

EXEMPLAR PROBLEMS IN BIOLOGY - CLASS XII

(Corrections in the questions)

Chapter 1

Reproduction in Organisms

Multiple Choice Questions

3. Asexual method of reproduction by binary fission is common to which of the following?
- Some eukaryotes
 - All eukaryotes
 - Some prokaryotes
 - All prokaryotes

Options

- i and ii
- ii and iii
- i and iii
- iii and iv

11.

Choose the correct answer from the options given below:

- | | |
|-------------------|-------------------|
| a. i, ii and iii; | b. i, iii and iv |
| c. i, ii and iv | d. ii, iii and iv |

Chapter 3

Human Reproduction

Multiple Choice Questions

1.

- c. Polyspermy in mammals is prevented by the chemical changes in the egg surface

2. Identify the correct statement from the following:

- High levels of estrogen triggers the ovulatory surge.
- Oogonial cells start to proliferate and give rise to functional ova in regular cycles from puberty onwards.
- Sperms released from seminiferous tubules are highly motile.
- Progesterone level is high during the post ovulatory phase of menstrual cycle.

Chapter 5

Principle of Inheritance and Variation

Multiple Choice Questions

15. It is said that Mendel proposed that the factor controlling any character is discrete and independent. His proposition was based on the
- results of F_3 generation of a cross.
 - observations that the offspring of a cross made between the plants having two contrasting characters shows only one character without any blending.
 - self pollination of F_1 offsprings.
 - cross pollination of F_1 generation with recessive parent.

Chapter 6

Molecular Basis of Inheritance

Multiple Choice Questions

24. The RNA polymerase holoenzyme transcribes
- the promoter, structural gene and the terminator region.
 - the promoter and the terminator region.
 - the structural gene and the terminator region.
 - the structural gene only.

Chapter 7

Evolution

Multiple Choice Questions

- 15.
- Chimpanzee

Chapter 8

Human Health and Diseases

Multiple Choice Questions

5. The sporozoites that cause infection, when a female *Anopheles* mosquito bites a person, are formed in
- liver of the person
 - RBCs of mosquito
 - salivary glands of mosquito
 - intestine of mosquito
- 11.
- the ability to differentiate pathogens or foreign molecules from self cells increases.
19. Which of the following is not a lymphoid tissue?
- Spleen
 - Tonsils
 - Pancreas
 - Thymus
21. Haemozoin is a
- precursor of hemoglobin
 - toxin released from *Streptococcus* infected cells
 - toxin released from *Plasmodium* infected cells
 - toxin released from *Haemophilus* infected cells

Chapter 9

Strategies for Enhancement in Food

Production

Multiple Choice Questions

- 1.
- Relation of heterogenous populations to its environment.

- 13.
- | | |
|--------------|---------------|
| a. i and iii | b. i and ii |
| c. i and iv | d. ii and iii |
- 16.
- d. aromatic amino acids
- 20.
- a. Bamboo
23. The agriculture sector of India employs about
- | |
|----------------------------------|
| a. 50 per cent of the population |
| b. 70 per cent of the population |
| c. 30 per cent of the population |
| d. 60 per cent of the population |

Chapter 10

Microbes in Human Welfare

Multiple Choice Questions

- 2.
- | |
|------------------------|
| a. anaerobic digesters |
| b. floc |
19. Delete the question

Chapter 11

Biotechnology: Principles and Processes

Multiple Choice Questions

6. Which of the following is not required in the preparation of a recombinant DNA molecules?
- | |
|-----------------------------|
| a. Restriction endonuclease |
| b. DNA ligase |
| c. DNA fragments |
| d. <i>E. coli</i> |
14. Which of the following is not a source of restriction endonuclease?
- | |
|--------------------------------------|
| a. <i>Haemophilus influenza</i> |
| b. <i>Escherichia coli</i> |
| c. <i>Entamoeba coli</i> |
| d. <i>Bacillus amyloliquifaciens</i> |

Chapter 12

Biotechnology and its Applications

Multiple Choice Questions

7. The site of production of ADA in the body is
- | |
|-----------------|
| a. Erythrocytes |
| b. Lymphocytes |

- c. Blood plasma
- d. Osteocytes

15. Silencing of a gene could be achieved through the use of
- a. RNAi only
 - b. antisense RNA only
 - c. both RNAi and antisense RNA
 - d. none of the above

Chapter 15

Biodiversity and Conservation

Multiple Choice Questions

5. Which of the following is not a feature of biodiversity hotspots?
- a. Large number of species
 - b. Abundance of endemic species
 - c. Mostly located in the polar regions
 - d. Mostly located in the tropics
17. Which of the following group exhibit more species diversity?
- a. Gymnosperms
 - b. Algae
 - c. Bryophytes
 - d. Fungi

Chapter 17

Answers to Multiple-choice Questions (Corrections in the answers)

Chapter 3: Human Reproduction

2-d

Chapter 5: Principle of Inheritance and Variation

3-a; 16-d

Chapter 8: Human Health and Diseases

5-d

Chapter 9: Strategies in Enhancement of Food Production

15-a

Chapter 10: Microbes in Human Welfare

2-a

Chapter 13: Organisms and Populations

5-d; 17-b; 20-a

Chapter 15: Biodiversity and Conservation

13-c

Chapter 16: Environmental Issues

10-a

© NCERT
not to be published