STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086

(For Candidates admitted during the academic year 2019 - 2020 & thereafter)

SUBJECT CODE: 19ZL/AC/GZ24

B.Sc. DEGREE EXAMINATION - APRIL 2023

BRANCH V. A – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY SECOND SEMESTER

COURSE : ALLIED CORE

PAPER : GENERAL ZOOLOGY - II

TIME : 3 HOURS MAX. MARKS: 100

SECTION - A

Answer all the questions

 $(10 \times 3 = 30)$

1. Fill in the Blanks

- a) The Golgi bodies of spermatid that undergo gradual regression and are discarded are called
- b) _____ is the eating of faecal matter.
- c) Fusion of male and female pronuclei is called

2. Match the following

a) Cotyledonary placenta - Rabbit
b) Zonary placenta - Sheep
c) Discoidal placenta - Dogs

3. True or False

- a) Commensalism is a symbiotic relationship between two organisms where one organism is benefited from the other.
- b) Mosquito is an endoparasite
- c) Female Hippocampus exhibits parental care.
- 4. Define reproductive isolation.
- 5. Comment on lethal genes with example.
- 6. What are holandric genes?
- 7. Differentiate innate immunity from acquired immunity.
- 8. Draw the structure of an immunoglobulin.
- 9. Comment on the evolution exhibited by 'Flowers and pollinators'.
- 10. List the types of distribution in animals.

SECTION - B

Answer any FIVE questions

 $(5 \times 6 = 30)$

- 11. Describe the process of oogenesis with a diagram.
- 12. Discuss the importance and applications of IVF.
- 13. Give an account on parental care in Vertebrates.
- 14. Explain mitochondrial inheritance with reference to Kearns Sayre Syndrome.

- 15. Define autoimmunity and add a note on autoimmune disorder with examples,
- 16. Enumerate the different classes of antibody and their functions.
- 17. Describe the mode of dispersal of animals

SECTION - C

Answer any TWO questions

 $(2 \times 20 = 40)$

- 18. Write an essay on 'foetal maternal relationship' on the bases of placentation in mammals.
- 19. Illustrate and explain the pattern of inheritance in the following: a) colour blindness b) ABO blood groups
- 20. Discuss in detail on the types, production, importance and ethical issues in relation to vaccines.
- 21. Give a detailed account on mimicry and colouration.
