

**Seat
No.**

M.Phil./Ph.D. Entrance Examination, August - 2018

TEXTILE ENGINEERING

Day and Date : Wednesday, 08 - 08 - 2018

Total Marks : 100

Time : 04.00 p.m. to 06.00 p.m.

Instruction

- 1) All questions are compulsory.**
 - 2) Each question carries 2 marks.**
 - 3) Answers should be marked in the given OMR answer sheet by darkening the appropriate option.**
 - 4) Use black ball point pen only for marking the circle. Do not make any stray mark on the OMR Answer Sheet.**
 - 5) Follow the instructions given on OMR Sheet.**
 - 6) Rough work shall be done on the sheet provided at the end of question paper.**
 - 7) Only non programmable calculators are allowed.**

- 4)** The first purpose of a survey is to _____.

 - A) Description
 - B) Evaluation
 - C) Propagation
 - D) Provide Information

5) In a survey the number questions is

 - A) Unlimited
 - B) Limited
 - C) Both limited and unlimited
 - D) None of the above

6) The null hypothesis for the Mann-Whitney U test is used to test that

 - A) Two samples are from different populations
 - B) Two samples are from different populations but have the same mean
 - C) Two samples are from the same population and have the same mean
 - D) Two samples are from the same population and have the same median

7) In Testing the statistical hypothesis, which of the following statement is false

 - A) The critical region is the values of the test statistic for which we reject null hypothesis
 - B) The level of significance is the probability of type I error
 - C) The p-value measures the probability that the null hypothesis is true
 - D) None of the above

M/P ENT - 106

M/P ENT - 106

M/P ENT - 106

- 17)** A Research Report is a formal statement of _____

A) Research Process B) Research Problem
C) Data Collection D) Data Editing

18) A comprehensive full Report of the research process is called

A) Thesis B) Summary Report
C) Abstract D) Article

19) _____ is a statistical technique that identifies homogeneous subgroups.

A) Factor analysis
B) Multivariate analysis of variance
C) Cluster analysis
D) Discriminant analysis

20) Data originating from studies that are conducted by others and for a different purpose than the one for which the data are being reviewed are called _____ data.

A) Primary B) Secondary
C) Quantitative D) Descriptive

21) When analyzing nominal data, which measure of central tendency is appropriate?

A) Mean B) Mode
C) Median D) Range

22) A short summary of Technical Report is called

A) Article
B) Research Abstract
C) Publication
D) Guide

M/P ENT - 106

M/P ENT - 106

- 29)** The maximum practical limit of spindle speed in a commercial cotton ring frame is around

A) 5,000 rpm B) 10,000 rpm
C) 20,000 rpm D) 30,000 rpm

30) In ISO standard the traveller number is defined as the mass in grams of

A) 10 travellers B) 100 travellers
C) 1,000 travellers D) 10,000 travellers

31) A spin finish formulation contains

A) Delustrant B) Whitener
C) Lubricant D) Oxidant

32) In the context of friction spindles for texturising, the twister angle should be

A) 60 Degrees B) 45 Degrees
C) 35 Degrees D) 90 Degrees

33) The number average molecular weight of fibre grade nylon6,nylon 6,6 and poly (ethylene terephthalate) polymers is approx

A) 10,000 B) 20,000
C) 30,000 D) 40,000

34) Repeat length of Nylon 6 to Nylon 66 is

A) Half B) Twice
C) One-fourth D) One

M/P ENT - 106

- 35)** Boiling-off of cellulosic fibrous material during scouring in air may result in the formation of

 - A) Oxy cellulose
 - B) Soda-cellulose
 - C) Hydrocellulose
 - D) None of the above

36) The principal objective of cotton scouring is to

 - A) Increases whiteness
 - B) Decrease trash content
 - C) Increase absorbency
 - D) None of the above

37) An example of a coagulant used in textile effluent treatment is

 - A) Activated carbon
 - B) Ferrous sulphate
 - C) Hydrogen peroxide
 - D) Sodium chloride

38) Drawing

 - A) Decreases birefringence
 - B) Increases birefringence
 - C) Decreases Crystalline
 - D) Decreases Strength

39) Neps on User evenness tester is based on change in mass over a length of

 - A) 1 mm
 - B) 2 mm
 - C) 4 mm
 - D) 8 mm

40) Twist Multiplier(TM) is a better indicator of twist characteristic of yarn than T.P.I. because

 - A) TM is directly proportional to the tangent of twist angle
 - B) TM describe level of twist in yarn irrespective of linear density
 - C) TM is related to both the above characters
 - D) None of the above

M/P ENT - 106

- 41)** Uniformly index of a square cut staple polyester fibre will be
A) 0.25 B) 0.5
C) 0.75 D) 1

42) The expected CV (%) of a 3-ply yarn produced from single yarns of 17.3% CV will be approximately
A) 10 B) 15
C) 17.3 D) 20

43) When a load of 245 cN breaks a 50 denier yarn, the breaking length of the yarn is
A) 1,800 metres B) 4,500 metres
C) 9,000 metres D) 45,000 metres

44) The strength utilization of yarn in a woven fabric is
A) Always more than 1.0
B) Always less than 1.0
C) Always equal to 1.0
D) Either more or less than 1.0

45) Fabrics with the same sett but different weaves are woven on a loom. The tear strength will be minimum in a fabric having
A) Plain weave B) 3/1 twill weave
C) 5-end satin weave D) 2/2 matt weave

M/P ENT – 106

- 46) On Sulzer projectile loom, the number of projectiles depends on
- A) Weight of projectile
 - B) Width of loom
 - C) Speed of loom
 - D) Picking force
- 47) Percent waste in sizing department, calculated on the yarn processed in the sizing, is normally
- A) 0.5 - 0.8%
 - B) 1.2 - 1.5%
 - C) 2.0 - 2.5%
 - D) >3%
- 48) Wind is defined as
- A) number of coils per traverse
 - B) number of coils in double traverse
 - C) number of grooves in the drum
 - D) None of the above
- 49) During Sizing, the pickup will increase if
- A) squeeze pressure is increased
 - B) machine speed is increased
 - C) temp. of drying cylinder is increased
 - D) temp. of drying cylinder is decreased
- 50) A good spliced joint of a ring spun cotton yarn is
- A) As strong as the parent yarn
 - B) Stronger than the parent yarn
 - C) 80 to 90% as strong as the parent yarn
 - D) Half as strong as the parent yarn



M/P ENT – 106

Rough Work

M/P ENT – 106

Rough Work