Question Booklet Code : Register Number

2019
FOOD AND NUTRITION

Time Allowed : 3 Hours] **[Maximum Marks : 300**

Read the following instructions carefully before you begin to answer the questions.

IMPORTANT INSTRUCTIONS

1. The applicant will be supplied with Question Booklet 15 minutes before commencement of the examination.
2. This Question Booklet contains **200** questions. Prior to attempting to answer, the candidates are requested to check whether all the questions are there in series and ensure there are no blank pages in the question booklet. **In case any defect in the Question Paper is noticed, it shall be reported to the Invigilator within first 10 minutes and get it replaced with a complete Question Booklet. If any defect is noticed in the Question Booklet after the commencement of examination, it will not be replaced.**
3. Answer **all** questions. **All** questions carry equal marks.
4. You must write your Register Number in the space provided on the top right side of this page. Do not write anything else on the Question Booklet.
5. An answer sheet will be supplied to you, separately by the Room Invigilator to mark the answers.
6. You will also encode your Question Booklet Code with Blue or Black ink Ball point pen in the space provided on the side 2 of the Answer Sheet. If you do not encode properly or fail to encode the above information, action will be taken as per Commission's notification.
7. Each question comprises *four* responses (A), (B), (C) and (D). You are to select ONLY ONE correct response and mark in your Answer Sheet. In case you feel that there are more than one correct response, mark the response which you consider the best. In any case, choose ONLY ONE response for each question. Your total marks will depend on the number of correct responses marked by you in the Answer Sheet.
8. In the Answer Sheet there are **four** circles Ⓐ, Ⓑ, Ⓒ and Ⓓ against each question. To answer the questions you are to mark with Blue or Black ink Ball point pen ONLY ONE circle of your choice for each question. Select one response for each question in the Question Booklet and mark in the Answer Sheet. If you mark more than one answer for one question, the answer will be treated as wrong. *e.g.* If for any item, Ⓑ is the correct answer, you have to mark as follows :

   Ⓐ ● Ⓒ Ⓓ

9. You should not remove or tear off any sheet from this Question Booklet. You are not allowed to take this Question Booklet and the Answer Sheet out of the Examination Hall during the time of examination. After the examination is concluded, you must hand over your Answer Sheet to the Invigilator. You are allowed to take the Question Booklet with you only after the Examination is over.
10. **Do not make any marking in the question booklet except in the sheet before the last page of the question booklet, which can be used for rough work. This should be strictly adhered.**
11. Applicants have to write and shade the total number of answer fields left blank on the boxes provided at side 2 of OMR Answer Sheet. An extra time of 5 minutes will be given to specify the number of answer fields left blank.
12. Failure to comply with any of the above instructions will render you liable to such action or penalty as the Commission may decide at their discretion.

SEAL

SPACE FOR ROUGH WORK

1. The peripheral nervous system consists of

(A) Brain and Spinal Cord
(B) Sensory nervous, ganglia and nerves
(C) Arms, hands and feets
(D) Brain, spinal cord and retina of the eye

2. Similarly of endorphins and neuropeptides occur naturally in the brain due to

(A) Serotonin
(B) Morphine
(C) GABA
(D) Acetyl Choline

3. Nerve synapses are present only in the

(A) Gray matter
(B) Sensory ganglia
(C) Posterior nerve root ganglia
(D) White matter

4. Sickle cell anemia is caused due to substitution of

(A) Valine
(B) Glutamic acid
(C) Aspartate
(D) Arginine

5. Which of the following statements is 'correct' regarding hemoglobin?

(A) The iron in the haeme is in the ferric state and one Hb combines with four, O_2
(B) The iron in the haeme is in the ferrous state and one Hb combines with one, O_2
(C) The iron in the haeme is in the ferrous state and one Hb combines with four, O_2
(D) The iron in the haeme is in the ferric state and one Hb combines with one, O_2

6. Which of the following statements are correct?

I. There will be an immediate increase in RBC at high altitudes
II. The cause for increase is high O_2 tension
III. Anoxia is due to lower O_2 tension and blood
IV. There will be immediate response by spleen due to Anoxia

(A) I and II are correct
(B) II, III and IV are correct
(C) I, III and IV are relevant and correct
(D) I is correct but IV is not relevant

7. Which of the following valves open when the intra ventricular pressure exceeds the pressure in the large arteries?

(A) Semilunar valves
(B) Tricuspid valves
(C) Bicuspid valves
(D) Mitral

8. The cardiac impulse originates at

(A) SA node
(B) AV node
(C) Node of Tawara
(D) Purkinje Fibres

9. This principle of management may be used to ensure speed in food production

(A) Division of work
(B) Unitary command
(C) Work stability
(D) Unity

10. Which of the following statements are correct?

I. Stamp the date of delivery on every stock received before shelving to ensure that old stocks are used up first

II. Place items on shelves according to date stamped with earlier ones in the front row and later ones at the back

(A) (I) only
(B) (II) only
(C) (I) and (II)
(D) Neither (I) nor (II)

11. Which of the statement is correct?

I. Operation of equipment simply refers to the manner in which it performs when handed by the operators in the work situation

II. Even the simplest equipment needs to be used correctly for efficiency

(A) (I) only
(B) (II) only
(C) (I) and (II)
(D) Neither (I) nor (II)

12. As a general guide in a food service kitchen ———— is sufficient for a single person to work in

(A) 3 m × 4.5 m
(B) 1 m × 2.5 m
(C) 4 m × 6.5 m
(D) 2.5 m × 3 m

13. Profit-making commercial organisations may even go up to a net profit of ———— percent

(A) 5%
(B) 10%
(C) 15%
(D) 20%

14. Effective recruitment requires

I. A clear idea of job requirements
II. Information regarding the applicants age, qualifications, experience and background.
III. Projection of a fairly realistic but favourable image of the establishments in order to attract qualified people

(A) (I) and (II)
(B) (II) and (III)
(C) (I) and (III)
(D) (I), (II) and (III)

15. ———— is used to keep the food hot.

I. Hot cupboard
II. Bain marie
III. Stock pot
IV. Wok

(A) (I) and (II)
(B) (II) and (III)
(C) (III) and (IV)
(D) (I) and (IV)

16. This is a process of determining now well people perform their functions, by ascertaining and comparing results with expected ones, over a period of time

(A) controlling
(B) coordinating
(C) forecasting
(D) evaluating

17. The temperature maintained in dry storage room is ———— °C

(A) 0 – 10
(B) 20 – 25
(C) 10 – 15
(D) 25 – 30

18. Holding temperatures for foods must therefore be carefully watched to prevent them from coming then within the danger zones of ———— °C, as micro organisms multiply very rapidly at various temperatures depending on the nature of the foods.

(A) 60 – 101
(B) 10 – 62
(C) 40 – 70
(D) 112 – 120

19. The key characteristics of a la carte menu are

(i) the choice is generally more extensive

(ii) each dish is priced separately

(iii) there may be longer waiting times as some dishes are cooked or finished to order

(A) (i) and (ii)
(B) (ii) and (iii)
(C) (i) and (iii)
(D) (i), (ii) and (iii)

20. ———— is an example of probability sampling.

(A) Quota sampling
(B) Snowball sampling
(C) Judgement sampling
(D) Replicated sampling

21. The purpose of an exploratory study may be to ————

(i) generate new ideas

(ii) make a precise formulation of the problem

(iii) gather information for clarifying concepts

(A) (i) and (ii)
(B) (ii) and (iii)
(C) (i) and (iii)
(D) (i), (ii) and (iii)

22. The variance in ———— is split into variance between columns, variance between rows, variance between varieties and residual variance.

(A) One way ANOVA
(B) Two way ANOVA
(C) ANOVA in latin square design
(D) ANOVA is perpendicular design

23. ———— is an example of non-continuous variable.

(A) Age
(B) Height of children
(C) Weight of children
(D) No. of children in a family

24. The method of convenience sampling is also called the

(A) Chunk (B) Quota

(C) Chester (D) Lottery

25. ———— are measures that divide a distribution into one hundred equal parts.

(A) Deciles (B) Quartiles

(C) Centiles (D) Mean

26. ———— are the most effective pictorial device for comparing data.

(A) Bar charts (B) Lorenz curve

(C) Stock plots (D) 'Z' scores

27. ———— are the mathematical techniques used to facilitate the interpretation of numerical data secured from groups of individuals or group of observations from a single individual.

(A) Statistical methods (B) Sampling techniques

(C) Depository services (D) None of the above

28. The important parametric test to test the significance used for hypothesis testing is

(i) Z test

(ii) 't' test

(iii) F test

(A) (i) and (ii) (B) (ii) and (iii)

(C) (i) and (iii) (D) (i), (ii) and (iii)

29. When the effects of extraneous variables are eliminated and the observed effects on dependent variable can be ascribed solely to the effect to experimented dependent variables, than the experiment has

(A) internal validity (B) inoculation

(C) interviewing (D) randomisation

30. Arachin and Conarchin II are the major proteins in

(A) Cashewnut

(B) Walnut

(C) Coconut

(D) Groundnut

31. Nuts are rich in the amino acid

(A) Phenylalanine

(B) Methionine

(C) Arginine

(D) Histidine

32. Egg yolk comprises about ————————% of fat.

(A) 25 – 33%

(B) 35 – 50%

(C) 51 – 72%

(D) 75 – 100%

33. High content of glycogen is present in

(A) Scallops

(B) Oysters

(C) Molluscs

(D) Mussels

34. How much time is taken by chicken for rigor mortis to set in?

(A) 1 – 2 hours

(B) 2 – 4 hours

(C) 4 – 6 hours

(D) 6 – 8 hours

35. Drying and withering of greens results in reduction of ———— vitamin.

(A) Vitamin A
(B) Vitamin B
(C) Vitamin C
(D) Vitamin D

36. The temperature to obtain soft ball stage is ———— °C.

(A) 50 – 75 °C
(B) 75 – 100 °C
(C) 100 – 112 °C
(D) 112 – 115 °C

37. Excessive consumption of kesari dhal results in

(A) Farism
(B) Goitre
(C) Lathyrism
(D) Nausea

38. The calorie contribution by 100 g of pulses is ———— K.cal.

(A) 125
(B) 175
(C) 280
(D) 340

39. Wheat proteins are low in ———— amino acid.

(A) Glutamic acid
(B) Lysine
(C) Tryptophan
(D) Phenylalanine

40. The amount of calcium present in 100 g of ragi is

(A) 121 mg
(B) 190 mg
(C) 280 mg
(D) 344 mg

41. The length of the baby increases by about ———— cm during first year and another ———— cm during the second year.

(A) 12, 25
(B) 25, 12
(C) 14, 30
(D) 30, 14

42. Under National immunisation schedule, BCG vaccine is given at

(A) Birth
(B) 6 weeks
(C) 10 weeks
(D) 14 weeks

43. Under reproductive and child health programme, all pregnant mothers are given ———— mg of elemental iron and ———— mcg of folic acid for 100 days after the first trimester of pregnancy.

(A) 40, 400
(B) 60, 500
(C) 100, 1000
(D) 50, 600

44. During infancy, high phosphorus can lead to

(A) hypocalcaemic neonatal tetany
(B) hypercalcaemic neonatal tetany
(C) hypocalcaemic neonatal injury
(D) hypercalcaemic neonatal injury

45. The "Baby friendly Hospital Initiative" scheme was initiated by

(A) UNICF/WHO
(B) FAO/WHO
(C) UNICF/FAO
(D) ICMR/WHO

46. Severe Acute Malnutrition (SAM) is defined by very low

(A) weight for height
(B) height for weight
(C) weight
(D) height

47. Visible fats suggested by ICMR (2010) for an adult woman doing sedentary, moderate and heavy activities are

(A) 20, 25 and 30 g
(B) 25, 30 and 35 g
(C) 30, 35 and 40 g
(D) 35, 40 and 45 g

48. The effect of nutrients in molecular level processes in the body as well as the variable effects of nutrients is

(A) Nutrigenomics
(B) Nutraceuticals
(C) Nutrimix
(D) Phytochemicals

49. Providing ———— is a measure for improving the health and nutrition of children.

(A) Breakfast
(B) School snacks
(C) School lunch
(D) Dinner

50. During pregnancy there is considerable increase in the demand for ———— which are required for DNA synthesis in the rapidly growing tissue.

(A) Protein
(B) Calories
(C) Folate
(D) Vitamin D

51. One which contains difference types of foods in such quantities and proportions that the need for calories, minerals, vitamins and other nutrients is met and a small provision is made for extra nutrients to withstand short duration of learners is called

(A) Balanced diet
(B) Functional food
(C) Nutrigenetics
(D) Anti oxidane

52. Adolescents with this eating disorder have usually near ideal body weight, but with weight fluctuations.

(A) Anorexia Nervosa
(B) Binge eating
(C) PMS
(D) Bulimia Nervosa

53. Adolescents with ———— are usually overweight or obese.

(A) Anaemia
(B) Lactose intolerance
(C) Anorexia
(D) Binge eating

54. Infants are generally born with haemoglobin levels of ———— /100 ml of blood.

(A) 30 – 40 g
(B) 15 – 24 g
(C) 18 – 22 g
(D) 14 – 20 g

55. The energy expenditure during normal pregnancy for an Indian reference woman would be ———— Kcals.

(A) 80,000
(B) 27,000
(C) 30,000
(D) 20,000

56. High ———— levels during pregnancy promotes gynecoid type of fat distribution

(A) Progesterone
(B) Oxytocin
(C) Prolactin
(D) Estrogen

57. The amount of fluid given initially in case of clear fluid diet is every 1–2 hours

(A) 30 – 60 ml
(B) 100 ml
(C) 80 – 120 ml
(D) 10 – 20 ml

58. The infusion technique in tube feeding where large volumes are given in a short time is

(A) Cyclic
(B) Interrupted
(C) Continuous
(D) Bolus

59. The Recommended Dietary Allowances (RDA) is given by

(A) ICAR
(B) ICMR
(C) FAO
(D) WHO

60. ———— is the quickness of reaction with fast and sure movements.

(A) Flexibility
(B) Coordination
(C) Agility
(D) Equilibrium

61. Select the test which should be conducted for a minimum of three times before obtaining confirmative tests.

(A) Provocative test
(B) Elimination test
(C) Skin test
(D) X-ray test

62. Anaphylactic shock which is the life threatening food allergy mainly caused by ingestion of

(A) wheat products
(B) groundnuts
(C) salted fish
(D) alcohol

63. In surgical condition, ———— concentration reflects surgical risk rather than nutritional status.

(A) Creatinine
(B) Albumin
(C) Globulin
(D) Gastrin

64. Match the following :

(a)	Soyabean	1.	Vegetable oils
(b)	Red wind	2.	Almonds
(c)	MUFA	3.	Flavonoids
(d)	Vitamin E	4.	Anthocyanin

	(a)	(b)	(c)	(d)
(A)	4	3	1	2
(B)	3	4	2	1
(C)	3	2	1	4
(D)	3	1	4	2

65. It would be prudent for people with H.Pylori infection to increase their intake of

(A) Iron
(B) Calcium
(C) Folic acid
(D) Ascorbic acid

66. BCAA protein refers to rich in branched amino acids such as

(A) Histidine, Leucine, Tryptophan
(B) Leucine, Isoleucine, Valine
(C) Aspartic acid, Leucine, Phenyl alanine
(D) Isoleucine, Histidine, Valine

67. Choose the correct statement :

(i) Liver synthesises heparin.
(ii) Liver stores calcium.
(iii) Liver synthesis Iron.
(iv) Liver synthesis phospholipids.

(A) (i) and (ii) are correct
(B) (i) and (iii) are correct
(C) (i) and (iv) are correct
(D) (ii) and (iii) are correct

68. Excessive ———— should be avoided in ulcers and gastritis.

(A) Water
(B) Caffeine
(C) Juices
(D) Protein foods

69. Currently ———— and individualized diet is recommended in treating peptic ulcer.

(A) liquid
(B) sippy's
(C) low protein
(D) bland

70. Delirium and confusion are symptoms of

(A) hepatic coma
(B) hepatitis
(C) alcoholic liver disease
(D) cirrhosis

71. Person who takes decision interms of methods and time-frame implementation.

(A) High level managers
(B) Middle level managers
(C) Lower level managers
(D) Very lower level managers

72. (i) A number of transactions, both big and small, take place in a food service establishment.

(ii) A systematic record of large transactions is essential and not small transaction.

(A) (i) is correct but not related to (ii) statement
(B) (i) is not correct and related to (ii) statement
(C) (i) is correct and related to (ii) statement
(D) (i) and (ii) are not correct

73. Match the following :

(a)	Production Budget	1.	Direct and Indirect materials
(b)	Labour Budget	2.	Values of different products
(c)	Sales Budget	3.	Physical units
(d)	Material Budget	4.	Hours per unit of output

	(a)	(b)	(c)	(d)
(A)	2	1	4	3
(B)	2	4	1	3
(C)	3	1	4	2
(D)	3	4	2	1

74. Inventory control is otherwise called as

(A) Labour control
(B) Financial control
(C) Stock control
(D) Vehicle control

75. It is not the factor that affect pricing in a food service establishment

(A) Location
(B) Advertising
(C) Menu
(D) Environmental condition

76. Which of the following is the precursor of Bile acids

(A) Lanosterol
(B) Cholesterol
(C) Stagmasterol
(D) Bilirubin

77. Pick out the enzyme responsible for phenylketonuria :

(A) Tyrasinase
(B) Histidase
(C) Phenylalamine hydroxylase
(D) Homogentisate oxidase

78. Which of the following statement is incorrect?
Hyper calcemia is observed in
Statement :

(i) Hyper parathyroidism
(ii) Multiple Myeloma
(iii) Cancer
(iv) Rickets and Osteomalacia

(A) (i), (ii), (iii) are incorrect
(B) (ii), (iii), (iv) are incorrect
(C) only (i) is incorrect
(D) only (iv) is incorrect

79. The 3Ds of symptoms of pellagra are
(A) dermatitis, diarrhea and dementia
(B) deficiency, disease, death
(C) dermatitis, digestion, deficiency
(D) dermatitis, diarrhea, digestion

80. Which of the following vitamin is known as anti-hemorrhagic factor
(A) Vitamin D
(B) Vitamin K
(C) Vitamin E
(D) Vitamin A

81. The absorption of fat soluble vitamins A, D, E and K requires
(A) Bile salts
(B) Compound lipids
(C) Steroid hormones
(D) Lecitherine

82. The accumulation of ketone bodies in blood is known as
(A) Ketonemia
(B) Ketonuria
(C) Ketoacidosis
(D) Fatty liver

83. Which amino acid is essential for the formation of bile acids?

(A) Glycine

(B) Cysterine

(C) Methionine

(D) Tryptophan

84. ———— functions as a master co-ordinator of hormonal action.

(A) Pituitary

(B) Adrenal

(C) Pancreatic

(D) Hypothalamus

85. ———— is the one that resists a change in pH on the addition of acid or base.

(A) Acid solution

(B) Alkali solution

(C) Neutral solution

(D) Buffer solution

86. Chemically similar substances that possess qualitatively similar vitamin activity called

(A) Minerals

(B) Vitamins

(C) Nucleic acids

(D) Pheramoals

87. ———— regarded as the reserve bank of genetic information.

(A) Protein

(B) Nucleic acid

(C) DNA

(D) RNA

88. Chemical agents which serve to retard, hinder or mask undesirable change in food are called

(A) Additives
(B) Toxins
(C) Preservatives
(D) Coolatives

89. ———— is caused by ingesting food containing toxins formed by bacteria which resulted from bacteria growth in food item.

(A) Food borne infection
(B) Food poisoning
(C) Food spoilage
(D) Food intoxication

90. ———— results in motor and muscle paralysis.

(A) Yellow fever
(B) Dengue fever
(C) Viral hepatitis
(D) Poliomyelitis

91. The main cause for traveler's diarrhea is

(A) Vibrio cholerae
(B) E.coli
(C) Treponema
(D) Sobrinus

92. Which one of the following is NOT a bacterial food intoxication?

(A) Botulism
(B) Staphylococcus gastro enteritis
(C) E.coli poisoning
(D) Aflatoxin

93. ———— is used in Vinegar manufacture.

(A) Lactic acid bacteria
(B) Propionic acid bacteria
(C) Acetic acid bacteria
(D) Oxalic acid bacteria

94. The food preservation method that uses both freezing and drying is known as

(A) Dessication

(B) Lyophilization

(C) Pasteurization

(D) Filteration

95. Which of the following sterilization method is most effective for sterilizing test tubes and petri dishes?

(A) Pasteurization

(B) Hot air oven

(C) Incineration

(D) Boiling

96. ———— is added in large quantities as a preservative in murabbas.

(A) Salt

(B) Sugar

(C) Nitrates

(D) Organic acids

97. The term 'asepsis' means

(A) Towards infection

(B) Against infection

(C) Skin disease

(D) Surgery

98. The agents used for disinfecting the inanimate objects or substances are

(A) Preservatives

(B) Contaminants

(C) Disinfectants

(D) Pathogens

99. Which of the following explain the vital capacity of lungs?

(A) Volume of air contained in the lungs at the end of a maximal respiration

(B) Maximum volume of air that can be expelled by a complete expiration

(C) Volume of air remaining in the lungs at the end of normal respiration

(D) Maximum volume of air that can be inspired after a normal expiration

100. Name the enzymes converts inactive trypsinogen into active trypsin?

(A) enterokinase (B) trypsin

(C) chymotrypsin (D) kallakrein

101. The substance which promote evacuation of the gall bladder and free flow of bile is known as

(A) Emeties (B) Expectorants

(C) Cholagogues (D) Purgatives

102. Name the hormone controlled the second half of the menstrual cycle and secreated by

(A) LH, Progesterone (B) LH, Estrogen

(C) FSH, Estrogen (D) FSH, Progesterone

103. Insulin is a protein hormone containing trace amount of

(A) Cobalt (B) Copper

(C) Manganese (D) Zinc

104. The Renal vein leaves the kidney at the

(A) Malpigi (B) Hilum

(C) Cortex (D) Columns of Bertini

105. Effective glomerular filtration occurs when

(A) Osmotic Pressure < Intracapsular Pressure

(B) Glomerular Capillary Pressure < Effective Filtration Pressure

(C) Glomerular Capillary Pressure > Effective Filtration Pressure

(D) Intracapsular Pressure > Glomerular Capillary Pressure

106. Which of the following statements is Incorrect regarding viscosity of blood is

(A) Viscosity of blood is 3 to 4 times that of water

(B) Blood Viscosity is due to plasma proteins only

(C) Plasma Viscosity is contributed by proteins

(D) Plasma Viscosity is 1.8 times that of water

107. Which type of epithelium is seen in urinary bladder?

(A) Stratified

(B) Squamous

(C) Transitional

(D) Cuboidal

108. Which of the following statements does not coincide with the characteristics of eosinophil?

(A) They are slightly larger than neutrophils

(B) They have bilobed nuclei

(C) Their granules take up methylene blue (basic) stain

(D) They are rich in histamines

109. The superior and inferior vena cava drain the blood into the

(A) left atrium

(B) right atrium

(C) left ventricle

(D) right ventricle

110. Which of the following effects stimulates the conductivity of cardiac contraction?

(A) Inotropic

(B) Chronotropic

(C) Bathmotropic

(D) Dromotropic

111. Assertion (A) : Heart continues to contract even after all its nervous connections are cut

Reason (R) : The pacemaker cells in the heart produces impulses

Read the above statements carefully and mark the correct options :

(A) Both (A) and (R) are correct and (R) explains (A) adequately

(B) Both (A) and (R) are correct but (R) does not explain (A) adequately

(C) (A) is correct, (R) is wrong

(D) Both (A) and (R) are wrong

112. The space allowance for counter service is ———— m^2

(A) 1.70 to 1.90 (B) 1.40 to 1.80

(C) 1.50 to 1.95 (D) 1.10 to 1.40

113. In which method air is removed from food and put in air tight cans so that germs do not grow on them.

(A) canning (B) drying

(C) freezing (D) boiling

114. The recommended height for racks in a store room is ———— m.

(A) 1.8 (B) 4.6

(C) 2.3 (D) 5.4

115. In ———— food system, food is produced totally from raw ingredients.

(A) convenience (B) conventional

(C) ready (D) integrated

116. Eggs and dairy products are stored at a temperature of ———— °C

(A) 10 to 15 (B) 5 to 10

(C) –20 to –10 (D) 0 to 5

117. Which of the statement is correct?

I. A corner location of kitchen makes it accessible by road for purposes of receiving supplies and removal of kitchen wastes.

II. The kitchen should be situated over ground to avoid flooding, drainage back flow and unnecessary expenses on artificial lighting and ventilation.

(A) (I) only (B) (II) only

(C) (I) and (II) (D) Neither (I) nor (II)

118. In a restaurant equipped for leisurely dining, each space setting should allow atleast ———— cm space on the table per person.

(A) 100 – 120
(B) 50 – 60
(C) 40 – 80
(D) 70 – 90

119. Choose the correct sequence :

(i) Delegating authority
(ii) Determining activities
(iii) Coordinating activities
(iv) Assigning duties
(v) Providing physical facilities and right environment
(vi) Clear definition of objectives
(vii) Establishment of structural relationship for overall control

(A) (i), (v), (ii), (vii), (iii), (vi), (iv)
(B) (ii), (v), (i), (iv), (vii), (vi), (iii)
(C) (vi), (ii), (iv), (i), (iii), (v), (vii)
(D) (iii), (vii), (iv), (v), (i), (vi), (ii)

120. The advantage of having proper ventilation is

(i) It makes the work place comfortable by cooling it
(ii) It reduces chances of accidental fires due to accumulated grease
(iii) It prevents water from condensation from settling on walls and ceilings and drippings onto food

(A) (i) only
(B) (ii) only
(C) (iii) only
(D) (i), (ii) and (iii)

121. ———— is a document based on the information in the requisition completed by the buyer who gives it to the supplier.

(A) Purchase requisition
(B) Purchase order
(C) Invoice
(D) Requisition slip

122. Which of the statement is correct?

(i) It is good practice to keep foods covered in refrigerated storage to prevent them from drying
(ii) The space required for refrigerated storage is determined by the volume of food produced and the type of menus along with the accuracy of forecasts of sales

(A) (i) only
(B) (ii) only
(C) (i) and (ii)
(D) Neither (i) nor (ii)

123. Which of the following statements are correct?

Statement (1): A hypothesis from which the consequences can be deducted is called a barren hypothesis

Statement (2): A hypothesis which is found to be unsatisfactory when verified is called a false hypothesis

(A) (1) is wrong (2) is correct
(B) Both (1) and (2) are correct
(C) Both (1) and (2) are wrong
(D) (1) is correct (2) is wrong

124. ———— and ———— are the central steps in the research process.

(A) Framing of hypothesis and Pitot study
(B) Analysis and Interpretation
(C) Defining the problem and collection of data
(D) Report writing and Bibliography

125. ———— is/are the method of studying correlation.

(A) Graphic method
(B) Freehand smoothing
(C) Sectional averages
(D) Cyclical movements

126. Controlled group is a term used in

(A) Survey research
(B) Historical research
(C) Experimental research
(D) Descriptive research

127. ———— is defined as the reciprocal of the average of reciprocals of the values of items in a series.

(A) Geometric mean
(B) Harmonic mean
(C) Median
(D) Mode

128. Classification is the process of arranging data in

(A) different columns
(B) different rows
(C) grouping of related facts in different classes
(D) different columns and rows

129. Which of the following statements are True or False?

Statement (1): In the construction of a table, abbreviations should be avoided especially in titles and headings

Statement (2): The frequency distribution achieves condensate data by blurring the values of the data.

(A) (1) is true
(B) (2) is true
(C) Both (1) and (2) are true
(D) (1) is true and (2) is false

130. ———— designs are used in experiments where the effects of varying more than one factor are to be determined.

(A) Factorial

(B) Latin Square

(C) Randomized Block

(D) Random replication

131. The enzyme used in cheese preparation is

(A) Lipase

(B) Rennin

(C) Trypsin

(D) Amylase

132. Whey proteins are made up of ———— and β -lactoglobulin.

(A) Glutamate

(B) α -lactalbumin

(C) Riboflavin

(D) Oxidase

133. ———— °C is the smoking point of soybean and peanut oil

(A) 230°C

(B) 150°C

(C) 320°C

(D) 28°C

134. ———— is a semisolid oil in water emulsion of edible vegetable oils.

(A) Mayonnaise

(B) Margarine

(C) Cheese

(D) Ghee

135. Offal's are an excellent source of ———— nutrient.

(A) Carbohydrate

(B) Protein

(C) Fat

(D) Vitamins

136. Mixture of ascorbic acid and ———— develop brown colour.

(A) Glucose

(B) Fat

(C) Amino acids

(D) Minerals

137. Over ripening of fruits is prevented by ———— dip.

(A) Acetic acid

(B) Ascorbic acid

(C) Carbon dioxide

(D) Oxygen

138. When onions got scorched or burnt the sugar get

(A) Gelatinized

(B) Caramalized

(C) Coagulated

(D) Hydrolyzed

139. An ———— medium promotes a reddish colour to betalains.

(A) Neutral

(B) Acidic

(C) Alkaline

(D) Hard water

140. PDS is

(A) Public Deficiency System
(B) Public Deficiency Scheme
(C) Public Distribution System
(D) Public Distribution Scheme

141. ———— is a method of communication using all kinds of media written, spoken and audio visual. All kinds of teaching aids are also used making it the most effective method of communication.

(A) Radio
(B) Nutrition Exhibition
(C) Banners
(D) Newspapers

142. During emergency feeding for the proper management of food supplies the following point should be followed :

(i) The objective is to ensure safety and prevent the transmission of disease through food.

(ii) It is necessary to inspect the food received, identify and discard damaged supplies and confirm that containers are in good condition.

(iii) Store food by its date of entry so that it is distributed on a first in/first out basis.

(A) (i) and (ii)
(B) (ii) and (iii)
(C) (i) and (iii)
(D) (i), (ii) and (iii)

143. Recent studies revealed that elderly patients with early stage of Alzheimers disease consumed less amount of

(A) Vitamin A
(B) Vitamin D
(C) Vitamin E
(D) Vitamin K

144. The mean age of menarche for Indian girls is

(A) 11.5 ± 0.8 years
(B) 12.5 ± 0.8 years
(C) 13.5 ± 0.8 years
(D) 13.5 ± 0.6 years

145. During growth of preschool children, for an increase in each kilogram in body weight requires ———— mg. of iron.

(A) 20 mg
(B) 30 mg
(C) 40 mg
(D) 50 mg

146. This age group is not a beneficiary of ICDS.

(A) Pregnant women
(B) Nursing mothers
(C) Children less than 3 years
(D) Old people

147. Which of the statement is true?

(i) Maternal malnutrition prior to and/or during pregnancy is more likely to produce an under weight newborn baby.

(ii) Higher incidence of malnutrition has been reported in children belonging to small families.

(iii) Malnutrition occurs more in children living in unsanitary living conditions

(iv) Poverty can cause malnutrition

(A) (i), (ii) and (iv)
(B) (ii), (iii) and (iv)
(C) (i), (iii) and (iv)
(D) (i), (ii) and (iii)

148. The formula for calculating BMI is

(A) Weight in kg / Height in m^2
(B) Height in m^2 / Weight in kg
(C) Weight in kg × Height in m^2
(D) Weight in kg / Height in m

149. A facility that collects and distributes food donations to authorized organization that feed the hungry is

(A) Food Bank
(B) Nutrition Security
(C) Food Distributor
(D) Food Dealers

150. A Frenchman, often referred as the father of science of nutrition is

(A) Lavoisier
(B) Dubois
(C) Funk
(D) Hopkins

151. Pyridoxin and Zinc requirement suggested by ICMR (2010) for adult man is

(A) 2 mg and 12 mg
(B) 2 mg and 14 mg
(C) 3 mg and 12 mg
(D) 3 mg and 14 mg

152. During adulthood, nutrients are required

(A) to replace worn out cells and maintenance of body function
(B) for growth and development
(C) for regeneration of cells and functional capacity
(D) for effective functional capacity

153. Corneal xerosis may progress suddenly and rapidly to

(A) Conjunctival xerosis
(B) Blindness
(C) Keratomalacia
(D) Bitot's spots

154. For one month old infant, ———— per cent energy intake is used for basal energy.

(A) 50
(B) 25
(C) 75
(D) 40

155. Lack of ———— in human milk inhibits malaria.

(A) Lactoferin
(B) Lactobacillus Bifidus factor
(C) Macrophages
(D) Para Amino Benzoic acid

156. ———— helps a baby to pass the first stool.

(A) Prelacteal food
(B) Foremilk
(C) Hind milk
(D) Colostrum

157. Severe prolonged persistent ———— in pregnancy is referred as hyperemesis gravidarum.

(A) heart burn
(B) leg cramps
(C) vomiting
(D) anaemia

158. The dietary assessment method where the subject is required to save a duplicate sample of each food taken by him is

(A) 24 hour diet recall
(B) weighment method
(C) chemical analysis
(D) inventory method

159. ———— tests help to diagnose malnutrition at sub clinical stage and also help to confirm clinical diagnosis if symptoms are non-specific.

(A) Clinical
(B) Biochemical
(C) Anthropometry
(D) Functional

160. ———— Index = Ht. in cms. – 100 = Ideal weight in kg.

(A) Kanawati
(B) Mcharen's
(C) Rao
(D) Broka's

161. Fat fold at ———— is the least error prone.

(A) Biceps
(B) Subscapula
(C) Triceps
(D) Calf

162. Low cholesterol diet is prescribed mostly for ———— patients.

(A) Gall stones
(B) Diabetes Mellitus
(C) Toxemia
(D) Hypertension

163. Protein sparing modified fasting diet containing approximately ———— g protein and ———— Kcal/day are recommended for extremely obese patients.

(A) 50 g protein and 500 Kcal/day
(B) 60 g protein and 600 Kcal/day
(C) 60 g protein and 700 Kcal/day
(D) 40 g protein and 400 Kcal/day

164. Nuts contain high amount of monounsaturated fat in the form of ———— acid.

(A) Linoleic acid
(B) Linolenic acid
(C) Oleic acid
(D) Arachidonic acid

165. Choose the correct statement :

(i) If the patient is obese, carbohydrate and calorie supplementation is not recommended either before or after exercising.

(ii) Sudden initiation of a vigorous exercise programme in a person of sedentary habit is desirable.

(A) (i) and (ii) are correct
(B) (i) is correct
(C) (ii) is correct
(D) Both (i) and (ii) are wrong

166. The ———— within the glomerular capillaries results in the filtration of fluid into Bowman's capsule.

(A) Osmotic pressure
(B) Hydrostatic pressure
(C) Hyperstatic pressure
(D) Venous pressure

167. Pick out the wrong Option :

Biochemical Assessment of Renal function

(i) Potassium and phosphate increase in plasma.
(ii) Renal dysfunction increases alkaline phosphatase.
(iii) Volume of urine may be increased or decreased
(iv) Urinary constituents like blood and protein may not be present in urine.

(A) (i)
(B) (ii)
(C) (iii)
(D) (iv)

168. Find out the non-clinical criteria of Diabetes :

(A) Relief from symptoms
(B) Prevention or retardation of both acute and chronic complications of diabetes
(C) Presence of adequate energy and endurance for work performance
(D) Urine sugar testing

169. Choose the correct statement :

(i) Type I diabetes can consume alcohol without omitting any food.
(ii) Metabolism of alcohol does not require insulin.

(A) (i) only correct
(B) Both (i) and (ii) are correct
(C) (ii) only correct
(D) Both (i) and (ii) are wrong

170. Intrahepatic obstruction and venous congestion leads to a complication called as

(A) hypertension
(B) hepatitis
(C) varices
(D) coma

171. Death of hepatocytes is termed as

(A) Fibrosis
(B) Necrosis
(C) Hepatitis
(D) Steatosis

172. ———— patients comprise the largest percentage of patients receiving long-term TPN.

(A) Coma
(B) Cancer
(C) Chronic renal failure
(D) Cirrhosis

173. Feeding can be directly given inside the stomach through ———— feeding.

(A) Parenteral
(B) Esophagostomy
(C) Percutaneous endoscopic gastrostomy
(D) Perculaneous endoscopic jejunostomy

174. ———— diet is recommended in atomic constipation.

(A) High residue
(B) Low residue
(C) Low fibre
(D) High fibre

175. Hyper cholesterolemia is observed in

(A) hypothyroidism

(B) hyper thyroidism

(C) fever

(D) ulcer

176. Which in the substrate for the enzyme salivary amylase

(A) maltase

(B) starch

(C) lactose

(D) sucrose

177. Hydrolysis of peptide bonds in protein molecule is catalysed by ———— enzyme.

(A) pepsin

(B) dehydrogenase

(C) peptidyl transferase

(D) carboxy peptidase

178. The process of continuous degradation and resynthesis of protein is termed as

(A) Protein turnover

(B) Denaturation

(C) Renaturation

(D) Protein Detoxification

179. Pick out the protein used in the process of making artificial fibers

(A) Globular proteins

(B) Coagulated proteins

(C) Metalloproteins

(D) Scleroproteins

180. (i) This hormone has the historical importance because it is the first hormone to be synthesized

(ii) It was discovered by Bayli's and starting in 1902.

The above statements are referring to

(A) Cholecytokinin
(B) Secretin
(C) Renin
(D) Gastrin

181. The hormone adrenalin and the pigment melanin are synthesised from this amino acid

(A) Tyrosine
(B) Lysine
(C) Tryptophan
(D) Leucine

182. Which of the following statement is incorrect regarding methionine?

(A) involved in transmethylation
(B) it protects the liver from damage by poisons
(C) fatty liver can be cured by methionine
(D) it is a component of glutathione

183. Which of the following statement is incorrect?

(A) Calcium is well absorbed at normal pH. If the pH becomes more alkaline, Ca absorption is suppressed
(B) Excess of phosphate lowers Ca absorption
(C) Oxalic acid and Oxalates present in several foods lower Ca absorption
(D) Vitamin D lower calcium absorption from intestine

184. Which of the following is not a Hydrolases?

(A) Peptidases
(B) Glycosidases
(C) Esterase's
(D) Oxidase

185. ———— are the most abundant organic molecule of the living system.

(A) Carbohydrates
(B) Proteins
(C) Lipids
(D) Vitamins

186. Unsaturated fatty acid exhibits

(A) Geometric isomerism
(B) Optical isomerism
(C) Tautomerism
(D) Mutarotation

187. ———— pathway is an alternative to glycolysis and TCA cycle for the oxidation of glucose.

(A) Glycogenolysis
(B) Glucoreogenesis
(C) Hexose Monophosphate Shunt
(D) Citric acid cycle

188. The specific optical rotation of a freshly prepared glucose solution in water is

(A) +110.2°
(B) –112.2°
(C) +112.2°
(D) –110.2°

189. Soluble fibre in general helps in

(A) clearance of LDL cholesterol
(B) fatty acid absorption
(C) accumulation of steroids
(D) clearance of HDL cholesterol

190. Identify the lubricant present in bone joints :

(A) Inulin
(B) Hyaluronic acid
(C) Heparin
(D) Chondroitin sulfate

191. ———— are preservative added in jams, jellies, margarine etc.

(A) Sodium Benzoate
(B) Sorbates
(C) Acetates
(D) Nitrites

192. Gas production is a type of spoilage in milk caused by

(A) Coliform bacteria
(B) Clostridium species
(C) Yeast
(D) All the above

193. Symptoms like blurred vision, difficulty in swallowing and speaking muscle weakness, nausea and vomiting is due to the food poisoning caused by

(A) vibrio cholerae
(B) clostridium botulinum
(C) salmonella typhi
(D) shigella sonnei

194. Gamma rays and X-rays can be used to

(A) prevent the sprouting of fruits and vegetables
(B) sterilize food
(C) kill insects and parasitic worms
(D) all the above

195. Tempeh is a fermented food obtained by the action of

(A) Zygosacchromyces
(B) Pediococcus halophiles
(C) Torulophilus
(D) Rhizopus oligospores

196. Rancidity in butter is due to

(A) Hydrolysis

(B) Carboxylation

(C) Lipolysis

(D) Fermentation

197. The spoilage in bakery products are caused mainly by

(A) molds

(B) virus

(C) algae

(D) protozoa

198. Nosocomical infection is mainly caused by ———— in the clinical setting.

(A) Air droplet

(B) Oxidation

(C) Decomposition

(D) Rainfall

199. ———— is the dark organic matter in soil.

(A) Commensalism

(B) Humus

(C) Ammensalism

(D) Mucigel

200. The chemical stimuli which enables the bacterial cell to move is called as

(A) Phototaxis

(B) Chemotaxis

(C) H antigent

(D) Tumbles

———————

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