

ATAL BIHARI VAJPAYEE VISHWAVIDYALAYA BILASPUR (C.G.)

Pre Ph. D. Course work Examination 2019-20

ZOOLOGY

PAPER II: CW – 02 (TOOLS AND TECHNIQUES)

Model question paper

[Set – II]

Duration - 3.00 Hrs

Max. Marks - 80

Note: Section - A is Compulsory. Answer one question from each unit of Section - 'B'.

Section - A

Q. 1. Answer the following questions in brief.

2 X 10 = 20

- i. How can you define and divide the Biodiversity?
- ii. What is life table? Point out its significance.
- iii. What do you mean by Narcotisation? Point out its effect.
- iv. How soil water is classified.
- v. What is Electrophoresis? Write its types
- vi. What is HPCL? Write its specific use.
- vii. Differentiate between light microscopy and electron microscopy.
- viii. Write the various stages involved in microtomy.
- ix. Write the name of any four insecticides produced by plants.
- x.. What do you mean by median lethal dose? Point out its importance

Section - B

12 X 5 = 60

2. What do you understand with diversity of animals? Discuss species diversity
3. What are the biotic and abiotic factors of an ecosystem?

UNIT II

4. Explain the methods to measure primary and secondary productivity.
5. Write in detail about chemical analysis of water.

UNIT III

6. What is Chromatography? Write its types and discuss any one of them in details.
7. Write an elaborated note on Atomic Absorption Spectroscopy.

UNIT IV

8. Describe microbial staining techniques.
9. Write notes on – (i) Camera Lucida, (ii) Fluorescence Microscope.

UNIT V

10. Write an account of insect pest control by biological and microbial methods.
11. What do you understand with statistics of toxicology. Discuss Behren's method

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