Time: 02 Hrs

2022

ZOOLOGY

[P.G.]

(M.Sc. Second Semester End Examination-2022)
PAPER- 203

Full Marks: 40

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as

far as practicable

Illustrate the answers wherever necessary

Use separate Answer script in each Unit

Group - A Marks: 20

Molecular Biology

1. Answer any two questions from the following:

2x2 = 4

- a) What Satalyses the opening and placement of sliding clamps on the DNA?
- b) What would be result if an organism's telomere is mutated and nonfunctional?
- c) Write the function of DNAB.
- d) What is Shine Dalgarno Sequences?

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Z.	Answer	anv	LWO	muesitons	irom	ine	following:

2x4 = 8

- a) How E.coli DNA replication is regulated by Dna A. ATP levels and seq A?
- b) Describe about the + RNA binding site of Ribosome.
- c) Write comparison between DNA Pol-I, II & III.
- d) Write about the charging of t- RNA

3. Answer any one question of the following:

1x8 = 8

- a) Describe the mechanism of RNA editing with diagram in Trypanosomatid.
- b) Write the name and function of maximum proteins / enzymes involved in prokaryotic replication.

Group - B

Marks: 20

Parasitology

4. Answer any two questions from the following:

2x2 = 4

- a) What is phoresis? Give example.
- b) What is zoonosis? Give example.
- c) Write the difference between hard ticks and soft ticks.
- d) Define parasitism.

5. Answer any two questions from the following:

2x4 = 8

- a) Write a short note on giardiasis.
- b) Discuss host—parasite interactions on the basis of cellular and physiological aspect.

- c) Define with proper example
 - i) Symbiosis
 - ii) Commensalism
- d) Write a note on African sleeping sickness.

6.	Answer	any	one	question	of	the	following:

1x8 = 8

- a) Draw and describe the life cycle of Schistosoma Sp.
- b) i) Mention the structure and composition of helminth cuticle.

4

ii) Write an explanatory note on Paragonimiasis.

4