PGCET-2013

DOs :

1. Check whether the PGCET No. has been entered and shaded in the respective circles on the OMR answer sheet.
2. Ensure whether the circles corresponding to course and the specific branch have been shaded on the OMR answer sheet.
3. This Question Booklet is issued to you by the invigilator after the 2ⁿᵈ **Bell i.e., after 10.25 a.m.**
4. The Serial Number of this question booklet should be entered on the OMR answer sheet.
5. The Version Code of this question booklet should be entered on the OMR answer sheet and the respective circles should also be shaded completely.
6. Compulsorily sign at the bottom portion of the OMR answer sheet in the space provided.

DON'Ts :

1. **THE TIMING AND MARKS PRINTED ON THE OMR ANSWER SHEET SHOULD NOT BE DAMAGED / MUTILATED / SPOILED.**
2. The 3ʳᵈ **Bell rings at 10.30 a.m., till then;**
   * Do not remove the paper seal / polythene bag 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 75 (items) questions and each question will have one statement and four answers. (Four different options / responses.)
2. After the 3ʳᵈ **Bell is rung at 10.30 a.m.,** remove the paper seal / polythene bag of this question booklet and check that this booklet does not have any unprinted or torn or missing pages or items etc., if so, get it replaced by a complete test booklet. Read each item and start answering on the OMR answer sheet.
3. During the subsequent 120 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 BALL POINT PEN against the question number on the OMR answer sheet.**
4. Use the space provided on each page of the question booklet for Rough Work. Do not use the OMR answer sheet for the same.
5. After the **last Bell is rung at 12.30 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, 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.**
9. Only **Non-programmable** calculators are allowed.

Marks Distribution	
PART-I :	50 QUESTIONS CARRY ONE MARK EACH (1 TO 50)
PART-II :	25 QUESTIONS CARRY TWO MARKS EACH (51 TO 75)

TEXTILE TECHNOLOGY
PART – I

Each question carries one mark.   **50 × 1 = 50**

1. Ramie is called

   (A) Regenerated fibre   (B) Mineral fibre

   (C) Bast fibre   (D) Man – Made fibre

2. Standard Moisture regain of cotton is

   (A) 6.0%   (B) 5.0%

   (C) 13.0%   (D) 8.5%

3. The density of silk is

   (A) 1.52 gm/cc   (B) 1.0 gm/cc

   (C) 1.32 gm/cc   (D) 1.8 gm/cc

4. Normally for Indian cotton ginning is done by

   (A) Knife and roller gin   (B) Macarthy gin

   (C) Saw gin   (D) Roller gin

5. Piano feed is very useful in

   (A) Cleaning   (B) Opening

   (C) Uniformity   (D) Regulating the feed

Space For Rough Work

6. The speed of licker in modern carding is

(A) 150 rpm　　　　　　　　(B) 250 rpm

(C) 800 rpm　　　　　　　　(D) 100 rpm

7. Majority of hooks in carding sliver are

(A) Leading　　　　　　　　(B) Trailing

(C) Hooks on both sides　　　(D) No hooks

8. Combing is a process of

(A) Cleaning the cotton　　　(B) Removing short fibres

(C) Uniformity　　　　　　　(D) Removing trash

9. Flyer leading mechanism is very popular in

(A) Cotton industry　　　　　(B) Jute industry

(C) Viscose industry　　　　　(D) Man – Made fibre industry

10. The amount twist inserted at speed frame does not exceed

(A) 1 – 1.5　　　　　　　　　(B) 10 – 20

(C) 20 – 30　　　　　　　　　(D) 30 – 40

11. The break draft in ring spinning

(A) removes inherent twist　　(B) parallization takes place

(C) weakens the fibre strand　(D) increases the strength

Space For Rough Work

12. Traveller lagging in ring frame helps in

   (A) Insertion of twist
   (B) Uniformity
   (C) Winding
   (D) Helps in drafting

13. Doubling objective is

   (A) to increase the elongation
   (B) to increase strength and uniformity
   (C) to produce fancy yarns
   (D) just to combine the yarns

14. The uniformity of OE yarn is

   (A) lesser than ring yarn
   (B) higher than ring yarn
   (C) equal to ring yarn
   (D) none of the above

15. U% of double yarn is always

   (A) higher than single yarn
   (B) lower than single yarn
   (C) equal to single yarn
   (D) not related

16. DREF spinning belongs to

   (A) Twist less spinning
   (B) Self twist yarn
   (C) Friction spinning
   (D) Air jet spinning

17. SIRO yarn can be comparable to

   (A) Double yarn
   (B) Friction yarn
   (C) Twist less yarn
   (D) Air jet yarn

Space For Rough Work

18. Sizing increases

(A) strength of yarn

(B) uniformity of yarn

(C) elongation of yarn

(D) abrasion resistance of yarn

19. Beat up takes place at

(A) top centre

(B) front centre

(C) bottom centre

(D) back centre

20. Draft in looms indicate

(A) timing

(B) setting

(C) arrangement of heals

(D) loom speed

21. The minimum CSP required for a yarn to use a warp is

(A) 10,000

(B) 5,000

(C) 18,000

(D) 8,000

22. Non-woven has very high applications in

(A) Garment industry

(B) Filteration

(C) Tyre cords

(D) Household

23. Wales are normally

   (A) Loops vertical

   (B) Loop horizontal

   (C) Loops both horizontal & vertical

   (D) None of the above

24. Positive feeding helps in

   (A) Better uniformity   (B) Good strength

   (C) Better loop shape factor   (D) None of the above

25. Tricot belongs to

   (A) Flat weft knitting   (B) Circular weft knitting

   (C) Warp knitting   (D) Braiding

26. Designing helps in

   (A) applying size

   (B) removing size

   (C) removing natural colouring matter

   (D) removing fatty acids

27. Normally the degumming percentage will be

   (A) 10 – 15%   (B) 5 – 10%

   (C) 20 – 25%   (D) 15 – 18%

Space For Rough Work

28. Reeling requires warm water of temp.

(A) 25 °C 　　　　　　　　　　(B) 10 °C

(C) 65 °C 　　　　　　　　　　(D) 20 °C

29. When fastness properties are very important for cotton ?

(A) Dyed with direct dyes 　　　(B) Dyed with basic dyes

(C) Dyed with acid dye 　　　　(D) Dyed with vat dyes

30. Disperse dye is exclusively used for

(A) Cotton 　　　　　　　　　(B) Jute

(C) Polyester 　　　　　　　　(D) Silk

31. Fineness of cotton is normally expressed as

(A) Micronaire value 　　　　　(B) Maturity coefficient

(C) K/S value 　　　　　　　　(D) Hand value

32. Differential dyeing is used to measure

(A) Maturity 　　　　　　　　(B) Strength

(C) Elongation 　　　　　　　(D) Fineness

33. Uniformity ratio is

(A) 50% span length to 2.5% span length

(B) U% of the yarn

(C) Non-uniformity percentage

(D) Moisture relation

Space For Rough Work

34. The relation between count and twist in indirect systems is

(A) $\sqrt{\text{count}} \times \text{T.M.}$ (B) $\text{TM} / \sqrt{\text{count}}$

(C) $\text{TM} + \sqrt{\text{count}}$ (D) $\text{TF} - \sqrt{\text{count}}$

35. U% of a single yarn ranges from

(A) 10 – 12%   (B) 20 – 25%

(C) 30 – 35%   (D) 0 – 5%

36. 60's Ne is equivalent to

(A) 20 Tex   (B) 10 Tex

(C) 5 Tex   (D) 30 Tex

37. No. of gms in 1000 mts is called

(A) Denier   (B) Tex

(C) Mili Tex   (D) Kilo Tex

38. Fabric hand is normally depending on

(A) Length of fibre   (B) Low stress mechanical property

(C) Uniformity ratio   (D) Uneven percentage

39. Spun silk is spinning

(A) Filament silk

(B) Waste silk

(C) Short staple spinning of filament

(D) None of the above

Space For Rough Work

40. Denim is a

(A) Plain weave

(B) Satin weave

(C) Twill weave

(D) Sateen weave

41. The strongest fabric is

(A) Plain weave fabric

(B) Twill fabric

(C) Leno fabric

(D) Huck – a – back

42. Shear modulus for good garment making fabric is

(A) 30 – 80 N/M

(B) 0 – 10 N/M

(C) 5 – 20 N/M

(D) None of the above

43. Buckling is very important while

(A) Pressing

(B) Sewing

(C) Finishing

(D) Dyeing

44. 4 – point system belongs to

(A) Fabric finishing

(B) Fabric hand

(C) Fabric inspection

(D) Fabric shear measuring

Space For Rough Work

45. Max THV value of fabric is

(A) 1

(B) 10

(C) 20

(D) 5

46. The resultant count of 3 ply yarn of 30's Ne is

(A) 3×30's Ne

(B) $3 + 30$'s Ne

(C) 3/30's Ne

(D) $3 - 30$'s Ne

47. Number of gms in 9000 mts is

(A) Tex

(B) Kilo Tex

(C) Denier

(D) Mili Tex

48. Higher the FQI

(A) Higher will be CSP

(B) Lower will be CSP

(C) FQI = CSP

(D) No relation between the two

49. The minimum no. of fibres in the c/s of a yarn is

(A) 10

(B) 40

(C) 30

(D) 25

50. Gimp yarn belongs to

(A) Double yarn

(B) SIRO yarn

(C) Fancy yarn

(D) Air jet yarn

Space For Rough Work

PART – II

Each question carries two marks. 25 × 2 = 50

51. Cotton free from seed is called

    (A) Kapas   (B) Linters

    (C) Lint   (D) Cotton

52. American cotton is normally ginning by

    (A) Saw   (B) Roller

    (C) Macarthy   (D) Knife roller gin

53. Percentage plate controls

    (A) Short fibre   (B) Trash

    (C) Long fibre   (D) Hooks

54. Doffer speed is normally

    (A) 40 – 50 rpm   (B) 100 – 120 rpm

    (C) 200 – 250 rpm   (D) 700 – 800 rpm

55. The action in carding zone is called as

    (A) Point to back   (B) Back to back

    (C) Point to point   (D) Back to point

56. The percentage of noil removed in scratch combing is

    (A) 10 – 15%   (B) 20 – 30%

    (C) 2 – 5%   (D) 30 – 40%

Space For Rough Work

57. Comber should be fed with

(A) Leading hooks   (B) Trailing hooks

(C) Hooks on both sides   (D) None of the above

58. The normal spinole speed of speed frame is

(A) 1400 rpm   (B) 10000 rpm

(C) 15000 rpm   (D) 20000 rpm

59. The draft between back roller and middle roller is called

(A) Main draft   (B) Total draft

(C) Break draft   (D) Tension draft

60. The 3/0 traveller is _____ than 4/0 traveller.

(A) lighter   (B) heavier

(C) equal in weight   (D) none of the above

61. If 1.5 hank roving is fed and 60's yarn is produced the draft is

(A) 50   (B) 30

(C) 20   (D) 40

62. The resultant count becomes _____ after doubling.

(A) coarser   (B) finer

(C) equal to single   (D) none of the above

Space For Rough Work

63. Loop shape factor is normally

(A) 1.3   (B) 10

(C) 20   (D) 5

64. Robbing back is a

(A) Function in knitting   (B) Defect in knitting

(C) Quality checking in knitting (D) Connected to geometry of knitting

65. Wool is normally dyed with

(A) Direct   (B) Basic

(C) Acid   (D) Vat

66. Heat setting is normally carried out for

(A) Cotton   (B) Wool

(C) Polyester   (D) Ramie

67. Normally TM for hosiery yarn ranges from

(A) 4 to 4.5   (B) 5 to 5.5

(C) 6.0 to 6.5   (D) 3 to 3.5

68. Shear is a measure of

(A) Tangential stress   (B) Tensile stress

(C) Bursting strength   (D) Tearing strength

69. Braided fabrics are normally used for

(A) Apparel   (B) Industrial

(C) Shoe laces   (D) Horiculture

Space For Rough Work

70. The maximum cover factor of fabric is

(A) 55

(B) 45

(C) 60

(D) 28

71. The principle of fineness measuring is

(A) Resistance to air flow

(B) CRT

(C) CRL

(D) Capacitance

72. Normal U% of double yarn is

(A) 8 – 9%

(B) 10 – 15%

(C) 2 – 3%

(D) 20 – 25%

73. Uster eveners test measures

(A) U% & IPP

(B) Count & strength

(C) Elongation

(D) RKM value

74. Fabrics are classified on the basis of

(A) Weight

(B) Thickness

(C) Weave

(D) Colour

75. The other name of pile fabric is

(A) Velvet

(B) Sateen

(C) Satin

(D) Twill

Space For Rough Work

SEAL

A-1