CODE: AE-TX

M.Tech. Common Entrance Test, PGCET – 2010

Textile Technology

Time: 2 Hours | Max. Marks: 100

Read the following instructions before answering the test

i) Write / darken the particulars of your identity, Test Seat Number and affix your signature on the OMR Response Sheet before the start of the test.

ii) All Questions have multiple choices of answers, of which only one is correct.

iii) Mark the correct answer by completely darkening only one oval against the Question number using Black Ink Ball Point pen only.

iv) There will be no negative evaluation with regard to wrong answers. Marks will not be awarded if multiple answers are given.

v) Do not make any stray mark on the OMR Response sheet. For rough work, use blank page on the question paper.

vi) Taking the question paper out of the test hall is permitted only after the full duration of the test.

vii) Use of only non-programmable calculator is permitted.

viii) START ANSWERING ONLY AT THE SPECIFIED TIME WHEN THE INVIGILATOR GIVES INSTRUCTIONS.

MARKS DISTRIBUTION

PART – I	50 Questions :	50 x 1 = 50 Marks
PART – II	25 Questions :	25 x 2 = 50 Marks
		Total = 100 Marks

PART – 'I'

Each Question carries one mark

1. The difference between the highest and the lowest value is known as _____.

(a) Range (b) S.D. (c) C.V. (d) Mean

2. A sample in which all the fibres in the population have an equal chance of being represented is known as _____.

(a) Biased sample (b) Numerical Sample
(c)Random Sample (d) Length biased sample

3. Hygrometers are used for determining _____.

(a) Moisture regain (b) Moisture Content
(c) R.H. (d) Temperature

4. W.I.R.A. fineness meter works on _____.

(a) Gravimetric Principle (b) Magnetic Principle
(c) Electro-magnetic Principle (d) Air-flow Principle

5. Immaturity of cotton affects _____.

(a) Shade after dyeing (b) Strength (c) Elongation (d) Hairiness

6. Shirley analyser is used for measurement of _____.

(a) Neps (b) Crimp (c) Trash Content (d) Hairiness

7. Beesley's yarn balance is used for determining _____.

(a) Twist (b) Strength (c) Elongation (d) Count

8. The measure of the spiral turns given to a yarn in order to hold the fibres together is known as _____.

(a) Slubs (b) Twist (c) Neps (d) Tex

9. The measure of stiffness associated with handle is known as _____.

(a) Bending Length
(b) Bending Modulus
(c) Flexural Rigidity
(d) Toughness

10. Abrasion is just one aspect of _____.

(a)Pilling (b) Wear (c) Pilling and Wear (d) Creasing

11. One of the objects of doubling is _____.

(a) To reduce the irregularity
(b) To reduce neps
(c) To increase crease recovery
(d) To reduce slubs

12. The process of removing loose hairy fibres projecting from the surface of the cloth is known as _____.

(a) Sizing (b) Desizing (c) Singeing (d) Waxing

13. Hydrogen peroxide bleaching is carried out at a temperature of _____.

(a) 80-85 degree centigrade
(b) 140 degree centigrade
(c) 200 degree centigrade
(d) 180 degree centigrade

14. HPHT method is used for dyeing _____.

(a) Cotton (b) Wool (c) Polyester (d) Silk

15. For dyeing of delicate fabrics _____ machine is used.

(a) Jigger
(b) Winch
(c) Calendering
(d) Star Frame Dyeing Machine

16. Vat dyes are characterized by _____.

(a) Fastness to light
(b) Fastness to rubbing
(c) Fastness to perspiration
(d) Fastness to light, rubbing and perspiration

17. The fibre length of fine wools ranges from _____.

(a) 10-20 cm (b) 20-25 cm (c) 3.8-10 cm (d) 2-5 cm

18. Muga silk is found in _____.

(a) Tamil Nadu (b) Karnataka (c) Orissa (d) Assam

19. Acid dyes are used for dyeing of _____.

(a) Cotton (b) Polyester (c) Nylon (d) Silk

20. Acetate Rayon is having a tenacity of _____.

(a) 1.4 gm / denier in dry state (b) 4 gm / denier in dry state
(c) 8 gm / denier in dry state (d) 10 gm / denier in dry state

21. Polyester is heat set at a temperature of _____.

(a) 210 degree celsius (b) 400 degree celsius
(c) 300 degree Celsius (d) 350 degree Celsius

22. The purpose of carbonising is _____.

(a) Chemical destruction of Vegetable matter (b) Enhancement of Strength
(c) Enhancement of luster (d) Enhancement of elongation

23. Felting shrinkage is noticed in _____.

(a) Cotton (b) Silk (c) Wool (d) Polyester

24. The melting point of polyester is _____.

(a) 100 degree Celsius (b) 250 degree celsius
(c) 150 degree Celsius (d) 400 degree celsius

25. The formation of small knots of fibres on the surface of fabric is known as _____.

(a) Pilling (b) Creasing (c) Pressing (d) Calendering

26. The reciprocal of the modulus has been termed as _____.

(a) Yield Stress (b) Compliance (c) Yield Strain (d) Toughness

27. At higher temperature _____ is low.

(a) Air permeability (b) Drapeability
(c) Tenacity and stiffness (d) Abrasion resistance

28. Plasticity is opposite to _____.

(a) Tensile Stress (b) Tensile Strain (c) Toughness (d) Elasticity

29. Wool fibres show _____ recovery from an extension of 35%.

(a) 20% (b) 10% (c) 60% (d) 20%

30. The bending and twisting of fibre influences _____ of fabrics.

(a) Abrasion resistance (b) Drape and handle
(c) Warmth (d) Elasticity

31. Piano feed regulating motion is used in _____.

(a) Scutcher (b) Card (c) Draw frame (d) Ring frame

32. Cages are considered as _____.

(a) Minor cleaning points (b) Major cleaning points
(c) Beaters (d) Neps removers

33. In Rieter draw frame _____ method is used for weighting of top drafting rollers.

(a) Self weighting (b) Magnetic
(c) Pneumatic (d) Electro-magnetic

34. Cone drums are used in _____ .

(a) Draw frames (b) Doublers (c) Ring frames (d) Speed frames

35. Plugtype spindles are used in _____ .

(a) Ring frame (b) Speed frame (c) O-E spinning frame (d) Comber

36. The objective of doubling is to increase _____ .

(a) Strength and abrasion resistance (b) Elastic recovery

(c) Air porosity (d) Water proofness

37. The objective of texturisation is _____ .

(a) To increase air permeability

(b) To increase water proofness

(c) To impart bulk or stretch or both to the filaments

(d) To increase dye uptake

38. Modern combers operate at a speed of _____ .

(a) 50 nips per minute (b) 100 nips per minute

(c) 20 nips per minute (d) 250 nips per minute

39. No. of doubling on modern draw frame is _____ .

(a) 20 (b) 8 (c) 4 (d) 15

40. Antiwedge rings and elliptical travelers are used in _____ .

(a) Ring frames (b) Combers

(c) Speed frames (d) Two for one twister

41. To separate the warp threads into two layers is known as _____ .

(a) Shedding (b) Take-up (c) Let-off (d) Beat-up

42. To push the weft thread that has been inserted across the warp ends, upto the cloth fell is known as _____ .

(a) Warp stop (b) Weft stop (c) Beat-up (d) Let-off

43. Unconventional weaving machines are also known as _____ .

(a) Shuttleless looms
(b) Warp knitting machines
(c) Weft knitting machines
(d) Electronic dobby

44. Weft bars occur due to _____.

(a) Warp thread
(b) Combination of warp and weft
(c) High tension
(d) Change in the weft package

45. The disadvantage of the shuttle loom is _____ .

(a) High cost
(b) Skilled operatives are required
(c) Small weft package size and high noise
(d) Multiple colours cannot be used

46. The elongation of the cocoon filament is _____ .

(a) 10%
(b) 5%
(c) 18-23%
(d) 2%

47. The compactness of the cocoon shell depends on _____.

(a) Silkworm race
(b) Filament strength
(c) Filament elongation
(d) Filament fineness

48. The objective of cocoon stifling is _____ .

(a) To increase filament strength
b) To increase filament elongation
(c) To increase filament luster
(d) To kill the pupae

49. The interlock structure becomes costlier per linear metre due to _____.

(a) Thick places of yarn
(b) Thin places of yarn
(c) Slubs of yarn
(d) Increase in thickness and less production

50. In circular knit hosiery gauge is the number of _____.

(a) Needles per inch
(b) Needles per 10 cm
(c) Needles per 20 cm
(d) Needles per 30 cm

PART – 'II'

Each Question carries two marks

51. The moisture regain of cotton fibre is _____.

(a) 14% (b) 4% (c) 8.5% (d) 5%

52. If the mean is 19.55 and the mean range is 7.2, then percentage mean Range is _____.

(a) 60 Percent (b) 80 Percent (c) 20 Percent (d) 36.8 Percent

53. 32s cotton count is equal to _____.

(a) 20 denier (b) 166 denier (c) 80 denier (d) 100 denier

54. Heavy weight fabric is having the weight of _____.

(a) 4 ozs per square yard
(b) 6 ozs per square yard
(c) 8 ozs per square yard
(d) Above 8 ozs per square yard

55. The air permeability of a fabric is the volume of air measured in cubic centimentres passed per second through _____.

(a) 1 sq.cm. of the fabric at a pressure of 1 cm of water
(b) 2 sq.cm. of the fabric at a pressure of 2 cm of water
(c) 2 sq.cm. of the fabric at a pressure of 1 cm of water
(d) 1 sq.cm. of the fabric at a pressure of 2 cm of water

56. Uster Evenness tester works on _____.

(a) Capacitance Principle
(b) Magnetic Principle
(c) Electro-magnetic Principle
(d) Air flow Principle

57. In gas singeing machine the fabric moves at a speed of _____.

(a) 200 metres per minute
(b) 400 metres per minute
(c) 600 metres per minute
(d) 90 metres per minute

58. In yarn mercerizing the concentration of alkali used is _____.

(b) 25-30 % (b) 10 % (c) 5 % (d) 10 %

59. Wool is characterized by _____.

(a) High Strength
(b) High pilling resistance
(c) High extensibility
(d) High convolutions

60. Weighting of silk improves _____.

(a) Strength (b) Handle (c) Elongation (d) Pilling resistance

61. To produce prints in bulk quantity _____ printing is used.

(a) Block (b) Screen (c) Roller (d) Transfer

62. The output of fabric in continuous calendar Transfer printing machine is _____.

(a) 15 m per minute
(b) 50 m per minute
(c) 100 m per minute
(d) 200 m per minute

63. _____ are used for water repellent finish on cotton fabrics.

(a) Sulphuric acid
(b) Hydrochloric acid
(c) Oils and waxes
(d) Turkey red oil

64. If the surface of cloth is raised, cut even and smoothed then the process is known as _____.

(a) Calendering (b) Heat setting (c) Shearing (d) Napping

65. Weight of Indian cotton bale is _____ .

(a) 500 kg (b) 180 kg (c) 800 kg (d) 1000 kg

66. A pH of _____ favour the growth of mildew.

(a) 10 (b) 2 (c) 4-7.5 (d) 12

67. Fibre fineness influences _____ of a fabric.

(a) Draping quality
(b) Elongation
(c) Tearing strength
(d) Water proofing

68. In the causticaire test to obtain the maturity of cotton _____ is used.

(a) 10 % sulphuric acid
(b) 20 % sulphuric acid
(c) 18 % caustic soda
(d) 5 % caustic soda

69. The heat evolved when one gram of water is absorbed by an infinite mass of material at a given moisture regain is known as _____.

(a) Work factor
(b) Yield Stress
(c) Work of rupture
(d) Differential heat of sorption

70. The energy needed to break the fibre is known as _____.

(a) Toughness (b) Elastic recovery (c) Tensile Stress (d) Tensile Strain

71. In the ideal state, the work factor will be _____.

(a) 1 (b) 0.5 (c) 4 (d) 6

72. The needle may become red-hot in the stitching of fabrics due to _____.

(a) High strength of fabrics
(b) High elongation of fabrics
(c) Light weight of fabrics
(d) High friction

73. Autolevellers are used in _____.

(a) Draw frame (b) Scutcher (c) Step cleaner (d) Ring frame

74. Main carding action takes place between _____.

(a) Flats and cylinder
(b) Licker-in and cylinder
(c) Doffer and cylinder
(d) Feed roller and licker-in

75. Knitted fabrics are characterized by _____.

(a) High Strength
(b) High elasticity
(c) High toughness
(d) High luster

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