



BIOLOGY

BOOKS - SUPER COMPANION 5 IN 1

EXAM QUESTION PAPER JULY 2015

Part A

1. What is embryogenesis ? Mention two important events that occurred during embryogenesis.



[Watch Video Solution](#)

2. Mention the asexual reproductive structures of Penicillium.



[Watch Video Solution](#)

3. Name the fungus that produces cyclosporin
A.



[Watch Video Solution](#)

4. Lactose is termed as inducer in lac operon.

Give reason.



Watch Video Solution

5. What are eurythemal organism ?



Watch Video Solution

6. Define transcription?



Watch Video Solution

7. Retroviruses are disarmed before using to deliver desirable genes into animal cells. Why?



Watch Video Solution

8. What is saltation?



Watch Video Solution

9. Disposal of sewage into water without proper treatment may cause outbreak of serious diseases. Give reason.



[Watch Video Solution](#)

Part B

1. How does fragmentation of large habitats due to human activities lead to population decline?



[Watch Video Solution](#)

2. Mention any two natural methods of birth control.



[Watch Video Solution](#)

3. Mention the possible genotypes of A and B blood group individuals.



[Watch Video Solution](#)

4. Write two examples for loss of biodiversity due to alien species invasions.



[Watch Video Solution](#)

5. Placenta is the structural and functional unit between foetus and maternal body, Substantiate the statement.



[Watch Video Solution](#)

6. What is gene therapy? Name the disorder to which clinical gene therapy was given first.



Watch Video Solution

7. The shape of RBCs of sickle cell anaemia patients change to elongated sickle like structure. Give reason.



Watch Video Solution

8. Classify restriction enzymes. Mention the function of each.



[Watch Video Solution](#)

Part C

1. Name the pioneer species in primary succession and primary succession in water.



[Watch Video Solution](#)

2. What is a heterothallic condition?

Differentiate between staminate and pistillate flowers.



[Watch Video Solution](#)

3. What are cleistogamous flowers ? Write their significance .



[Watch Video Solution](#)

4. How do the following assisted reproductive technologies assist the couples to have children? (a) In vitro Fertilization (b) Zygote Intrafallopian Transfer .(c) Gamete Intra Fallopian Transfer



[Watch Video Solution](#)

5. Name the six stages of human evolution in the correct sequence.



[Watch Video Solution](#)

6. What is contact inhibition ? Mention the types of tumours .



Watch Video Solution

7. Draw a labelled diagram of plasmid PBR 322.



Watch Video Solution

8. In which ways genetically modified plants are useful?



Watch Video Solution

Part D

1. (a) Single cell proteins can be used as an alternate source of proteins for human nutrition. Illustrate with two examples.

(b) How can tissue culture be applied to

recover healthy plants from virus-infected plants?



[Watch Video Solution](#)

2. Write the events of development of female gametophyte in correct order.



[Watch Video Solution](#)

3. What is incomplete dominance? Explain inheritance of flower colour in snapdragon



Watch Video Solution

4. Write a diagrammatic representation of life cycle of HIV.



Watch Video Solution

5. Describe the parts of a biogas plant with a labelled diagram.



Watch Video Solution

6. Describe Frederick Griffith's experiment to show transformation in bacteria.



Watch Video Solution

7. (a) Define the following terms :(i)

Commensalism.

(ii) Brood parasitism.

(iii) Mutualism



Watch Video Solution

8. Draw a neat labelled diagram of human male reproductive system .

Mention four basic processes that fluctuate the density of a population in a given habitat.



[Watch Video Solution](#)

9. Describe the process of translation of mRNA.



[Watch Video Solution](#)

10. Explain the important steps involved in the process of decomposition.



Watch Video Solution

11. (a) Explain the types of outbreeding process employed to improve desirable qualities of animals .

(b) Write any two processes dealt with to increase the yield and quality of milk in dairy farm management .





[Watch Video Solution](#)

12. What is Eutrophication? Discuss the phenomenon of accelerated eutrophication.



[Watch Video Solution](#)