Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Examination – January 2021
V Semester

Class : III UG **Time : 3 Hours**
Major : Food Service Management and Dietetics **Max. Marks : 100**

18BFDC16 Nutritional Biochemistry

Part A **10 x 1 = 10**
Choose the Correct Answer

1. Glycogen is an
   a. Animal starch b. Plant starch
   c. Sedoheptulose d. Pyranose

2. Which one of the following is NOT a component of Electron Transport chain
   a. Niacin b. Biotin
   c. Riboflavin d. Beta carotene

3. Glycolysis is also called as
   a. Emben Meyerhof pathway b. HMP shunt pathway
   c. Uronic acid pathway d. citric acid cycle

4. The conversion of Gycerol 3 P to glycerol requires the enzyme
   a. Hexaokinase b. Glycerokinase
   c. Aldolase d. Enolase

5. An intermediate product in biosynthesis of TG and lecithin is
   a. Phosphatidyl ethanolamine b. Phosphatidyl adenylate
   c. Phosphatidyl cytidylate d. Phosphatidic acid

6. The function of apo E is
   a. cholesterol uptake b. cholesterol transport
   c. cholesterol catabolism d. cholesterol synthesis

7. Proteins can form both carbohydrate and lipids through _____ and _____ aminoacids
   a. essential ,non essential b. aliphatic ,aromatic
   c. glucogenic, ketogenic d. DNA, essential

8. About _____ % protein is made up of glucogenic aminoacids
   a. 40 b. 60 c. 80 d. 100

9. Which causes the milk ejection in females?
   a. ADH b. LTH c. Oxytocin d. ACTH

10. Insulin hormone is secreted by
    a.Thyroid gland b. Parathyroid gland
    c. Beta islets of Langerhans d. Alpha islets of Langerhans

Part B **5 x 6 = 30**

Answer ALL questions

Each answer should not exceed 400 words or two pages

11.a. Enumerate on the functions of enzyme.

(or)

11.b. Write on active transport mechanism.

12.a. Brief on oxidative phosphorylation.

(or)

12.b. Illustrate pentose phosphate pathway.

13.a. Write a note on ketone bodies.

(or)

13.b. Bring down the biomedical importance of lipid metabolism.

14.a. Describe the transamination , demination of aminoacids.

(or)

14.b. Write a note on genetic repair mechanism.

15.a. Enumerate on the mode of action of thyroxin.

(or)

15.b. Write on the functions of pituitary gland.

Part C **5 x 12 = 60**

Answer ALL questions

Each answer should not exceed 800 words or four pages

16.a. Discuss enzymes in terms of properties, classification and its function.

(or)

16.b. Elaborate on electron transport mechanism.

17.a. Enumerate on Citric acid cycle.

(or)

17.b. Explain the release of energy during glucose oxidation in cells.

18.a. Elaborate on beta oxidation of fatty acids.

(or)

18.b. Explain metabolism of phospholipids.

19.a. Enumerate on fate of amino and keto groups.

(or)

19.b. Write on protein biosynthesis.

20.a. Write a note on reproductive hormones in terms of mode of action.

(or)

20.b. Describe the role of insulin and glucagon.

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