PC- 510

(554) M.Sc. ZOOLOGY (FOURTH SEMESTER)
Semester Examination June-2020
Group – B
Paper -IV

Name/Title of Paper – CELLULAR ORGANIZATION AND MOLECULAR ORGANIZATION

Time : Three Hours] [*Maximum Marks* : 80
[*Minimum Passing Marks* : 29

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित है।
Note : Answer from both the section as directed. The figures in the right-hand margin indicate marks.

SECTION-A

1. Answer the following questions: **1×10 = 10**

(a) What is the scientific name of HIV ?
(b) Where does protein synthesis take place ?
(c) How do chromosome replicate ?
(d) What is intracellular digestion ?
(e) The most common solid tumor – brest colon etc. arise in which cells ?
(f) How many filamentous structure together comprise the cytoskeleton ?
(g) Give one example of chromosomal abnormalities.
(h) Oncogenes do no encode for ..... ?
(i) Nuclear organizer regions (NOR) is found in ..... ?
(j) What is the another name of Lysosomes ?

2. Answer the following questions **2×5 = 10**

(a) How do yeasts reproduce ?
(b) What is the structure of peroxisomes
(c) What is the DNA function ?
(d) What is the function of proto oncogenes ?
(e) What is the main function of nucleolus ?

SECTION-B

Answer the following questions **15×4 = 60**

UNIT-I

3. Describe the general organization and characteristics of Sv40 and HIV viruses.

OR

Explain basic ideas of its application as vectors for gene cloning.

UNIT-II

4. Describe ultra structure and function of Lysosomes.

OR

Explain synthesis and targeting of mitochondrial, mitochondrial protein.

UNIT-III

5. Describe the difference between normal cells and cancer cells.

OR

Write short notes :
(a) Biochemical changes (b) Cytoskeleton change

UNIT-IV

6. Describe the general idea of oncogenes and proto oncogenes.

OR

Write short notes :
(a) Transforming agents.
(b) Tumor suppressor geameses.