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ROLL NO.....

ZOO. 303/21

III SEMESTER EXAMINATION, 2021

M. Sc. (ZOOLOGY)

PAPER-III

ENVIRONMENTAL BIOLOGY & POPULATION ECOLOGY

TIME: 3 HOURS

MAX.- 80

MIN.- 16

[4]

UNIT-II

Q.2. Write about Xerosere.

OR

Write about Nitrogen Cycle.

UNIT-III

Q.3. Discuss about intrinsic mechanism of population regulation.

OR

Write about Ecotone and Edge Effect, with proper examples.

UNIT-IV

Q.4. What is recent energy scenario of India? Write about the future prospects of Energy resources.

OR

Define WWF and IUCN. Write about in-situ and ex-situ conservation strategies.

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Note: The question paper consists of three sections A, B & C. All questions are compulsory.

Section A- Attempt all multiple choice questions.

Section B- Attempt one question from each unit.

Section C- Attempt one question from each unit.

SECTION 'A'
Multiple Choice Questions

2 × 8 = 16

1. The term Ecosystem was coined by-
(a) Ernst Haeckel (b) Ernst Mayr
(c) Clements (d) Tansley
2. Tick one who is not a author of books on Ecology-
(a) Madav Chadra Dash (b) V.C. Kapoor
(c) Kormondy (d) P.D. Sharma
3. Universal Model of Energy flow was given by -
(a) Kendeigh (b) Clarke
(c) E.P. Odum (d) Chapman

[2]

4. Which one is correct about food chain -
(a) Grazing (b) Detritus
(c) Both of the above (d) None of the above
5. Biotic potential is represented by -
(a) bp (b) p (c) k (d) r
6. Which is not related with community Dynamics -
(a) Climax (b) Seral (c) Home range (d) Pioneer
7. Which one is not related with Sanctuary -
(a) Sitanadi (b) Badalkhol
(c) Barnawapara (d) Indrawati
8. Which one is not a non renewable source of Energy -
(a) Cool (b) Petroleum
(c) Fossil fuel (d) Bio fuel

SECTION 'B'

$4 \times 6 = 24$

Short Answer Type Questions (Word limit 200-250 words.)

UNIT-I

Q.1. What do you know about Estuaries?

OR

Write about Decomposers and Transformers.

[3]

UNIT-II

Q.2. Write about Liebig's law of Minimum.

OR

Write about theories of Ecological Succession.

UNIT-III

Q.3. Write about population growth form.

OR

What do you know about Bioindicators?

UNIT-IV

Q.4. Write about Ecological importance of forest.

OR

Write about project Tiger in the context of Chhattisgarh.

SECTION 'C'

$4 \times 10 = 40$

Long Answer questions (Word limit 400-450 words.)

UNIT-I

Q.1. Describe Energy flow in Ecosystem with various types of Ecological Models.

OR

Describe about structures and stratification of Pond Ecosystem.