



# BIOLOGY

**BOOKS - VGS PUBLICATION-BRILLIANT**

## MODEL PAPER 9

### Section A

**1. Differentiate osmosis from diffusion.**



**Watch Video Solution**

2. Define the terms quiescence and dormancy.



[Watch Video Solution](#)

3. What is transduction ? Who discovered it and in which organism ?



[Watch Video Solution](#)

4. Who had proposed the chromosomal theory of the inheritance?



[Watch Video Solution](#)

5. What are the components of a nucleotide ?



[Watch Video Solution](#)

6. In a typical DNA molecule the proportion of thymine is 30 % of the N bases. Find out the percentages of other N bases.



[Watch Video Solution](#)

7. What are cloning vectors ? Give an example.



[Watch Video Solution](#)

8. What is Green Revolution ? Who is regarded as Father of Green Revolution ?



[Watch Video Solution](#)

9. Give two examples of fungi used in SCP production.





[Watch Video Solution](#)

**10.** What is Nucleopolyhedrovirus is being used for nowadays?



[Watch Video Solution](#)

**11.** Name the muscles that help in normal breathing movements.



[Watch Video Solution](#)

**12.** What are the columns of Bertin ?



**Watch Video Solution**

**13.** Distinguish between red muscle fibers and white muscle fibers.



**Watch Video Solution**

**14.** What is corpus callosum?



**Watch Video Solution**

**15.** Colostrum is very much essential for the newborn infants. Justify.



**Watch Video Solution**

**16.** Write the names of any four mononuclear phagocytes.



**Watch Video Solution**

**17.** Define gestation period. What is the duration of gestation period in the human beings ?



**Watch Video Solution**

**18.** Mention the advantages of "actational amenorrhea method'.



**Watch Video Solution**



**19.** What is popularly called 'Guardian Angel of Çell's Genome'?



**Watch Video Solution**

**20.** What is tomogram?



**Watch Video Solution**

**Section B**

1. What is meant by plasmolysis ? How is it useful in our daily life ?



**Watch Video Solution**

2. What are the steps involved in formation of a root nodule?



**Watch Video Solution**

3. Explain different types of co-factors.



[Watch Video Solution](#)

4. Define RQ. Write a short note on RQ.



[Watch Video Solution](#)

5. Explain the structure of T-even Bacteriophages .



[Watch Video Solution](#)

6. Mention the advantages of selecting pea plant for experiment by Mendel.



**Watch Video Solution**

7. What are the important features of Genetic code ?



**Watch Video Solution**

**8.** List out the beneficial aspects of transgenic plants.



**Watch Video Solution**

**9.** What are the functions of liver ?



**Watch Video Solution**

**10.** What are the major transport mechanisms for  $CO_2$ ?- Explain.



[Watch Video Solution](#)

**11.** Draw a labelled diagram of the T.S. of the spinal cord of man.



[Watch Video Solution](#)

**12.** Write a note on Addison's disease and Cushing's syndrome.



[Watch Video Solution](#)

**13.** How is sex determined in human beings ?



**Watch Video Solution**

**14.** Write a short note on the theory of mutations.



**Watch Video Solution**

**15.** What is meant by genetic drift ? Explain genetic drift citing the example of Founder

Effect.



[Watch Video Solution](#)

**16.** List out the various steps involved in MOET."



[Watch Video Solution](#)

## Section C

**1.** Explain the reactions of Calvin cycle.





[Watch Video Solution](#)

2. Explain briefly the various processes of recombinant DNA technology.



[Watch Video Solution](#)

3. You are a Botanist working in the area of plant breeding. Describe the various steps that you will undertake to release a new variety.



**Watch Video Solution**

4. Write notes on the working of the heart of man.



**Watch Video Solution**

5. Describe female reproductive system of a woman with the help of a labelled diagram.



**Watch Video Solution**

6. What is crisscross inheritance ? Explain the inheritance of one. " sex linked recessive character in human beings.



**Watch Video Solution**