PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 600 words.

16. (a) Describe the structure of an Eukaryotic cell with one example.

Or

(b) Explain the compound microscope in detail.

17. (a) Discuss about ribosomes.

Or

(b) Write about the structure and functions of Golgibodies.

18. (a) Explain DNA replication.

Or

(b) Comment on DNA as the genetic material.

19. (a) Discuss about Lemp-bresh chromosomes.

Or

(b) Write about the causes and treatment of cancer.

20. (a) Explain about Meiosis-I in detail.

Or

(b) Discuss about control of gene expression.

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Reg. No. : .....

Code No. : 10700 E **Sub. Code : JMZO 31/ SMZO 31**

B.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2019.

Third Semester

Zoology — Main

CELL AND MOLECULAR BIOLOGY

(For those who joined in July 2016 onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The 'Cell theory ' was proposed by

(a) Kolliker

(b) Robertson

(c) Schleiden and Schwenn

(d) Robert Brown

2. A well-defined prominent nucleus is abseat in
   (a) 'T' cells (b) Prokaryotic cells
   (c) Eukaryotic cells (d) Cancer cells
3. The power-house of the cell is
   (a) Nucleus (b) Chloroplast
   (c) Mitochondria (d) Ribosomes
4. The site of protein-synthesis is
   (a) Nucleus (b) Lysosomes
   (c) Centriole (d) Ribosomes
5. Which is occur at the diploteae stage of meiotic prophase?
   (a) Polyteac chromosomes
   (b) Chiasmcte
   (c) Chromatids
   (d) Lamp-breshchromosomes
6. The controlling centre of the cell is
   (a) Nucleus (b) Lysosomes
   (c) Ribosomes (d) Mitochondria
7. Which is present only in RNA
   (a) Thecmiae (b) Guenine
   (c) Urccil (d) Cytocine
8. tRNA is otherwise called as
   (a) template RNA (b) sRNA
   (c) insoluble RNA (d) hnRNA

9. The cell in which meiosis take place is called
   (a) 'T' cells (b) B cells
   (c) Micocytes (d) Immune cells
10. During cytokinesis, the cytoplasm divides at
   (a) 'M' phase (b) G1 phase
   (c) G2 phase (d) Cleavage

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 250 words.

11. (a) Describe the structure of prokaryotic cell.

Or

(b) Write about the types of electron microscopes.

12. (a) Write the importance of centriole.

Or

(b) Mention the types of endoplasmic reticulum.

13. (a) Comment on Nucleolus.

Or

(b) Describe about polyteae chromosomes.

14. (a) Write the components of DNA.

Or

(b) Comment on DNA finger-print.

15. (a) Explain about 'cell cycle'.

Or

(b) Mention the types of meiosis.