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Reg. No.....

Name.....

M.Sc. DEGREE (C.S.S.) EXAMINATION, FEBRUARY 2021

Third Semester

Faculty of Science

Branch VIII—Zoology

ZY 3CT 12—Course XII—CELL AND MOLECULAR BIOLOGY

(2012—2018 Admissions)

Time : Three Hours

Maximum Weight : 30

Section I (Short Answer Type Questions)

Answer any **ten** *out of twelve.*
Each question carries weight 1.

1. Membrane fluidity.
2. Anti-repressor.
3. Oncogene.
4. Apoptosis.
5. Basal membrane.
6. Simple and facilitated diffusion.
7. Glycocalyx.
8. Desmosomes.
9. Oxidative phosphorylation.
10. Protein sorting.
11. Silencer in gene regulation.
12. RNA interference.

(10 × 1 = 10)

Turn over

Section II (Short Essay Type Questions)

Answer any **five** *out of eight.*
Each question carries weight 2.

13. Differentiate tumour cells with normal cells
14. Elucidate the functions of endoplasmic reticulum.
15. Explain cell cycle control system.
16. Explain GPCR pathway in rod cell of eye.
17. Describe the functions of cell receptors.
18. How cell interactions occurs ?
19. Explain membrane potential
20. How do G protein receptor work ?

(5 × 2 = 10)

Section III (Long Essay Type Questions)

Answer any **two** *out of three.*
Each question carries weight 5.

21. Write an essay on cell cycle.
22. Describe the process of transcription of prokaryotic gene. Comment of post transcriptional processing.
23. Explain cell junctions and its types.

(2 × 5 = 10)