

(FOR THE CANDIDATES ADMITTED

23UZY304

DURING THE ACADEMIC YEAR 2023 ONLY)

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : NOVEMBER 2024

B.SC ZOOLOGY

MAXIMUM MARKS: 75

SEMESTER:III

TIME : 3 HOURS

PART - III

23UZY304 -CELL BIOLOGY

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

(K1)

1. Who proposed Cell theory?
a. Darwin b. Schleiden c. Robert hooke d. Schleiden and Schwann
2. Which organelle is known as Protein factories of the Cell?
a.centrosome b.nucleus c. ribosomes d. nucleolus
3. Choose the suicide bag of the Cell_____
a. F1 particle b.mitochondria c. lysosome d lysozyme
4. Find the chromosome which has a centromere close to its end? .
a. metacentric b. acrocentric c. telocentric d. sub metacentric
5. When the tumour arises from the epithelial, cells are called_____
a. sarcoma b. carcinoma c. Osteoma d.fibroma

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. Explain Vital stains.
7. What is Plasmalemma.
8. Define nucleolus.
9. Recall protein synthesis.
10. Brief oncogenes.

SECTION – B

(5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K3)

11. a. Apply the germplasm theory.
(OR)
b. Interpret the role of chemical fixatives in cytology

(CONT...2)

12. a. Compare 70S and contrast 80S ribosome.

(OR)

b. Differentiate between rough and smooth endoplasmic reticulum.

13. a. Sketch the polymorphism of lysosomes.

(OR)

b. Describe the structure of interface nucleus.

14. a. Formulate the steps involved in translation during protein synthesis.

(OR)

b. Experiment on the semi conservative method of DNA Replication.

15. a. Assess the causes of cell aging.

(OR)

c. Find out the stages of cell cycle.

SECTION – C

(5 X 8 = 40 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K4 (Or) K5)

16. a. Sketch and structure of *E.coli* bacteria. (K4)

(OR)

b. Determine the steps involved in the cytological technique. (K4)

17. a. Defend on Fluid mosaic model of plasma membrane. (K5)

(OR)

b. Enumerate the functions of endoplasmic reticulum. (K5)

18. a. Analyze the structure of Golgi complex. (K4)

(OR)

b. Summarize the structure of Mitochondria. (K4)

19. a. Defend on the Watson and Crick model of DNA. (K5)

(OR)

b. Point out the salient features of genetic code. (K5)

20. a. Discuss the stages of Mitosis. (K4)

(OR)

b. Criticize the properties of cancer cells. (K4)