

20U518

(Pages: 2)

Name:

Reg.No:

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC19U ZOL5 B06 - CELL BIOLOGY AND GENETICS

(Zoology - Core Course)

(2019 Admission onwards)

Time : 2.5 Hours

Maximum : 80 Marks

Credit : 4

Part A (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

1. Distinguish between Bright-field and Phase contrast microscope.
2. What is kinetosome?
3. What is facilitated diffusion?
4. What is Endomitosis, what is it's significance?
5. Differentiate Prokaryotic and Eukaryotic ribosomes.
6. Give the structural organization of microtubules.
7. Illustrate the structure of nucleolus.
8. What is angiogenesis? How does it help tumour?
9. What are the two types of epistasis?
10. What is duplicate genes?
11. What are the significance of crossing over?
12. What are sex influenced traits? Give example.
13. Comment on the importance of SRY gene.
14. What is gynadromorphism? What are the types?
15. Comment on albinism.

(Ceiling: 25 Marks)

Part B (Paragraph questions)

Answer *all* questions. Each question carries 5 marks.

16. Elaborate the working of Micrometry.
17. Give a brief description of membrane lipids.
18. Give a brief description of amitosis?
19. Explain the free-radical theory of ageing.
20. Explain Human Rh blood group system.
21. What is the difference between Complete and Incomplete Linkage?
22. What are mutagenic agents? Give examples.
23. Differentiate between Turners syndrome and Klinefelter's syndrome.

(Ceiling: 35 Marks)

Part C (Essay questions)

Answer any *two* questions. Each question carries 10 marks.

24. Give a detailed account of different Scanning Probe Microscopes.
25. Explain the mechanism of meiotic crossing over. What are the kinds and factors influencing crossing over?
26. Define Multiple Alleles. Explain with reference to ABO blood grouping in man.
27. Explain the chromosome mechanism of sex determination in different organisms.

(2 × 10 = 20 Marks)
