# Mid-West University

# **Examinations Management Office**

Chance Examinations-2080

Bachelor level/ B.Sc /7th Semester

Full Marks: 100

Time: 3 hours

Pass Marks: 50

Subject: Ecology and Environmental Biology (ZOO473)

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

#### **GROUP-A**

## 1) Answer any TEN questions in very short

[10x1=10]

- a) Define the term synecology.
- b) What is energy crisis?
- c) Define community.
- d) Who proposed the term 'Niche'?
- e) Why is forest important for mitigation climate change?
- f) Define biogeochemical cycle.
- g) Define nature and natural resources.
- h) What is carbon trade?
- i) Define global warming.
- j) What is meant by trophic level?
- k) Highlights maximum carrying capacity.
- 1) Define ecological energetics.

### **GROUP-B**

## Attempt any EIGHT questions in brief:

[8x5=40]

- 2) What is meant by water pollution? Enlists the major causes of water pollution and mitigation methods.
- 3) Write short notes on hydrogen and hydrocarbon production.
- 4) Define energy crops. How do they support the management of ecosystem?
- 5) Explain energy flow in an ecosystem is unidirectional. Justify.
- 6) What are main causes of climate change and how can be prevented?
- 7) What is population? What are the properties of population?
- 8) What stands for EIA? Write its importance's.
- 9) Write short notes on Kyoto Protocol.
- 10) Explain the carrying capacity?

#### **GROUP-C**

# Answer any FIVE questions in detail.

[5x10=50]

- 11) Define sustainable resources. Discuss natural resources along with its types.
- 12) Elaborate the principles of ecology. Summarize the factors of any ecosystem which influences the any organism.
- 13) Sedimentary cycles play an important role to maintain any ecological system. Justify it in the context of phosphorus cycle.
- 14) Define community. Explain the characteristics of an ecological community.
- 15) State Liebig's law of Minimum. Enlist the environmental limiting factors. Why is it necessary for balance ecosystem? Discuss.
- 16) What is GIS and GPS? Explain their applications for human welfare.

#### THE END