

6244

M.Sc. (ZOOLOGY) 1st SEMESTER EXAMINATION, 2019

Paper - IV

CELL AND MOLECULAR BIOLOGY

Time: Three Hours

Maximum Marks: 80

PART – A (खण्ड – अ)

[Marks: 20]

Answer all questions (50 words each).

All questions carry equal marks.

सभी प्रश्न अनिवार्य हैं। प्रत्येक प्रश्न का उत्तर 50 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

PART – B (खण्ड – ब)

[Marks: 40]

Answer five questions (250 words each).

Selecting one from each unit. All questions carry equal marks.

प्रत्येक इकाई से एक-एक प्रश्न चुनते हुए, कुल पाँच प्रश्न कीजिए।

प्रत्येक प्रश्न का उत्तर 250 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

PART – C (खण्ड – स)

[Marks: 20]

Answer any two questions (300 words each).

All questions carry equal marks.

कोई दो प्रश्न कीजिए। प्रत्येक प्रश्न का उत्तर 300 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

PART – A

- Q.1 (i) What is passive transport? Give examples.
- (ii) What is Robertson's Model?
- (iii) What is desmosome?
- (iv) What is CAMP?
- (v) What is apoptosis?
- (vi) What are check points?
- (vii) What is heterophagosome?
- (viii) What is protein trafficking?
- (ix) What is C-value paradox?
- (x) What is cell fusion?

PART – B

UNIT –I

- Q.2 Explain co-transport with suitable examples.
- Q.3 Write short note on -
- (a) Facilitated diffusion
- (b) Membrane potential

UNIT –II

- Q.4 Explain tight junction and gap junction.
- Q.5 Describe cell surface receptor and intra cellular receptors.

UNIT –III

- Q.6 Explain Cycline-dependent kinases.
- Q.7 Give the causes of aging.

UNIT -IV

Q.8 Discuss the Golgi sorting.

Q.9 Describe lysosomal polymorphism.

UNIT -V

Q.10 Describe human karyotype.

Q.11 Give the applications of Hybridoma technology.

PART - C

Q.12 Describe basic structure of bio membrane with the help of fluid mosaic model.

Q.13 Explain cell-cell signaling with suitable examples.

Q.14 Describe cell death.

Q.15 Discuss regulation of intracellular transport.

Q.16 Explain euchromatin and heterochromatin.
