

Previous year questions (2016-2020)

Department of Zoology

Nambol L. Sanoi college, Nambol

Question Bank

4th Semester (Elective)

ZOO:404- Biodiversity, Environmental biology, Applied Zoology and Computer Application

UNIT-I: Biodiversity

Objective type questions (1 mark)

- (a) The Indian Wildlife Protection Act was constituted in **(2016)**
- (i) 1962
 - (ii) 1972
 - (iii) 1942
 - (iv) 1952
- (b) Which one of the following is not an IUCN Red List category? **(2017)**
- (i) Schedule I
 - (ii) Extinct in the wild
 - (iii) Critically endangered
 - (iv) Data deficient
- (c) MAB Project stands for **(2018)**
- (i) Man and Biosphere Project
 - (ii) Man and Biome Project
 - (iii) Man and Biodiversity Project
 - (iv) None of the above
- (d) The diversity of the habitats over the total geographical area is called **(2019)**
- (i) alpha diversity
 - (ii) beta diversity
 - (iii) gamma diversity
 - (iv) omega diversity

Very short answer type (1 mark)

- (a) Explain briefly Ramsar sites. **(2016)**

- (b) What is in situ conservation? (2017)
- (c) What is Red Data Book? (2018)
- (d) Define census. (2018)
- (e) What is dealing with the Schedule I of Indian Wild Life (Protection) Act? (2019)

Short answer type (3 marks)

- (a) Describe the different methods adopted in wildlife census. (2016)
- (b) Explain biodiversity hot spots. (2016)
- (c) Differentiate between genetic diversity and species diversity. (2017)
- (d) Write a short note on Kaziranga Wildlife National Park. (2017)
- (e) Distinguish between endangered species and vulnerable species. (2018)
- (f) What do you mean by Ramsar Sites? (2018)
- (g) Distinguish between in situ and ex-situ conservation. (2019)
- (h) Write three functions of IUCN. (2019)

12 Marks questions

- (a) Give detailed list of National Parks and Sanctuaries of India. (2016)
- (b) Explain the causes of biodiversity losses and the arguments on why should we conserve biodiversity. (2017)
- (c) What is biodiversity hot spots? Describe the four famous hot spots of India. (2018)
- (d) Write an account on the concept of wildlife conservation. (2018)
- (e) What is National Park? Give an account of the important National Parks in India. (2019)
- (f) Give a detailed account of the threatened wild mammals of India. (2019)

UNIT-II: Environmental Biology

Objective type questions (1 mark)

- (a) Which of the following phenomena leads to the under population of a particular species? (2016)
 - (i) Immigration
 - (ii) Migration
 - (in) Emigration
 - (iv) Dispersion
- (b) The movement of nutrient elements through the various components of an ecosystem is known as

- (i) nutrient cycling (2017)
 - (ii) mineral cycle
 - (iii) biogeochemical cycle
 - (iv) Both (i) and (iii)
- (c) Natality is characteristics population which means (2018)
- (i) the total number of individuals present per unit area at a given time,
 - (ii) the increase in number of individuals in a population under given environmental conditions
 - (iii) loss of individuals due to death in a population under given environmental conditions
 - (iv) the movement of individuals into and out of population
- (d) Which one of the following shows detritus food chain? (2018)
- (i) Organic wastes → Bacteria → Mollusks
 - (ii) Grass → Insects → Snakes
 - (iii) Plankton → Small fishes → Large fishes
 - (iv) All of the above

Very short answer type (1 mark)

- (a) What is ecological pyramid? (2016)
- (b) Define biomagnification. (2017)
- (c) Define bioinformatics. (2018)
- (d) What do you mean by bio-magnification? (2019)

Short answer type (3 marks)

- (a) Distinguish between habitat and ecological niche. (2016)
- (b) Draw nitrogen cycle and label it. (2016)
- (c) What is ecological succession? Name two types of ecological succession with one example each. (2017)
- (d) Give an account on the ecological pyramids. (2017)
- (e) Write note on the three types of age pyramids of a population. (2018)
- (f) Differentiate between immigration and emigration. (2018)
- (g) Write a short note succession. on ecological.
- (h) Draw a neat labelled sketch of water cycle. (2019)

12 Marks questions

- (a) What are the chief components of an environment? Give an account of Leibig's law of minimum and Shelford's law of tolerance. Comment on the concept of limiting factors. (2016)
- (b) What is pollution? Explain the different types of pollution. (2016)
- (c) Describe Shelford's law of tolerance and Leibig's law of minimum. (2018)
- (d) Explain briefly the different types of environmental pollution. (2018)
- (e) What is ecosystem? Describe in detail the man-made ecosystem. (2019)
- (f) Describe the different layers biosphere in detail. (2019)

UNIT-III: Applied Zoology

Objective type questions (1 mark)

- (a) The pH of water in nursery pond should be maintained at (2016)
- (i) 3-5
 - (ii) 6-7
 - (iii) 8-9
 - (iv) 13-14
- (b) Which of the following statement is wrong? (2018)
- (i) The culturable fish should be herbivorous in nature.
 - (ii) The culturable fish should be fast growing.
 - (ii) The culturable fish should be able to resist against diseases.
 - (iv) The culturable fish should not be prolific breeder.
- (c) The life span of honeybee drone is (2019)
- (i) 3-4 months
 - (ii) 1-2 months
 - (iii) 6-7 months
 - (iv) 10-12 months

Very short answer type (1 mark)

- (a) What is meant by fish schooling? (2016)
- (b) Why is silk called the 'Queen of Textiles'? (2017)
- (c) To which family Bombyx mori belongs? (2017)

- (d) What do you mean by fish schooling? (2018)
- (e) Why is sericulture called agro-based industry? (2019)

Short answer type (3 marks)

- (a) Describe the process of preparing a fish pond. (2016)
- (b) Point out the difference fish meal and fish flour. (2016)
- (c) Explain the different types of diseases of Tasar silkworm. (2017)
- (d) Draw and label the 5th instar larva of mulberry silkworm. (2017)
- (e) Write the medicinal values of honey and its importance as a food. (2018)
- (f) Draw a neat sketch of beehive and label the following: (2018)
- (i) Queen cell
 - (ii) Drone cell
 - (ii) Worker cell
- (g) Name the different types of diseases of silkworm. (2019)
- (h) Name three ornamental fishes with scientific name. (2019)

12 Marks questions

- (a) What is sericulture? Give an account of the life history of mulberry silkworm and mention the different diseases of silkworm. (2016)
- (b) What is apiculture? Describe the life history and social organization of honeybee. (2017)
- (c) What is pisciculture? Explain the different pisciculture techniques practised in pond fish culture in Manipur. (2017)
- (d) What is serigenous insect? Describe the life history of mulberry silkworm and mention the different diseases of silkworm. (2018)
- (e) Explain how you will prepare your pond if you want to use it for pisciculture and mention the different pisciculture techniques you adopted. (2018)
- (f) "Honeybee is a colonial insect." Explain the statement, Mention the economic utility of honeybees. (2019)

Unit- IV: Computer Application

Objective type questions (1 mark)

- (a) 1024 x 1024 bytes is equal to (2016)
- (i) one kilobyte
 - (ii) one megabyte
 - (iii) one gigabyte
 - (iv) one terabyte
- (b) A digital computer is better than an analog computer in terms of (2016)
- (i) speed
 - (ii) accuracy
 - (iii) cost
 - (iv) versatility
- (c) Keyboard of a computer is (2016)
- (i) an input device
 - (ii) an output device
 - (iii) a memory device
 - (iv) a software
- (d) The concept of Internet was given by (2017)
- (i) Li Leonard Kleinrock
 - (ii) J. C. R. Licklider
 - (iii) Robert Metcalfe
 - (iv) Tim Berners-Lee
- (e) Microsoft Word (MS-Word) made its first appearance in (2017)
- (i) 1981
 - (ii) 1982
 - (iii) 1983
 - (iv) 1984
- (f) Which among the following is a search engine? (2017)
- (i) <http://www.dmoz.org>
 - (ii) <http://www.ask.com>
 - (iii) <http://www.infomine.ucr.edu/>
 - (iv) <http://www.looksmart.com>

(g) Google was founded by (2017)

- (i) David Filo and Jerry Yang
- (ii) Larry Page and Sergey Brin
- (iii) Garrett Gruener and David Warthen
- (iv) Sabeer Bhatia

(h) 1 GB of memory is equivalent to (2018)

- (i) 1024 bytes
- (ii) 1024 KB
- (iii) 1024x1024 bytes
- (iv) 1024x1024x1024 bytes

(i) Keyboard of a computer is (2018)

- (i) an input device
- (ii) an output device
- (iii) a memory device
- (iv) a software device

(f) Who made the first portable laptop computer? (2018)

- (i) Adam Osborne
- (ii) Robert Metcalfe
- (iii) J. C. R. Licklider
- (iv) Tim Berners-Lee

(g) Function keys on the top of the keyboard are (2019)

- (i) F to F2
- (ii) F₁ to F3
- (ii) F5 to F10
- (iv) F to F12

(h) RAM is a (2019)

- (i) volatile memory
- (ii) non-volatile memory
- (iii) both volatile memory and non-volatile
- (iv) None of the above.

- (i) The output device of a computer is (2019)
- (i) scanner
 - (ii) floppy disk
 - (iii) printer
 - (iv) CD-Rom

Very short answer type (1 mark)

- (a) Name the device that allows you to connect and communicate with another computer through telephone lines. (2016)
- (b) Define operating system. (2016)
- (c) Give the long form of SPSS. (2016)
- (d) What is bioinformatics? (2017)
- (e) What are computer peripherals? (2017)
- (f) Write the full form of SPSS? (2018)
- (g) What is minitab? (2018)
- (h) What is the function of modem? (2019)
- (i) What does LAN stand for? (2019)
- (j) What is Wi-Fi? (2019)

Short answer type (3 marks)

- (a) What are the functions of CPU? (2016)
- (b) Why is Charles Babbage called as the father of the Modern Computer Science? (2016)
- (c) Explain the memory unit of a digital computer. (2016)
- (d) Write a note on programming languages. (2017)
- (e) Differentiate between LAN and WAN. (2017)
- (f) Explain the phylogenetic analysis. (2017)
- (g) Write note on the computer application in biological sciences. (2018)
- (h) Distinguish between hardware and software. (2018)
- (i) Why do we need an operating system in running a computer? (2018)
- (j) Why do we need an operating system in running a computer? (2019)
- (k) What are the functions of CPU? (2019)
- (l) What are the advantages of e-learning to the traditional teaching-learning process? (2019)

MSC