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3 (Sem 2) ZOO M2

2015

ZOOLOGY

(Major)

Theory Paper : 2.2

Full Marks – 60

Time – 2½ hours

The figures in the margin indicate full marks for the questions.

1. Choose the correct answer : 1×7=7
- (a) Concept of ecosystem was put forward by
- (i) A. G. Tansley
 - (ii) Hans Raiter
 - (iii) Ernst Hackel
 - (iv) Lindemann
- (b) Rotten leaves – insect nymph – small fish – big fish is an example of
- (i) Predator food chain
 - (ii) Grazing food chain
 - (iii) Detritus food chain
 - (iv) None of the above

[Turn over

- (c) In Brahmaputra river ecosystem Gangetic dolphin is a
- (i) Secondary consumer
 - (ii) Tertiary consumer
 - (iii) Primary consumer
 - (iv) None of the above
- (d) The part of the earth and atmosphere which support life processes is called
- (i) Biome
 - (ii) Biota
 - (iii) Biosphere
 - (iv) Ecotone
- (e) Which of the following is not an endangered mammalian fauna of N. E. India ?
- (i) Hispid hare
 - (ii) Pigmy hog
 - (iii) Mongoose
 - (iv) Clouded leopard

(f) Which Tiger Reserve of India is shared by another country ?

(i) Balphakram

(ii) Dudhwa

(iii) Priyar

(iv) Manas

(g) In which year the 'IUCN Red List of Threatened species', animals and plants were combined in a single list ?

(i) 1963

(ii) 1994

(iii) 2000

(iv) 2012

2. Distinguish between (any *two*) : $2 \times 2 = 4$

(a) Spatial niche and Trophic niche

(b) In-situ conservation and ex-situ conservation

(c) Sanctuary and National Park

3. Write short notes on (any *two*) : $2 \times 2 = 4$

(a) Minamata disease

(b) Pyramid of energy

(c) Tiger Project.

4. Answer the following (any *three*) : $5 \times 3 = 15$
- (a) Lead pollution and its affect on human health
 - (b) Biomagnification.
 - (c) Pyramid of number and its limitations.
 - (d) Aim and objectives of biosphere reserve.
 - (e) Write a short note on the biotic components of pond ecosystem.
5. What is carrying capacity ? Discuss briefly on the type of carrying capacity and its role in the conservation of wildlife in a protected area.

$2+2+6=10$

Or

What are the green house gases ? Discuss their role in global warming and climate change.

6. Discuss briefly the problems encountered in the management and conservation of wildlife in the Kaziranga National Park. 10

Or

What do you understand by biogeochemical cycle? Discuss the role of bacteria in the cycling of nitrogen in the ecosystem. 2+8=10

7. Name two endangered primates of N. E. India and discuss on the protective behaviour of primates.
2+8=10

Or

What is food-chain and food-web ? Discuss the role of detritus food chain in the functioning of an ecosystem.
2+8=10