

M.Sc. 3rd Semester Examination, 2022

ZOOLOGY

PAPER – ZOO-395 (Day)

(Practical)

Full Marks : 50

Time : 5 hours

Answer all questions

The figures in the right hand margin indicate marks

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

1. Prepare and identify the bacteria from the given sample using gram staining technique. Write down the procedure in brief. Draw a diagram of your microscopic observation. 6 + 4 + 2
2. (a) Briefly explain the working principle of an autoclave with a labeled sketch.

(Turn Over)

Or

(b) Present the scheme of enumeration of coliforms through multiple tube fermentation method.

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3. Find out the LC_{50} value for the data given below with suitable illustrative comments on your findings. Number of the test animal-20, Toxicity assessment-24 hrs. and 48 hrs.; Pesticide used-Metacid-50.

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Concentration (mg)	Mortality(24 hrs.)	Mortality(48 hrs.)
0.1	00	01
0.2	01	03
0.3	01	05
0.4	03	09
0.5	05	11
0.6	06	14
0.7	09	18
0.8	12	19
0.9	13	20
1.0	14	20

4. Make comments on entomological uniqueness and significance of the following insects : 5×2
- i. _____
- ii. _____
5. Laboratory notebook 5
6. Viva voce. 5
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