

University of Calcutta
City College Centre (Code 112)
BSc Semester II (CBCS) Examination 2020

ZOOA
Paper CC2-4
Internal Assessment

(Full Marks 10)

Answer any FIVE questions: -

5 x 2 = 10

1. Transmembrane proteins of plasma membrane are present

- a) Only at peripheral sides of PM.
- b) As partly anchored within lipid bilayers.
- c) Across the full span of membrane thickness.
- d) Only at cytoplasmic side of PM.

2. RTK acts as

- a) Membrane receptor.
- b) Membrane receptor as well as enzyme.
- c) Enzyme as well as second messenger .
- d) Receptor as well as growth factor.

3. Apical polarity of epithelial cells can be attributed to-

- a) Tight junction
- b) Gap junction
- c) Desmosome
- d) Hemidesmosome

4. Breakdown of Long chain fatty acid through β -oxidation is carried out by-

- a) Peroxisome
- b) Mitochondria
- c) Both A and B
- d) None of the above

5. ATP Synthase is housed on-

- a) Outer mitochondrial membrane
- b) Inner mitochondrial membrane
- c) Intermembrane space
- d) All of the above

6. Lysosomal protein modification is different from that of secretory or resident proteins. The basis is-

- a) Glycosylation
- b) Branching

c) Phosphorylation of Mannose residues

d) Removal of Mannose residues

7. Protein glycosylation occurs at _____ i _____ residues and the oligosaccharide is synthesised on _____ ii _____ molecule (anchored in ER membrane).

a) i) Cysteine, ii) Sterol

b) i) Valine, ii) Sterol

c) i) Asparagine, ii) Dolichol

d) i) Cysteine, ii) Dolichol

8. Ubiquitination is required for-

a) Glycosylation of proteins

b) Proper folding of proteins

c) Marking for degradation of misfolded proteins

d) Transport of proteins

9. Nucleosome core particle consists of:-

a) 2 copies each of H3, H1, H2A and H2B

b) 2 copies each of H4, H1, H2A and H2B

c) 1 copy each of H3, H4, H2A and H2B

d) 2 copies each of H3, H4, H2A and H2B

10. The length of DNA wrapped around a single nucleosome core particle is:-

a) 147 bp

b) 165 bp

c) 174 bp

d) 40 bp