twist increases, yarn strength will
- (A) Increases
(B) Decreases
~~(C) Increases after certain level Decreases~~
(D) Decreases after certain level Increases
(E) Answer not known
46. In the CRE principle of fabric/yarn testing, as the specimen length increases, what will happen
- ~~(A) Rate of loading decreases~~
(B) Rate of loading increases
(C) No change in rate of loading
(D) Rate of loading increases and then decreases
(E) Answer not known

52. An alternative term for tenacity is
- (A) Breaking load (B) Breaking length
(C) Breaking extension ~~(D) Specific strength~~
(E) Answer not known
53. Expand PI
- ~~(A) Pressley Index~~ (B) Pressley Industry
(C) Pressley Installation (D) Pressley Inertia
(E) Answer not known
54. The water contact angles of four different cotton fabrics are given below. Which one has the highest wettability?
- ~~(A) 60°~~ (B) 80°
(C) 90° (D) 120°
(E) Answer not known
55. The weight of water present in a unit volume of moist air is
- ~~(A) Absolute humidity~~ (B) Relative humidity
(C) Standard atmosphere (D) Testing atmosphere
(E) Answer not known
56. The technique used for homogeneous fibre sampling is
- (A) Tong sampling ~~(B) Zoning technique~~
(C) Cut squaring technique (D) Squaring technique
(E) Answer not known

57. The data are presented as a series of rectangles erected over the horizontal scale is called

- (A) Bimodal frequency distribution
- ~~(B) Histogram~~
- (C) Bell shaped distribution curve
- (D) Skew distribution curve
- (E) Answer not known

58. Calculate percentage of accuracy P , when “ V ” coefficient of variation and “ N ” number of tests at 95% confidence Interval.

- (A) $1.96 V \times N$
- (B) $1.96 V \div N$
- (C) $1.96 V \times \sqrt{N}$
- ~~(D) $1.96 V + \sqrt{N}$~~
- (E) Answer not known

59. The formula for the mode is

- (A) Median – 3 (Median – Mean)
- ~~(B) Mean – 3 (Mean – Median)~~
- (C) Mean – Median
- (D) Median – Mean
- (E) Answer not known

60. Calculate the standard deviation (SD)

(If $\sum(x - \bar{x})^2 = 113.60$ and $n = 10$)

- (A) 2.96
- (B) 3.24
- ~~(C) 3.55~~
- (D) 3.87
- (E) Answer not known

61. According to the pigment theory of colour, the secondary colours are
- (A) Red, Green, Blue (B) Red, Yellow, Blue
(C) Russet, Citron, Olive ~~(D) Green, Purple, Orange~~
(E) Answer not known
62. Identify the traditional designs where the devnagari alphabets are woven
- (A) Bandhani (B) Kasuti
~~(C) Patola~~ (D) Phulkari
(E) Answer not known
63. The property required for wound care medical textile is
- (A) Strength (B) Compression
(C) Elongation ~~(D) Absorbent~~
(E) Answer not known
64. Which one of the material is not related to implantable materials?
- (A) Sutures (B) Vascular grafts
~~(C) Plaster~~ (D) Artificial joints
(E) Answer not known

65. Airbags used in the car should possess the following properties

- (i) High tear strength
- (ii) High bursting strength
- (iii) High permeability
- (iv) High flexibility

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

66. The textile fibre suitable for Ballistic protection is.

- (A) Bast
- ~~(B)~~ Aramid
- (C) Olefin
- (D) Rayon
- (E) Answer not known

67. The non-implantable material used in wadding is

- (A) Cotton and Nylon
- ~~(B)~~ Viscose
- (C) Polyester
- (D) Acrylic
- (E) Answer not known

68. The material used in car seat cover is

- (A) Carboxy cellulose
- (B) Polyvinyl chloride
- ~~(C)~~ Polyurethane
- (D) Acrylic
- (E) Answer not known

74. Thermal bonded fabrics are produced by using
- (A) Water ~~(B)~~ Heat in a variety of ways
(C) Oil (D) Kerosene
(E) Answer not known
75. The process is not used for manufacturing of different types of non wovens.
- (A) Mechanical bonding (B) Chemical bonding
(C) Thermal bonding ~~(D)~~ Knitting
(E) Answer not known
76. The Binder used for manufacturing chemical bonded non-woven fabric is
- (A) Pantex ~~(B)~~ Latex
(C) Spantex (D) Tantex
(E) Answer not known
77. The type of knitting machine used for stitch bonding is
- (A) Weft knitting machine (B) Circular knitting machine
(C) Flat knitting machine ~~(D)~~ Warp knitting machine
(E) Answer not known
78. The type of needle used to produce needle punched non woven fabric is
- ~~(A)~~ Barbed needle (B) Latch needle
(C) Compound needle (D) Flat needle
(E) Answer not known

79. Needle-punched fabrics are produced when barbed needles are pushed through a
- (A) Fibrous cross – laid web (B) Sliver
(C) Lap (D) Roving
(E) Answer not known
80. Air-laid fabrics can have strength ratios as high as
- (A) 1 : 1 (B) 1.5 : 1
(C) 1.8 : 1 (D) 2.5 : 1
(E) Answer not known
81. With respect to waste water heat exchangers, the plate heat exchangers is having a heat transfer efficiency of _____ times higher than shell-and-tube heat exchangers.
- (A) 1 to 2
(B) 6 to 8
(C) 9 to 12
 (D) 3 to 5
(E) Answer not known
82. The average energy use in the textile industry and energy consumption varies from _____ of electricity per Kilogram of yarn in a modernised spinning mill.
- (A) 1 to 2.5 kwh
 (B) 3 to 3.5 kwh
(C) 5 to 6.5 kwh
(D) 7 to 8 kwh
(E) Answer not known

83. Identify the process which removes both dissolved Ions and suspended solids/particles with greater efficiency
- (A) Aerobic treatment
 - (B) Anaerobic treatment
 - (C) Membrane filtration
 - (D) Ion exchange
 - (E) Answer not known
84. Air pollution is caused by transportation of Vehicle is about
- (A) 20%
 - (B) 40%
 - (C) 60%
 - (D) 80%
 - (E) Answer not known
85. With respect to exim policies, DEPS stands for
- (A) Duty entry passbook scheme
 - (B) Duty entitlement provision scheme
 - (C) Duty entitlement provident scheme
 - (D) Duty entitlement passbook scheme
 - (E) Answer not known
86. National Textile Policy was announced in the year
- (A) 1999
 - (B) 2000
 - (C) 2002
 - (D) 2003
 - (E) Answer not known

87. In a spinning mill, the temporary removal of an employee can happen due to
- (A) Lay-off
 - (B) Strike
 - (C) Transfer
 - (D) Dismissal
 - (E) Answer not known
88. Leadership belongs to
- (A) Technical Skill
 - (B) Social Skill
 - (C) Motivational Skill
 - (D) Personal Skill
 - (E) Answer not known
89. The Deming cycle one of the quality control tool is also known as
- (A) PDCA cycle
 - (B) Juran's quality trilogy cycle
 - (C) Crosby's 14 steps
 - (D) Taguchis approach
 - (E) Answer not known
90. The quality control tool used in assessing the statistical process is
- (A) Pareto chart
 - (B) Check sheet
 - (C) Control charts
 - (D) Scatter Diagram
 - (E) Answer not known

91. What are the standard / standards for which research support is offered for processing and finishing industries in Textile Policy 2000?
- (A) ISO 9000 and GOTS Standard
 - (B) ISO 9000 and ISO 14000
 - (C) ISO 14000 and SA 8000
 - (D) ISO 9000 and SA 8000
 - (E) Answer not known
92. Giving authority to one or more persons to undertake a particular job is called as
- (A) Order writing
 - (B) Forecasting
 - (C) Tool control
 - (D) Loading
 - (E) Answer not known
93. Standard Allowed Minutes (SAM)
- (A) $[\text{Seam length} \times \text{machine speed}] \div \text{stitches per Inch}$
 - (B) $[\text{Seam length} \times \text{stitches per Inch}] \div \text{machine speed in rpm}$
 - (C) $[\text{Machine speed} \times \text{stitches per Inch}] \div \text{seam length}$
 - (D) $\text{Machine speed} \div [\text{seam length} \times \text{stitches per inch}]$
 - (E) Answer not known

94. Identify the following is related to assembly line system?
- (A) Make through system
 - (B) Whole garment production system
 - (C) Unit production system
 - (D) Modular production system
 - (E) Answer not known
95. Which statement / statements is/are correct about balance sheet?
- (I) Summarise the assets and liabilities
 - (II) Balances of ledger accounts carried forward to the next year
 - (III) Prepared before the preparation of profit and loss account
- (A) (I) only
 - (B) (I) and (II) only
 - (C) (II) and (III) only
 - (D) (I), (II) and (III)
 - (E) Answer not known
96. The volume of sales or production where, there is neither profit nor loss is known as
- (A) Breakeven production
 - (B) Breakeven point
 - (C) Breakeven profit
 - (D) Breakeven process
 - (E) Answer not known

97. LOB means
- (A) Liquid of Balance
 - (B) Line of Balance
 - (C) Limit of Balance
 - (D) Low of Balance
 - (E) Answer not known
98. Line type layout is also called as
- (A) Combination layout
 - (B) Process layout
 - (C) Product layout
 - (D) Fixed position layout
 - (E) Answer not known
99. _____ layout is characterized by keeping similar machines or similar operation at one location.
- (A) Process
 - (B) Product
 - (C) Combination
 - (D) Fixed position
 - (E) Answer not known

100. Multifactor productivity (MFP) is given by

- (A) $MFP = \frac{\text{Output}}{\text{Labour} + \text{Material} + \text{Overhead}}$
- (B) $MFP = \frac{\text{Labour}}{\text{Output} + \text{Material} + \text{Overhead}}$
- (C) $MFP = \frac{\text{Material}}{\text{Output} + \text{Labour} + \text{Overhead}}$
- (D) $MFP = \frac{\text{Overhead}}{\text{Output} + \text{Material} + \text{Labour}}$
- (E) Answer not known

101. Two major types of textured yarns are

- (A) Stretch and bulk
- (B) Long and short
- (C) Thin and thick
- (D) Wide and long
- (E) Answer not known

102. In false twist texturisation method, the spindle rotates at a speed in the range of

- (A) 10,000 to 25,000 rpm
- (B) 30,000 to 40,000 rpm
- (C) 50,000 to 1,00,000 rpm
- (D) 1,25,000 to 1,80,000 rpm
- (E) Answer not known

103. The melting point of polypropylene fibre is
- (A) 170°C
 - (B) 180°C
 - ~~(C) 165°C~~
 - (D) 185°C
 - (E) Answer not known
104. A simple ester will be formed by the reaction of methyl (or) ethyl alcohol reacts with
- ~~(A) Acetic acid~~
 - (B) Minerals
 - (C) Alkaline
 - (D) Distilled water
 - (E) Answer not known
105. The polymerisation temperature of high density polyethylene is
- (A) 50°C
 - ~~(B) 100°C~~
 - (C) 150°C
 - (D) 200°C
 - (E) Answer not known
106. Crystalline regions in a fibre can be expressed in terms of
- ~~(A) Degree of Crystallinity~~
 - (B) Degree of Amorphous region
 - (C) Degree of Temperature
 - (D) Degree of Drawing ratio
 - (E) Answer not known

107. Match the following :

- | | |
|---------------|------------------------|
| (a) Wool | 1. Meta cresol |
| (b) Polyester | 2. Formic acid |
| (c) Nylon | 3. Sodium hypochlorite |

- | | (a) | (b) | (c) |
|----------------|------------------|-----|-----|
| (A) | 1 | 2 | 3 |
| (B) | 3 | 1 | 2 |
| (C) | 2 | 3 | 1 |
| (D) | 1 | 3 | 2 |
| (E) | Answer not known | | |

108. The melting point of Acetate rayon fibre is

- (A) 220°C
- (B) 225°C
- ~~(C)~~ 230°C
- (D) 232°C
- (E) Answer not known

109. Viscose rayon is produced in

- (A) Melt spinning
- ~~(B)~~ Wet spinning
- (C) Dry spinning
- (D) Rotor spinning
- (E) Answer not known

110. Amount of Keratin present in wool fibre is

- (A) 60 – 80%
- ~~(B) 45 – 75%~~
- (C) 25 – 30%
- (D) 10 – 20%
- (E) Answer not known

111. The specific gravity of wool fibre is

- (A) 1.20 gm/cc
- ~~(B) 1.30 gm/cc~~
- (C) 1.32 gm/cc
- (D) 1.36 gm/cc
- (E) Answer not known

112. Percentage of Sericine in a Eri silk is

- ~~(A) 20 – 30%~~
- (B) 8 – 10%
- (C) 4 – 5%
- (D) 1 – 2%
- (E) Answer not known

113. Spiral angle of bast fibres (in degree) is

- (A) 0
- ~~(B) 6~~
- (C) 45
- (D) 60
- (E) Answer not known

114. The tensile strength of the Jute fibre is

- (A) 4-5 gm/den
- (B) 6-10 gm/den
- (C) 7-8 gm/den
- ~~(D) 5-8 gm/den~~
- (E) Answer not known

115. Treatment of cellulose with oxidising agents in acidic, neutral (or) alkaline solutions leads to the formation of

- (A) Hydro cellulose
- (B) Anhydro glucose
- ~~(C) Oxy cellulose~~
- (D) Aldehyde
- (E) Answer not known

116. Match the correct burning behaviour of fibres from the following :

- | | |
|---------------|--|
| (a) Silk | 1. Fresh celery burning vegetation odour |
| (b) Cotton | 2. Burning human hair odour |
| (c) Nylon | 3. Sweet aromatic odour |
| (d) Polyester | 4. Burning paper odour |

- | | (a) | (b) | (c) | (d) |
|----------------|------------------|-----|-----|-----|
| (A) | 4 | 2 | 3 | 1 |
| (B) | 2 | 4 | 1 | 3 |
| (C) | 2 | 4 | 3 | 1 |
| (D) | 2 | 3 | 1 | 4 |
| (E) | Answer not known | | | |

117. Identify the fibre gives higher volume of swelling %.

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

118. Glass fibre is a

- (A) Animal fibre
- (B) Plant fibre
- ~~(C)~~ Inorganic fibre
- (D) Organic fibre
- (E) Answer not known

119. Among the following, identify the Mineral fibre

- (A) Cotton
- (B) Coir
- ~~(C)~~ Graphite
- (D) Rayon
- (E) Answer not known

120. Fibre length influences the yarn

- ~~(A)~~ Spinning limit
- (B) Dyeability
- (C) Neps
- (D) Imperfections
- (E) Answer not known

121. The silver fed to a spinning machine has a CV of 8.5%. The CV of the yarn is 22%. How much variation has the spinning machine added?
- (A) 18.3 (B) 17.3
~~(C)~~ 20.3 (D) 22.3
(E) Answer not known
122. The dimensions of a bale of cotton is 0.433 volume in m^3 . On the mill weighing machine, its mass, including the wrapping and metal bands, is 235 kg. Make a rough estimate of the bale density in kg/m^3
- (A) 102 kg/m^3 (B) 142 kg/m^3
~~(C)~~ 542 kg/m^3 (D) 235 kg/m^3
(E) Answer not known
123. The amount of draft in the front zone of a ring spinning 3 over 3 apron drafting unit is
- (A) 10-20 (B) 21-30
~~(C)~~ 31-40 (D) 41-50
(E) Answer not known
124. Too high opening willet in OE spinning result in
- (A) Low production
(B) High production
~~(C)~~ Decrease in yarn strength
(D) Increase in yarn strength
(E) Answer not known

125. The term "Back-doubling" is associated with

- (A) Draw frame
- (B) Roving frame
- (C) Ring frame
- (D) Rotor spinning
- (E) Answer not known

126. Find the incorrect statement

- (A) Ring spun yarn is well parallel than rotor spun yarn
- (B) Ring spun yarn is softer than rotor spun yarn
- (C) Ring spun yarn is low hairy than rotor spun yarn
- (D) Ring spun yarn is less stiffness than rotor spun yarn
- (E) Answer not known

127. The type of ring and traveller will works at higher spinning speeds is

- (A) Low crown ring and C type traveller
- (B) Anti wedge ring and C type traveller
- (C) SU ring and SU traveller
- (D) Ear shaped ring and ear shaped traveller
- (E) Answer not known

128. Drafting waves are due to

- (A) Sliver levelness
- (B) Short fibres
- (C) Drafting force
- (D) Draft direction
- (E) Answer not known

129. In the ring size, the flange width for flange number 2 is
- (A) 2.5 mm (B) 3.2 mm
 (C) 3.7 mm (D) 4.1 mm
 (E) Answer not known
130. The shore hardness value of the soft top roller cot is in the range of
- (A) 55° – 60° (B) 65° – 75°
 (C) 75° – 85° (D) 85° and above
 (E) Answer not known
131. The definition of “actual draft” introduced in drafting process is
- (A) $\frac{\text{Length delivered per unit time}}{\text{Length fed per unit time}}$
 (B) $\frac{\text{Mass per unit length fed}}{\text{Mass per unit length delivered}}$
 (C) $\frac{\text{Total draft}}{\text{back zone draft}}$
 (D) $\frac{\text{Output speed}}{\text{Input speed}}$
 (E) Answer not known
132. Top comb is active when
- (A) Nipper moves forward
 (B) Combed material delivers
 (C) Circular comb in action
 (D) Detaching roller is in-active
 (E) Answer not known

133. Find the incorrect statement

- (A) Licker-in runs at 800 rpm
- ~~(B)~~ Cylinder runs at 100 rpm
- (C) Flats runs at 101.6 mm/min
- (D) Doffer runs at 15.40 rpm
- (E) Answer not known

134. Calculate the actual draft of a carding machine, if the waste% = 5% and the mechanical draft is = 83.

- ~~(A)~~ 87.5
- (B) 77.5
- (C) 67.5
- (D) 57.5
- (E) Answer not known

135. The blending of roving in staple yarn manufacturing is carried out in

- (A) Prior to impurity level
- (B) During opening and cleaning
- (C) At the draw frame
- ~~(D)~~ Ring frame
- (E) Answer not known

136. Removal of leading hook is carried out in

- (A) Drawing process
- (B) Carding process
- ~~(C)~~ Combing process
- (D) Winding process
- (E) Answer not known

137. Opening of individual fibres is carried at

- (A) Blow room
- (B) ~~Carding~~
- (C) Drawing
- (D) Spinning
- (E) Answer not known

138. Over all degree of cleaning achieved by the blow room and card is in the range of

- (A) 5 – 10%
- (B) 50 – 60%
- (C) 70 – 75%
- (D) ~~95 – 99%~~
- (E) Answer not known

139. Cohesion of fibres can be represented by;

Where μ = fibre/fibre coefficient of friction

N_y = Number of fibres in yarn cross section

P = a yarn structure factor

- (A) Cohesion = $L_f \times P / \mu \times N_y$
- (B) Cohesion = $\mu \times L_f / N_y \times P$
- (C) Cohesion = $\mu \times N_y / L_f \times P$
- (D) ~~Cohesion = $\mu \times N_y \times L_f \times P$~~
- (E) Answer not known

140. Intensity of opening by the beater is not influenced by

- (A) Production rate
- (B) Beater speed
- (C) Number of blades/strikers
- (D) ~~Fibre type~~
- (E) Answer not known

141. Two cotton yarns of 40^s and 64^s are folded, find the resultant count.
- (A) 24.6 (B) 34.6
(C) 20.6 (D) 43.6
(E) Answer not known
142. Calculate the count of the threefold cotton yarn composed of 20^s , 15^s and 12^s singles.
- (A) 5^s cotton (B) 6^s cotton
(C) 10^s cotton (D) 20^s cotton
(E) Answer not known
143. Two polyester filament yarns of 40 and 80 Denier are plied together, find the resultant count.
- (A) 27 (B) 60
(C) 2/60 (D) 120
(E) Answer not known
144. What is the count of silk yarn in Denier metric system if its equivalent count is 60^s NE.
- (A) 14.75 Denier (B) 20.80 Denier
 (C) 88.58 Denier (D) 120.75 Denier
(E) Answer not known

145. Conversion factor for Tex to Denier is

- (A) $\text{Tex} = \text{Denier} \times 0.1111$ (B) $\text{Tex} = \frac{\text{Denier}}{0.1111}$
(C) $\text{Tex} = \frac{590.5}{\text{Denier}}$ (D) $\text{Tex} = \text{Denier} \times 9$
(E) Answer not known

146. A 30 tex yarn requires a gap setting of 0.3 mm, determine the setting for a 20 tex yarn.

- (A) 1.25 mm (B) 2.5 mm
(C) 25 mm (D) 0.25 mm
(E) Answer not known

147. Calculate the Denier count of Nylon yarn if the length of yarn is 540 meters and its weight is 12 grams

- (A) 200 (B) 150
(C) 220 (D) 180
(E) Answer not known

148. Denier is defined as the

- (A) Weight of yarn in grams present in 9000 metre (or) 9 km length
(B) Weight of yarn in grams present in 8000 metre (or) 8 km length
(C) Weight of yarn in grams present in 7000 metre (or) 7 km length
(D) Weight of yarn in grams present in 6000 metre (or) 6 km length
(E) Answer not known

149. 1000/Nm is equal to

- (A) 1 Tex (B) 1 Denier
(C) 10 Tex (D) 10 Denier
(E) Answer not known

150. Worsted system is equal to

- (A) 885.8/Tex (B) 7.972/Tex
(C) 17440/D (D) 1654/Tex
(E) Answer not known

151. In Indirect system

- (A) higher the count, finer is the yarn
(B) higher the count, coarser is the yarn
(C) lower the count, finer is the yarn
(D) higher or lower the count, coarser is the yarn
(E) Answer not known

152. The actual production of a modern slasher is 42000 metres per day of 8 hours. If the slasher runs with a speed of 125 metres per minute, calculate the efficiency

- (A) 70% (B) 74%
(C) 75% (D) 86%
(E) Answer not known

153. Calculate the production per hour of a loom running at 200 picks per minute. The number of picks per meter inserted on the cloth is 2000
- ~~(A)~~ 6 m (B) 10 m
(C) 60 m (D) 100 m
(E) Answer not known
154. Calculate the actual production of a shuttleless loom per shift of 7.5 hours running at speed of 650 picks per minute at an efficiency of 92%. If the picks per dm is 300.
- (A) 85.7 meters (B) 86.7 meters
~~(C)~~ 89.7 meters (D) 91.7 meters
(E) Answer not known
155. The length of 40s yarn in 2 kg of cone is
- (A) 1256 yds (B) 2126 yds
~~(C)~~ 1482 yds (D) 768 metres
(E) Answer not known
156. The rate of winding of a superspeed automatic pirn winding machine is 880 yards per min. Calculate the actual production per day of 8 hours, if the efficiency is 86% and the count of yarn wound is 20s cotton
- (A) 3,62,200 yards (B) 3,63,100 yards
(C) 3,63,178 yards ~~(D)~~ 3,63,264 yards
(E) Answer not known

157. Write the formula for cleaning efficiency of card, where T_f = Trash in feed and T_d = Trash in delivery

- (A) $[T_f - T_d] \div T_f$
- (B) $[T_d - T_f] \div T_f$
- (C) $[T_f - T_d] \div T_d$
- (D) $[T_d - T_f] \div T_d$
- (E) Answer not known

158. How many hanks are contained in 5 bundles of 80^s cotton yarn?
(1 bundle = 4.5 kg)

- (A) 3900
- (B) 3950
- (C) 4000
- (D) 4010
- (E) Answer not known

159. Actual draft is equal to

- (A) $[100 - \text{waste \%}] \div [\text{Total draft} \times 100]$
- (B) $[\text{Total draft} - \text{waste \%}]$
- (C) $[\text{Total draft} \times 100] \div [100 - \text{waste \%}]$
- (D) $[\text{Total draft} - \text{waste \%}] \times 100$
- (E) Answer not known

160. In a scutcher, the material fed at the feed roller is having the hank of 0.00138 and the hank delivered is 0.00136. Find the mechanical draft.

- (A) 0.985
- (B) 0.970
- (C) 0.960
- (D) 1.015
- (E) Answer not known

161. The Weft Insertion Rate in meters per minute of a Loom is calculated by

- (A) Picks per minute \times reed width in meters \times number of phases
- (B) Number of phases \times picks per minute \times reed width in meters
- ~~(C)~~ Reed width in meters \times picks per minute \times number of phases
- (D) Width of the reed in cm \times picks per minute \times number of phases
- (E) Answer not known

162. Find incorrect statement :

High sley eccentricity ratio will

- (A) facilitate the passage of shuttle.
- (B) increases the effectiveness of beat-up
- (C) demand more robust loom parts
- ~~(D)~~ increases the effectiveness of shedding
- (E) Answer not known

163. In modern looms, the loom speed is expressed by

- (A) PPM
- (B) PPI
- ~~(C)~~ WIR
- (D) EPI
- (E) Answer not known

164. Which of the following statement is not correct?

- ~~(A)~~ Vat dye is soluble in water
- (B) Disperse dye is non-ionic in nature
- (C) Reactive dye is soluble in water
- (D) Direct dye is soluble in water
- (E) Answer not known

165. Maximum Range of Heald Shaft used to control the dobby shedding

- (A) 12 (B) 18
~~(C)~~ 24 (D) 36
(E) Answer not known

166. In weaving, other name of 'Front rest' is

- ~~(A)~~ Brest beam (B) Back beam
(C) Cloth beam (D) Warp beam
(E) Answer not known

167. The name of the defect which is formed in a fabric due to 'Jack Missing' in the dobby mechanism is

- (A) Bad Selvedges (B) Gout
~~(C)~~ Stitching (D) Wrong ends
(E) Answer not known

168. Picking CAMS must be set at _____ to one another.

- (A) 90° ~~(B)~~ 180°
(C) 270° (D) 360°
(E) Answer not known

169. Among the following motion, which is used to separate the warp threads?

- (A) Beat-up (B) Picking
(C) Let-off ~~(D)~~ Shedding
(E) Answer not known

170. In a Loom Timing diagram 0° (or) 360° stands for

- (A) Front Centre (B) Back Centre
~~(C)~~ Top Centre (D) Bottom Centre
(E) Answer not known

171. _____ mechanism is not coming under the Auxiliary motion in the Loom.

- ~~(A)~~ Let off motion (B) Warp stop motion
(C) Weft stop motion (D) Warp protector motion
(E) Answer not known

172. In tappet shedding, the limit of weave repeat is up to

- (A) 2 (B) 4
~~(C)~~ 8 (D) 6
(E) Answer not known

173. The function of the starch in the Sizing Paste is

- ~~(A)~~ Adhesives (B) Antiseptics
(C) Hygroscopic (D) Softeners
(E) Answer not known

174. Sizing process is a

- ~~(A)~~ Coating of a starch-based adhesive
(B) Coating of binders
(C) Coating of gum
(D) Coating of resin
(E) Answer not known

175. The Pirn is the

- (A) Yarn package that is fitted into a shuttle
- (B) Cone package that is fitted in the creel
- (C) Cheese package that is fitted in the creel
- (D) Ring Cop
- (E) Answer not known

176. Single end winders which produce packages such as

- (A) Cheeses or cones
- (B) Pirn
- (C) Warper's beam
- (D) Weaver's beam
- (E) Answer not known

177. In warp sheet preparation, Electronic sensing devices are attached in modern creels to

- (A) Confirm the yarn count
- (B) Confirm the size pickup
- (C) Ensure the tension
- (D) Ensure the colour
- (E) Answer not known

178. Which one of the piecing system is recommended for Automatic cotton yarn winding machines

- (A) Rigger
- (B) Splicers
- (C) Pinner
- (D) Knotter
- (E) Answer not known

179. Random winding is

- (A) Suitable for most staple spun yarns
- (B) Suitable for continuous filament
- (C) Suitable for delicate spun yarn
- (D) Suitable for continuous and delicate spun yarn
- (E) Answer not known

180. The polymeric film forming agent is applied to the warp yarn by the process called

- (A) Singeing
- (B) Sizing
- (C) Precision winding
- (D) Sectional warping
- (E) Answer not known

181. The "Shot" effect can be produced in threads with _____

- (A) The warp in one colour and the weft in another colour
- (B) The warp in different colours and the weft in one colour
- (C) The warp in one colour and the weft in different colours
- (D) Both the warp and the weft in different colours
- (E) Answer not known

182. The fabric with a leno and plain weave stripe fabric is termed as

- (A) Russian cords
- (B) Simple net lenos
- (C) Jacquard lenos
- (D) Madras Gauze
- (E) Answer not known

183. Name the type of velveteen fabric which is also known as "Fustian" fabric

- (A) Corded velveteen
- (B) Plain velveteen
- (C) Weft plushes
- (D) Figured velveteen
- (E) Answer not known

184. Identify the incorrect statement regarding to Extra warp figuring.

- (A) By introduction of a separate set of warp threads in addition to the ground warp threads
- (B) By introduction of separate set of weft threads in addition to the ground weft threads
- (C) By introduction of both separate warp and weft threads in addition to the ground warp and weft threads
- (D) By introduction of group of warp threads in addition to the ground warp threads
- (E) Answer not known

185. Among the following weaves, which is used to produce longitudinal warp lines in the cloth with fine sunken lines in between

- (A) Bed ford cord
- (B) Honey comb
- (C) Huck-a-back
- (D) Welt
- (E) Answer not known

186. Identify the incorrect statement with respect to the characteristics of bright on honey comb weave?

- (A) Constructed on straight drafts only
- ~~(B)~~ Repeat size is a multiple of 6
- (C) A single diagonal line crosses a double diagonal line
- (D) Non-reversible cloths in which face appears different from back side of the cloth
- (E) Answer not known

187. The weave which form diagonal lines from one selvedge to another is

- (A) Crepe
- (B) Plain
- (C) Satin
- ~~(D)~~ Twill
- (E) Answer not known

188. The Repeat is divided into four equal parts. Two parts are diagonally filled with motif and another two parts (diagonal) are filled with plain weave is called as

- (A) Matt weave
- (B) Honey comb
- ~~(C)~~ Huck-a-back
- (D) Mock leno
- (E) Answer not known

189. Identify the correct statement in related to twill weave

- (A) All warp face twills are called diagonals
- (B) All weft face twills are called diagonals
- (C) Small twills are called diagonals
- ~~(D)~~ Large twills are called diagonals
- (E) Answer not known

193. As per the principle of fabric structure which one of the following fabrics will have more ends per unit length essentially than picks per unit length.
- (A) Satin (B) Sateen
(C) Equal face twill (D) Diamond
(E) Answer not known
194. Threads used for increasing fabric weight and hidden inside the fabrics are
- (A) Wadding threads (B) Cutting ends
(C) Stitching threads (D) Face threads
(E) Answer not known
195. The plain weave has the following characteristics
- (A) The Thread density is not Limited
(B) It is a weaker fabric
 (C) It has maximum number of binding points
(D) Cloth thickness and mass/unit area are not Limited
(E) Answer not known
196. Double cloths are constructed by
- (A) Three series of weft and Two series of warp
(B) One series of weft and Two series of warp
 (C) Two series of warp and Two series of weft
(D) One series of warp and One series of weft
(E) Answer not known

197. The twill weave popularly known as "Gabardine" weave is

- (A) $\frac{4}{4}$ Twill
(B) $\frac{5}{4}$ Twill
(C) $\frac{3}{3}$ Twill
(D) $\frac{2}{2}$ Twill
(E) Answer not known

198. Identify the incorrect statement with respect to basic elements in a woven design

- (A) Design
(B) Draft or drawing plan
(C) Peg or lifting plan
(D) Interlacement of yarns to weave the fabric
(E) Answer not known

199. Identify the incorrect statement in related to draft

- (A) Wavy twill across the twill – pointed draft
(B) Wavy twill along the cloths – straight draft
(C) Diaper design – Herringbone draft
(D) Honey comb design – straight draft
(E) Answer not known

200. The drafting system which is used for weaving heavy warp thread density fabrics is

- (A) Broken
(B) Pointed
(C) Skip
(D) Straight
(E) Answer not known