

GURUDAS COLLEGE

B. Sc. SEMESTER V (Honours) Examination, 2020

Online Internal Assessment, 2020

Subject: BOTA

Subject Category: Honours

Course: BOT-A-CC-5-12

Course Name: BIOCHEMISTRY

Full Marks: 10

Date of Examination: 2nd March, 2021

Full Marks – 10

Time – 30 minutes

All questions carry equal marks

The figures in the margin indicate full marks

Answer the following multiple choice questions (any 5): 5X2=10

1. Which of the following statements is true about the (primary) 1° structure of proteins?

- (a) The helical structure of the protein
- (b) Subunit structure of the protein
- (c) Three-dimensional structure of the protein
- (d) The sequence of amino acids joined by a peptide bond

2. Non-cyclic photophosphorylation involves:

- (a) PS I
- (b) PS II
- (c) PS I and PS II
- (d) None of the above

3. Which of the following is an example of Epimers?

- (a) Glucose and Ribose
- (b) Glucose and Galactose
- (c) Galactose, Mannose and Glucose
- (d) Glucose, Ribose and Mannose

4. The transport of Proton across the membrane occurs through

- (a) Active Transport
- (b) Simple diffusion
- (c) Facilitated diffusion
- (d) Secondary Transport

5. Which of the following is true about Michaelis-Menten kinetics?

- (a) K_m , the Michaelis constant, is defined as that concentration of substrate at which enzyme is working at maximum velocity
- (b) It describes single substrate enzymes
- (c) K_m , the Michaelis constant is defined as the dissociation constant of the enzyme-substrate complex
- (d) It assumes covalent binding occurs between enzyme and substrate

6. Which of the following products of glucose oxidation are necessary for oxidative phosphorylation?

- (a) Pyruvate
- (b) NADH and $FADH_2$
- (c) Acetyl CoA
- (d) NADPH and ATP

7. What is an apoenzyme?

- (a) It is a protein portion of an enzyme
- (b) It is a non-protein group
- (c) It is a complete, biologically active conjugated enzyme
- (d) It is a prosthetic group

8. Which type of movement occurs when Na/K pump is used?

- (a) Na ions moves out of the cell and K^+ move in
- (b) K^+ ion moves out of cell and Na ion move in
- (c) Both Na and K^+ ions move inside the cell
- (d) Both Na and K^+ move out of the cell

Instructions for submission of answer scripts

1. Write the front page/top sheet as per instruction.
2. Scan the pages in sequence and make a single PDF file.
3. Rename file as per instruction.
4. Email the PDF file within the stipulated time to the following

Email IDs :

- 1) **botasem4GDC@gmail.com**
- 2) **gdexamhons@gmail.com**
- 3) **botahons2020@gmail.com**