

JEMAS(PG)-2022

QB No: 2101300001

Subject: Diploma in Dietetics (Dip Diet)

Duration: 90 minutes

No of MCQ: 100

Full Marks: 100

Instructions

1. All questions are of objective type having four answer options for each, carry 1 mark each and only one option is correct. In case of incorrect answer or any combination of more than one answer, $\frac{1}{4}$ mark will be deducted.
2. Questions must be answered on OMR sheet by darkening the appropriate bubble marked A, B, C, or D. Question booklet series code (A, B, C, or D) must be properly marked on the OMR.
3. Use only **Black/Blue ball point pen** to mark the answer by complete filling up of the respective bubbles.
4. Write question booklet number and your roll number carefully in the specified locations of the **OMR**. Also fill appropriate bubbles.
5. Write your name (in block letter), name of the examination center and put your full signature in appropriate boxes in the OMR.
6. The OMR is liable to become invalid if there is any mistake in filling the correct bubbles for question booklet number/roll number or if there is any discrepancy in the name/signature of the candidate, name of the examination center. The OMR may also become invalid due to folding or putting stray marks on it or any damage to it. The consequence of such invalidation due to incorrect marking or careless handling by the candidate will be sole responsibility of candidate.
7. Candidates are not allowed to carry any written or printed material, calculator, pen, log-table, wristwatch, any communication device like mobile phones etc. inside the examination hall. Any candidate found with such items will be **reported against** and his/her candidature will be summarily cancelled.
8. Rough work must be done on the question paper itself. Additional blank pages are given in the question paper for rough work.
9. Hand over the OMR to the invigilator before leaving the Examination Hall.

1. When food is given in the stomach or intestines directly then it is _____ nutrition.
(A) Intravenous.
(B) Saline.
(C) Enteral.
(D) Parenteral.

2. A person who has had a renal transplant should regulate the intake of _____.
(A) Carbohydrates
(B) Proteins.
(C) Fats.
(D) Vitamins.

3. To overcome diabetes, a person can increase the intake of _____ and reduce the intake of _____:
(A) Carbohydrates, proteins.
(B) Proteins, fats.
(C) Fats, carbohydrates.
(D) Carbohydrates, fats.

4. For a person suffering from problems like slow neural transmission, eg dementia, they should be given _____:
(A) increased potassium.
(B) increased sodium.
(C) increased calcium.
(D) increased magnesium.

5. A person who is suffering from high blood pressure should cut down on _____.
(A) Sodium.
(B) potassium.
(C) calcium.
(D) magnesium.

6. In cases of renal insufficiency, what should take in place of proteins?
(A) Triglycerides.
(B) Essential Amino Acids.
(C) Glucose.
(D) Vitamin K.

7. In cases of muscle fatigue, which of the Vitamin should be taken?
(A) A.
(B) D.
(C) E.
(D) K

8. Vitamin B₁₂ deficiency can result in:
 - (A) Pernicious anaemia.
 - (B) Neural Tube defects.
 - (C) Night blindness.
 - (D) Beri Beri

9. Which of the following is an unavoidable risk factor for osteoporosis?
 - (A) Caffeine intake.
 - (B) Gender.
 - (C) Sedentary lifestyle.
 - (D) Smoking.

10. What is the first line of treatment in Viral Hepatitis?
 - (A) Maintenance of Nutrition.
 - (B) Increased fluid intake.
 - (C) Probiotics.
 - (D) Vitamin C.

11. A process of treating buffalo milk by adding skim milk, powdered skim milk and later leads to the formation of
 - (A) Toned milk.
 - (B) Sterilized milk.
 - (C) UHT treated milk.
 - (D) Pasteurized milk.

12. All of the following are proximate principles of food except:
 - (A) Carbohydrates.
 - (B) Protein.
 - (C) Fat.
 - (D) Fibers.

13. Which of the following are called macronutrients?
 - (A) Carbohydrates, Proteins, and Minerals.
 - (B) Minerals, Proteins, and Vitamins.
 - (C) Carbohydrates, Proteins, and Fats.
 - (D) Proteins, Fats, and Minerals.

14. Which of the following nutrients are the ideal energy producer?
 - (A) Carbohydrates and Proteins.
 - (B) Proteins and Fats.
 - (C) Carbohydrates and Fats.
 - (D) Proteins and Vitamins.

15. Which of the following is the sweetest among naturally occurring sugar?
- (A) Glucose.
 - (B) Lactose.
 - (C) Starch.
 - (D) Fructose.
16. Which of the following is found more in the human milk in comparison to milk of cow, buffalo, and goat?
- (A) Lactose.
 - (B) Fructose.
 - (C) Starch.
 - (D) Cellulose.
17. The foods from which humans can get carbohydrates does not include
- (A) Cereals and pastas.
 - (B) White vegetables.
 - (C) Beans and rice.
 - (D) Potatoes and bran.
18. Which of the following statements is incorrect regarding micronutrients?
- (A) They are below 10 m mole / kg of dry weight in plants.
 - (B) Below critical concentration they cause deficiency symptoms.
 - (C) Moderate increase from critical concentration may cause toxicity.
 - (D) Examples are Sodium, Potassium, and Calcium.
19. A person deficient in the visual pigment Rhodopsin should be advised to take more of:
- (A) Radish and potato.
 - (B) Carrot and ripe papaya.
 - (C) Apple and grapes.
 - (D) Guava and ripe banana.
20. All of the following proteins are biologically complete except:
- (A) Egg.
 - (B) Milk.
 - (C) Soyabean.
 - (D) Fish.
21. Pulse proteins are deficient in:
- (A) Methionine.
 - (B) Lysine.
 - (C) Tryptophan.
 - (D) Leucine.

22. Product of digestibility coefficient and biological value of protein is given by:
- (A) Protein Efficiency Ratio.
 - (B) Net Protein Utilization.
 - (C) Protein Absorption Ratio.
 - (D) Protein Utilization Ratio.
23. Most important Essential Amino Acid is:
- (A) Stearic Acid.
 - (B) Arachidonic Acid.
 - (C) Palmitic Acid.
 - (D) Linoleic Acid.
24. Dietary fiber is rich in all except:
- (A) Cellulose.
 - (B) Pectin.
 - (C) Starch.
 - (D) Inulin.
25. Which of the following has the highest content of Vitamin A:
- (A) Dark green leafy vegetables.
 - (B) Mango.
 - (C) Coconut oil.
 - (D) Egg.
26. Mitochondrial enzyme Pyruvate carboxylase contains:
- (A) Zinc.
 - (B) Fluorine.
 - (C) Manganese.
 - (D) Iron.
27. The following separates the interstitial fluid from the blood plasma:
- (A) Plasma membrane.
 - (B) Cell membrane.
 - (C) Epithelial membrane.
 - (D) Blood vessel walls.
28. Which of the following are the examples of Monosaccharides?
- (A) Glucose, galactose, and fructose.
 - (B) Galactose, maltose.
 - (C) Cellulose, starch, and glycogen.
 - (D) Glucose and cellulose.

29. In which form body stores glucose?
(A) Cellulose.
(B) Starch.
(C) Glycogen and cellulose.
(D) Glycogen.
30. The brain and RBC needs energy source in the form of
(A) Proteins.
(B) Glucose.
(C) Fats.
(D) Enzymes.
31. If a person has not consumed food for a period of time then blood glucose levels start to get low then which organ of body release glucose into the bloodstream to maintain healthy levels?
(A) Liver.
(B) Bones.
(C) Brain.
(D) Muscles.
32. Lactose can be hydrolyzed in glucose and galactose in the presence of the enzyme:
(A) Lactase.
(B) Maltase.
(C) Sucrose.
(D) Lipases.
33. Which of the following minerals plays a major role in energy storage and transfer of ADP into ATP molecules?
(A) Phosphorus.
(B) Magnesium.
(C) Molybdenum.
(D) None of the above.
34. About 98 percent of the mass of every living organism is composed of just six elements including carbon, hydrogen, nitrogen, oxygen and _____:
(A) Calcium and phosphorus.
(B) Phosphorus and sulphur.
(C) Sulphur and magnesium.
(D) Magnesium and sodium.
35. Which of the following is not a function of vitamins?
(A) Digestion.
(B) Metabolism.
(C) Growth.
(D) Immunity.

36. Vitamin K is required for:
- (A) Synthesis of prothrombin.
 - (B) Conversion of prothrombin to thrombin.
 - (C) Formation of thromboplastin.
 - (D) Formation of prothrombinase.
37. Formation of glucose from protein is:
- (A) Glycolysis.
 - (B) Glyconeolysis.
 - (C) Glycogenesis.
 - (D) Gluconeogenesis.
38. Most of the serum Cholesterol ids present in:
- (A) Triglycerides.
 - (B) VLDL.
 - (C) LDL.
 - (D) HDL.
39. The peripheral blood picture of RBC in Iron deficiency anaemia is:
- (A) Hypochromic, microcytic.
 - (B) Normochromic, microcytic.
 - (C) Normochromic, macrocytic.
 - (D) Hypochromic, macrocytic.
40. Muscles in the propulsive and receiving segments of the GI tract respond differently to food movement through the gut. Which of the following statements correctly describes activity in the propulsive segment?
- (A) The circular and longitudinal muscles are contracted.
 - (B) The longitudinal muscles are contracted and the circular muscles are relaxed.
 - (C) Both the longitudinal muscles and circular muscles are relaxed.
 - (D) The circular muscles are contracted and the longitudinal muscles are relaxed.
41. Defective parietal cells would result in mal-absorption of which vitamin?
- (A) Vitamin B₁.
 - (B) Vitamin B₂.
 - (C) Vitamin B₆.
 - (D) Vitamin B₁₂
42. Saliva contains the carbohydrate-digesting enzyme:
- (A) Pepsin.
 - (B) Amylase.
 - (C) Carboxypeptidase.
 - (D) Lipase.

43. The major chemical digestive activity that takes place in the stomach is:
- (A) Breakdown of starch.
 - (B) Breakdown of protein.
 - (C) Digestion of Fats.
 - (D) Neutralization of acid by buffers & mucous.
44. Which of the following is true about pancreatic secretions?
- (A) CCK causes release of bicarbonate.
 - (B) Secretin causes release of enzymes.
 - (C) Gastrin stimulates release of enzymes.
 - (D) CCK stimulates release of enzymes while Secretin stimulates release of bicarbonate.
45. Sodium export through the brush border of the intestinal epithelial cells occurs by which of the following mechanisms?
- (A) Passive diffusion.
 - (B) Reverse Osmosis.
 - (C) Facilitated diffusion.
 - (D) Synport.
46. The function of Colon includes all of the following except:
- (A) Absorption of water.
 - (B) Absorption of Sodium.
 - (C) Absorption of Chloride.
 - (D) Absorption of Calcium.
47. Jejunum is the main site of absorption of all of the following except:
- (A) Glucose.
 - (B) Fatty acids.
 - (C) Amino Acids.
 - (D) Vitamin B₁₂.
48. The function of Bile is:
- (A) Emulsify fat.
 - (B) Denature Protein.
 - (C) Absorption of Glucose.
 - (D) Digestion of Carbohydrate.
49. Starch is broken down to form glucose units when hydrolysed by
- (A) Alkaline base.
 - (B) Acidic base.
 - (C) Neutral base.
 - (D) Salty base.

50. Esterases. Proteinases, Alkali Acid phosphates belong to:
- (A) Hydrolases enzymes.
 - (B) Transferases enzymes.
 - (C) Oxidoreductases enzymes.
 - (D) Ligases enzymes.
51. In Epidemic dropsy; the metabolite that accumulates in blood is:
- (A) Acetic Acid.
 - (B) Pyruvic acid.
 - (C) Acetaldehyde.
 - (D) Formaldehyde.
52. RBC Glutathione Reductase activity is useful in detection of deficiency of:
- (A) Thiamin.
 - (B) Riboflavin.
 - (C) Niacin.
 - (D) Folic Acid.
53. Which of the following minerals helps in improving both the quantity and quality of dry matter in leafy vegetables and protein in grain crops?
- (A) Iron.
 - (B) Copper.
 - (C) Nitrogen.
 - (D) Molybdenum.
54. The safety of which of the following substances must be demonstrated prior to their introduction into food?
- (A) Pesticide chemicals.
 - (B) Substances migrating from food packaging.
 - (C) Colour additives.
 - (D) All of the above.
55. The deteriorative changes originating from within the food system is known as:
- (A) Proteolysis.
 - (B) Hydrolysis.
 - (C) Putrefaction.
 - (D) Autolysis.

56. When sugars are heated under controlled conditions in the absence of water; they form a hydrosugar that readily polymerized to give a typical tint and brown pigment. The process is called:
- (A) Mail Lard reaction.
 - (B) Caramilization.
 - (C) Browning.
 - (D) Purification.
57. Which of the following is for standardization in the international market:
- (A) Codex Alimentarius.
 - (B) PFA Standards.
 - (C) Agmark.
 - (D) ISI certification.
58. The most sensitive test to detect Argemone oil as food toxicants is:
- (A) Nitric Acid Test.
 - (B) Paper Chromatography Test.
 - (C) Argemone Test.
 - (D) Phosphatase Test.
59. Disease that are caused by food toxicant are all except:
- (A) Pellagra.
 - (B) Lathyrism.
 - (C) Endemic Ascitis.
 - (D) Epidemic Dropsy.
60. All of the following are functional indicators of Zinc deficiency except:
- (A) Leucocyte chemotaxis.
 - (B) Sperm count.
 - (C) Delayed cutaneous hypersensitivity.
 - (D) Erythrocyte fragility.
61. Deficiency of which of the following is thought to have a role in development of Diabetes:
- (A) Sodium.
 - (B) Calcium.
 - (C) Chromium.
 - (D) Iron.
62. All are relatively easy and standardized measures of obesity; except:
- (A) Skin Fold thickness.
 - (B) Body mass Index.
 - (C) Waist circumference.
 - (D) Waist Hip ratio.

63. Which of the following modification in the diet of a patient with irritable bowel syndrome is useful:
- (A) Adding multivitamins to the diet.
 - (B) Reducing protein from the diet.
 - (C) Adding roughage to the diet.
 - (D) Reducing fruits to the diet.
64. Which of the following is not harmful in case of a person with Gout:
- (A) Oilseeds.
 - (B) Fruit juices.
 - (C) Nuts.
 - (D) Legumes.
65. The diet of a normal seven month old baby should include:
- (A) Breast milk only.
 - (B) Breast milk and soft boiled fish.
 - (C) Soft boiled fish and rice.
 - (D) Breast milk and mashed potato.
66. Cabbage should preferably be avoided by those suffering from:
- (A) Hypothyroidism.
 - (B) Diabetes.
 - (C) Renal Failure.
 - (D) Ischemic Heart Disease.
67. Deficiency of Vitamin B₁₂ is associated with:
- (A) Consumption of Beef.
 - (B) Vegetarian diet.
 - (C) Consumption of milk.
 - (D) Diet devoid of fruits.
68. Common complications of prolonged Total Parenteral Nutrition include all of the following except:
- (A) Electrolyte imbalances.
 - (B) Micronutrient deficiency.
 - (C) Pancreatitis.
 - (D) Liver failure.
69. Which of the following should be avoided by the patients of Chronic Renal Failure:
- (A) Potato.
 - (B) Cucumber.
 - (C) Pumpkin.
 - (D) Coconut water.

70. Which of the following statements is true about the diet of a pregnant or lactating woman:
- (A) Food should be restricted to control nausea during pregnancy.
 - (B) Folate should not be taken for possibilities of neural tube defects of the fetus.
 - (C) Dietary diversity with all proximate principles of diet is to be maintained.
 - (D) Papaya should be taken at plenty to increase the breast milk production.
71. A piece of lemon is always advisable to be taken in diet to increase absorption of:
- (A) Iron.
 - (B) Calcium.
 - (C) Amino acids.
 - (D) Essential Fatty Acids.
72. Diseases that reduce Pancreatic Acid secretions do not usually decrease the digestion and absorption of:
- (A) Animal Protein.
 - (B) Plant protein.
 - (C) Sucrose.
 - (D) None of these.
73. DASH is a dietary modification for:
- (A) Malignancy.
 - (B) Hypertension.
 - (C) Undernutrition.
 - (D) Growth spurt during adolescence.
74. In India all edible salt is supposed to be fortified with:
- (A) Iron.
 - (B) Vitamin B complex.
 - (C) Zinc.
 - (D) Iodine.
75. All of the following are advantages of "Vanaspati" except:
- (A) Improved shelf life.
 - (B) Good source of energy.
 - (C) Good source of unsaturated fatty acid.
 - (D) Can be fortified with vitamins.
76. The role of calcium chloride in cheese preparation is to
- (A) Improve the taste.
 - (B) Improve the flavor.
 - (C) Improve the color.
 - (D) Improve the process of coagulation.

77. The central AGMARK Laboratory is located at which of the following?
(A) Kolkata.
(B) New Delhi.
(C) Mumbai.
(D) Nagpur.
78. What is the full form of SDA in nutrition?
(A) Specific dynamic action.
(B) Specific destroy action.
(C) Species dynamic action.
(D) Species dynamic activity.
79. Which of the biomolecule has highest SDA value?
(A) Fat.
(B) Carbohydrate.
(C) Protein.
(D) Vitamin.
80. Glycemic index is due to the increase in the concentration of:
(A) Glucose.
(B) Galactose.
(C) Mannose.
(D) Sucrose.
81. What is the full form of NPU?
(A) Net protein used.
(B) Net proline utilization.
(C) No protein utilization.
(D) Net protein utilization.
82. One protein energy malnutrition disorder is:
(A) Kwashiorkor.
(B) Heart Failure.
(C) Cancer.
(D) Obesity.
83. When the food is directly given in the veins, it is called _____ nutrition?
(A) Enteral.
(B) Parenteral.
(C) Intravenous.
(D) Saline.

84. A diet high in saturated fats can be linked to which of the following?
(A) Kwashiorkor.
(B) Heart Failure.
(C) Bulimia.
(D) Kidney failure.
85. Citrus fruits are an excellent source of ____ vitamin:
(A) A.
(B) C.
(C) E.
(D) K.
86. This nutrient is needed for making hormones, healthier skin, and to make cell membranes:
(A) Fat.
(B) Carbohydrate.
(C) Fiber.
(D) Vitamin.
87. The acid which converts inactive pepsinogen into pepsin is:
(A) Nitric acid.
(B) Citric acid.
(C) Hydrochloric acid.
(D) Sulphuric acid.
88. Which form of DNA is the most stable in physiological conditions?
(A) A.
(B) B.
(C) Z.
(D) C.
89. Role of Rubisco in Calvin cycle is:
(A) Carbon fixation.
(B) Reduction.
(C) Regeneration.
(D) Oxidation.
90. What is the full form TCA in TCA cycle?
(A) Trichloroacetic acid.
(B) Tricyclic antidepressant.
(C) Tricarboxylic acid.
(D) None of them.

91. Which one is the largest gland in the Human Body?
(A) Pituitary.
(B) Liver.
(C) Pancreas.
(D) Thyroid.
92. Which among the following cell organelles is essential for cellular respiration?
(A) Endoplasmic Reticulum.
(B) Golgi Body.
(C) Mitochondria.
(D) Lysosomes.
93. Fructose is a form of carbohydrate synthesized in the plants. It becomes table sugar by combining with which of the following?
(A) Glucose.
(B) Galactose.
(C) Maltose.
(D) None of them.
94. The bread, cereal, rice and pasta group is a good source of:
(A) Carbohydrate.
(B) Vitamin-C.
(C) Protein.
(D) None of them.
95. Which one is an example of a hydrogenated fat?
(A) Butter.
(B) Margarine.
(C) Olive oil.
(D) None of them.
96. Wilson's disease are at a greater risk for health effects from overexposure to:
(A) Antimony.
(B) Copper.
(C) Zinc.
(D) Gold.
97. The iodine no. of essential fatty acids in vegetable oils:
(A) High.
(B) Low.
(C) Very high.
(D) None of them.

98. Which of the following is/are ketone bodies?
(A) Acetone.
(B) Beta-hydroxybutyrate.
(C) Acetoacetate.
(D) All of these.
99. Where are the enzymes for beta-oxidation present?
(A) Nucleus.
(B) Cytosol.
(C) Mitochondria.
(D) Golgi apparatus.
100. Which of the following Biomolecules simply refers to as "Staff of life"?
(A) Lipids.
(B) Protein.
(C) Vitamins.
(D) Carbohydrate.

