

PE – 272
(552) M.Sc. ZOOLOGY (Second Semester)
Examination June 2022 Compulsory/Optional
Group -
Paper -III
MOLECULAR CELL BIOLOGY

Time : Three Hours]

[Maximum Marks : 80
[Minimum Pass Marks : 29

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

Q1. Answer the following questions: -

1x10=10

- (a) What is pinocytosis?
- (b) What are the main chemical components of microtubules and microfilaments?
- (c) What is an example of secondary active transport?
- (d) What is Antiport give example?
- (e) What is matrix made of?
- (f) In which cell mitochondria are not found?
- (g) Who discovered nucleus?
- (h) What is called a group of ribosome's combined with each other by m-RNA?
- (i) Name the cancers that starts in the skin or the tissue that line other organs?
- (j) Who give cell theory?

Q 2. Answer the following questions: -

2x5 =10

- (a) Define Desmosomes?
- (b) Write the two name of enzyme of endoplasmic reticulum?
- (c) Define cilia and flagella?
- (d) Define giant chromosome?
- (e) What are intracellular protein?

Section - B

15x4 = 60

Q 3. Describe the fluid mosaic model of plasma membrane. On the basis of this model explain different functions of plasma membrane?

OR

Write short notes on the following:-

- (i) Transport across cell membrane
- (ii) Active transport and pumps

Q 4. Write in detail on role of dynamics microfilaments

Q 5. Discuss in detail about different type of cell- cell adhesion and communication?

OR

Write the structure and function of mitochondria?

Q 6. Describe DNA-structure function and replication?

OR

Write short notes on following:-

- (i) Protein synthesis
- (ii) Morphology and functional elements of Eukaryotic chromosome

-----000-----