

BIOLOGY

BOOKS - SUPER COMPANION 5 IN 1

SUPPLEMENTARY EXAMINATION PAPER JUNE -2016



1. Mention the function of sertoli cells of testes.



2. What are plasmids?



3. Name the hormone secreted by corpus luteum.



4. Which bioactive molecule is used as an immunosuppressive agent?



Watch Video Solution

5. What are interferons?



Watch Video Solution

6. Name one microbe used in the production of single cell protein.



7. Name the theory which attempts to explain 'origin of universe'.



Watch Video Solution

8. Define Biochemical Oxygen Demand (BOD).



9. Name the diagnostic test for AIDS.



Watch Video Solution

10. State Gause's 'Competitive Exclusion Principle'.



Watch Video Solution

Part B

1. What are hermaphrodites?



Watch Video Solution

2. Write four symptoms of Down's Syndrome.



Watch Video Solution

3. What is adaptive radiation?



4. Draw a labelled diagram of a Biogas plant.



Watch Video Solution

5. 'Alien species invasion leads to extinction of indigenous species' - Justify this statement by considering two animals as examples.



6. What is Ex-Situ conservation? Mention two examples.



Watch Video Solution

7. What is cross-breeding? Name a new breed developed by crossing Bikaneri ewes and Marino rams.



8. Mention two techniques to make Host competent in r-DNA technology.



Watch Video Solution

Part C

1. Write the Homozygous Genotype of 'A', 'B' and 'O' blood groups.



2. Explain the structure of matured pollen grain.



Watch Video Solution

- **3.** Name the vegetative propagules of the following plants. (a) Agave.
- (b) Ginger.
- (c) Bryophyllum.



4. Differentiate between homologous and analogous organs by giving plant example.



Watch Video Solution

5. Draw a net labelled diagram of simple stirred tank bioreactor.



Watch Video Solution

6. What are biogeochemical cycles? Mention two types by giving an example for each.



7. Name the pathogen, vector and symptom of malaria.



Watch Video Solution

8. Write the diagrammatic representation of pyramid of energy.



Part D Section I

1. Describe the structure of anatropous ovule with labelled diagram.



Watch Video Solution

2. What is contraception Briefly explain two barrier methods and two surgical methods to present conception.



3. Explain incomplete dominance with reference to flower colour in Snapdragon.



4. Explain working of Lac-operon with diagrammatic representation.



5. List out the salient features of double helix model of DNA.



Watch Video Solution

6. Draw a neat labelled diagram of sectional view of human female reproductive system.



Watch Video Solution

Part D Section li

1. Give the meaning of the following terms.
(a) Explant
(b) Totipotency
(c) Somaclones
(d) Somatic hybrids
(e) Micropropagation.
Watch Video Solution
2. Explain the role of microbes in household
food products.



3. What is population growth? Explain factors responsible for fluctuating population density.



Watch Video Solution

4. One of the applications of biotechnology is the production of insect resistant crop plants."

Justify the statement with reference to Bt-cotton.



5. Discuss the consequences of global warming and ozone layer depletion.

