

ENTRANCE TEST FOR Ph.D. PROGRAMME, 2023**HOME SCIENCE**

Time : Three Hours

Maximum : 100 Marks

Part A*Answer all questions.**Each question carries 1 mark.*

Choose the correct answer from the choices :

1. Sugar alcohols are :

- (A) Zero calorie sweetness. (B) Low calorie sweetness.
(C) High calorie sweetness. (D) Fat substitutes.

2. Theory of classical conditioning was proposed by :

- (A) Maria Montessori. (B) Lev Vygotsky.
(C) Ivan Pavlov. (D) Skinner.

3. Assertion (A) : Fibers containing protein are damaged by moths and carpet beetles.

Reasoning (R) : Moth balls give off odour that repels the moths and prevents the deposit of eggs.

- (A) (A) is correct (R) is incorrect.
(B) Both (A) and (R) are correct.
(C) Both (A) and (R) are incorrect.
(D) (A) is incorrect (R) is correct.

4. Give the correct sequence for manufacturing process of Linen yarn :

- (A) Breaking, Hackling, Retting, Spinning.
(B) Hackling, Breaking, Spinning, Retting.
(C) Retting, Spinning, Breaking, Hackling.
(D) Retting, Breaking, Hackling, Spinning.

Turn over

5. Identify the correct sequence of prenatal development :
- (A) Period of foetus, period of embryo and period of ovum.
 - (B) Period of ovum, period of embryo and period of foetus.
 - (C) Period of ovum, period of foetus and period of embryo.
 - (D) Period of embryo, period of foetus and period of ovum.
6. Apparel made in a manner which continues to be fashionable over a long period of time is known as :
- (A) Fad.
 - (B) Style.
 - (C) Classic.
 - (D) Chic.
7. The best example for a positive reinforcement in learning is :
- (A) Bribing the child with gifts.
 - (B) Scolding the child.
 - (C) Verbal praise.
 - (D) Comparing the child with others.
8. Which sequence most accurately represents the scientific method approach ?
- (A) Define problem, hypothesis, data collection, consolidation, interpretation.
 - (B) Formulate hypothesis, define problem, data collection, interpretation.
 - (C) Formulate hypothesis, define problem, consolidation, data collection.
 - (D) Define problem, validate hypothesis, data collection, interpretation.
9. Which of the following sequence is correct in counselling ?
- (A) First contact, interview, intervention, follow up.
 - (B) Follow up, interview, intervention, first contact.
 - (C) Interview, intervention, follow up, first contact.
 - (D) Intervention, follow up, interview, first contact.
10. Family resource management involves the following :
- (A) Development of goals, identification of resources needed to reach these goals, the decision-making process that uses limited resources to achieve these goals.
 - (B) Development of goals, arranging finances to achieve these goals.
 - (C) Identify goals, assign to individuals and identify resources.
 - (D) Identify resources, develop goals and use available resources.

11. Extension teaching should be successful by :
- (A) Encouragement. (B) Effective learning.
(C) Effective teaching. (D) Supporting.
12. According to Engel's law of consumption, as the income increases the proportion of income spent on food :
- (A) Decreases. (B) Increases.
(C) Increases or Decreases. (D) Remains constant.
13. The correct sequence of manufacturing process of wool is :
- (A) Sorting, scouring, garnething, grading.
(B) Sorting, grading, garnething, scouring.
(C) Scouring, grading, garnething, sorting.
(D) Garnething, grading, scouring, sorting.
14. Which of the following statements is correct ?
- (A) An a' la carte menu is one in which the food is prepared in advance.
(B) An a' la carte is one in which the drinks are included.
(C) A table d' hote menu is one where there is a limited choice in each course.
(D) A table d' hote menu is one where all the food is cooked to order.
15. The sensory test in which food products are rated from "extremely like" to "extremely : dislike" is :
- (A) Hedonic scale. (B) Threshold test.
(C) Paired comparison test. (D) Duo-trio test.
16. The protein produced by fat cells under the direction of ob gene is :
- (A) Serotonin. (B) Leptin.
(C) Sibutramine. (D) Ghrelin.
17. Apgar score is given to
- (A) A large for gestational age infant.
(B) An infant at 10 months of age.
(C) Newborn infants at 1 and 5 minutes of age.
(D) Newborn infants at 1 hour after birth.

Turn over

18. Knitted fabrics are described in terms of :

- (A) Courses and wales. (B) Warp and weft.
(C) Lap and sliver. (D) Roving and lap.

19. A low-birth-weight baby is defined as one that weighs :

- (A) < 1500 g at birth. (B) < 2000 g at birth.
(C) < 2500 g at birth. (D) < 3000 g at birth.

20. FSSAI stands for :

- (A) Food Standards and Safety Authority of India.
(B) Food Safety and Standards Authority of India.
(C) Food Safety and Storage Authority of India.
(D) Food Storage and Standards Authority of India.

21. Which of the following terms is used to describe an elevated blood sugar level ?

- (A) Glucosuria. (B) Hypoglycemia.
(C) Hyperlipidemia. (D) Hyperglycemia.

22. The openness or closeness of a fabric is expressed as :

- (A) Drape co-efficient. (B) Abrasion resistance.
(C) Thickness. (D) Cover factor.

23. Which of the following is not a method of child study ?

- (A) Case study. (B) Ethnography.
(C) Polygraphy. (D) Naturalistic observation.

24. Which among the following is not a product of fermentation ?

- (A) Cheese. (B) Paneer.
(C) Beer. (D) Yogurt.

25. The conversion of carotene to Vitamin A takes place in which organ of the body ?

- (A) Intestine. (B) Liver.
(C) Gall bladder. (D) Pancreas.

26. Who devised the psychosexual stage theory of development ?
- (A) Freud. (B) Piaget.
(C) Bandura. (D) Erikson.
27. Germination in wheat enhances the quality of the following vitamins :
- (A) Vitamin C and Vitamin E. (B) Vitamin C and Vitamin D.
(C) Vitamin E and Vitamin D. (D) Vitamin E and Vitamin B.
28. PFA stands for :
- (A) Prevention of food adulteration. (B) Prevention of fortified adulterants.
(C) Pure fatty acids. (D) Purified fatty acids.
29. Bleaching is not needed for :
- (A) Cottons. (B) Silk.
(C) Wool. (D) Rayon.
30. Which protein source among the following has highest biological value ?
- (A) Egg. (B) Zein.
(C) Soyabean. (D) Prolamines.
31. Green tea is also called :
- (A) Orthodox tea. (B) Fermented tea.
(C) Unfermented tea. (D) Semi-fermented tea.
32. Receiving and interpreting a message is called :
- (A) Encoding. (B) Drafting.
(C) Decoding. (D) Communication.
33. In the process of conducting research, "Formulation of Hypothesis" is followed by :
- (A) Collection of data. (B) Analysis of data.
(C) Statement of objectives. (D) Selection of research tools.
34. _____ is the last topic of research thesis.
- (A) Review of Literature. (B) Methodology.
(C) Results and Discussion. (D) Summary and Conclusion.

Turn over

35. Interpretation of data should be made by due consideration of _____.
- (A) Empirical evidences. (B) Theoretical framework.
(C) Hypothesis. (D) All of the above.
36. Data collected through _____ belongs to secondary source.
- (A) Observation. (B) Interview.
(C) Mailed questionnaire. (D) Census.
37. Chi - square test is a test used when the data are expressed in terms of :
- (A) Frequency . (B) Median.
(C) Mean score. (D) Mode.
38. Which one of the following is not a quality of a good hypothesis ?
- (A) Hypothesis should be specific and testable
(B) Hypothesis must be value laden statements
(C) Hypothesis should have definite empirical goals.
(D) Hypothesis should have clear concepts and specific operational definitions.
39. In which type data collection one can appoint enumeration ?
- (A) Observation method. (B) Mailed questionnaire.
(C) Interview schedule. (D) Personal interviews.
40. Which of the following is not a duty of the probation officer ?
- (A) Inquire. (B) Supervise.
(C) Control. (D) Advise.
41. The procedure for determining the duties and scale requirements of a job and a kind of person who should be hired is called :
- (A) Job description. (B) Job specification.
(C) Job analysis. (D) Job evaluation.
42. Mark the odd item from the following :
- (A) Deliberate sampling. (B) Purposive sampling.
(C) Random sampling. (D) Judgement sampling.

43. According to Abraham Maslow the highest human need is :
- (A) Self esteem. (B) Socialisation.
(C) Self actualisation. (D) Security.
44. The ultimate goal of self help group is :
- (A) Savings. (B) Employment.
(C) Empowerment. (D) Loans.
45. Standard deviation is a measure of :
- (A) Central tendency. (B) Dispersion.
(C) Association. (D) Correlation.
46. Identify the correct sequence :
- (A) Data collection, pretesting, data cleaning, analysis.
(B) Data cleaning, data collection, pretesting, analysis.
(C) Pretesting, data collection, data cleaning, analysis.
(D) Data collection, analysis, data cleaning, pretesting.
47. What is the minimum number of years the worker has to work to be eligible to receive the benefit of gratuity in case of his superannuation or resignation under the Payment of Gratuity Act ?
- (A) Two years. (B) Three years.
(C) Four years. (D) Five years.
48. The abbreviation CSR stands for
- (A) Council for Scientific Research.
(B) Centre for Social Resource
(C) Collective Structural Responsibility.
(D) Corporate Social Responsibility.
49. Which one of the following is organized before an employee is placed in the organization ?
- (A) Induction. (B) Lay- off.
(C) Retrenchment. (D) Promotion.

Turn over

50. One of the following is not a function of psychiatric social worker :

- (A) Providing rehabilitation services.
- (B) Providing counselling services.
- (C) Prescribing medicines.
- (D) Conducting group meeting with patients and families.

(50 × 1 = 50 marks)

Part B

*Answer any ten questions.
Each question carries 5 marks.*

- 51. Explain the criteria of a good research.
- 52. What is the need of defining a research problem ?
- 53. Explain the various types of sampling.
- 54. Write a note on questionnaire method.
- 55. What do you mean by hypothesis and describe the process of hypothesis testing.
- 56. What is analysis of data ? Explain.
- 57. Write a note on "Correlation".
- 58. Write about the techniques of interpretation of data.
- 59. Explain about "measures of central tendency".
- 60. Describe the steps in writing a research report.
- 61. Write a note on the characteristics of good sample.
- 62. Differentiate between continuous variable and discrete variable.
- 63. Explain the meaning of "Experimental and Control groups".
- 64. What do you mean by sampling error ? Explain the sampling and non-sampling error with suitable example.

(10 × 5 = 50 marks)