

12425

03 Hours / 80 Marks



20223

Seat No.

--	--	--	--	--	--	--	--

- Instructions* –
- (1) All Questions are *Compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.
 - (6) In case student has attempted sub-question of question no. 3 more than once, only first attempt should be considered for assessment.

Marks

30

1. Attempt any SIX of the following:

- a) Define and classify carbohydrates with example. Draw the structure of Glucose and Galactose.
- b) Discuss in brief the steps involved in Glycolysis and give its energetic.
- c) Define the term 'Enzyme'. Enlist the factors affecting enzyme activity. Explain effect of substrate concentration and temperature on rate of enzyme catalysed reaction.
- d) Define proteins. Enlist different types of structure of proteins. Describe secondary structure of proteins.
- e) Explain beta-oxidation of unsaturated fatty acid with energetic of palmitic acid.
- f) Describe lipid profile tests with its clinical significance.
- g) What is biological oxidation ? Explain electron transport chain in details.

2. Attempt any TEN of the following :

30

- a) Give types and functions of lipoproteins.
- b) Give the schematic representation of overall view of TCA cycle.
- c) Explain Watson and Crick model of DNA.
- d) State the causes of
 - i) Phenyl ketonuria
 - ii) Alkaptonuria
 - iii) Ketoacidosis
- e) Define dehydration. Give causes and treatment of dehydration.
- f) Explain different liver function tests.
- g) What are minerals? Give its classification and functions.
- h) Name normal and abnormal constituents of urine. Write significance of abnormal constituents in disease.
- i) What are fatty acids? Classify it based on chemical structure and nutritional requirements with example.
- j) Define and classify vitamins. Give deficiency diseases of vitamin D.
- k) Define anaemia. Explain megaloblastic and sickel cell anaemia.

P.T.O.

