



Perfect solution to all problems

Tips, Tricks, General Knowledge, Current Affairs, Latest Sample,
Previous Year, Practice Papers with solutions.

CBSE 12th Biology 2010 Unsolved Paper Outside Delhi

By Solution: <http://www.4ono.com/cbse-12th-biology-previous-year-solved-papers/>

Note

This pdf file is downloaded from www.4ono.com. Editing the content or publicizing this on any blog or website without the written permission of [Rewire Media](#) is punishable, the suffering will be decided under

DMC

4ono.com 4ono.com

CBSE 12th Biology 2010 Unsolved Paper Outside Delhi

TIME - 3HR. | QUESTIONS - 30

THE MARKS ARE MENTIONED ON EACH QUESTION

Q. 1. Mention the site where syngamy occurs in amphibians and reptiles respectively.

1 mark

Q.2. How is snow-blindness caused in humans? *1 mark*

Q. 3. Name one autosomal dominant and one autosomal recessive. Mendelian disorder in human. *1 mark*

Q. 4. How is the action of exonuclease different from that of endonuclease? *1 mark*

Q. 5. India has more than 50,000 strains of rice. Mention the level of biodiversity it represents. *1 mark*

Q. 6. Mention the information that the health workers derive by measuring BOD of a water body. *1 mark*

Q. 7. Name the enzyme involved in the continuous replication of DNA strand. Mention the polarity of the template strand. *1 mark*

Q. 8. Offspring's derived by asexual reproduction are called clones. Justify giving two reasons. *1 mark*

SECTION – B

Q. 9. Mention the role of ribosomes in peptide - bond formation. How does ATP facilitate it? *2 mark*

Q. 10. How do copper and hormone releasing IUDs act as contraceptives? Explain *2 mark*

Q. 12. A recombinant DNA is formed when sticky ends of vector DNA and foreign DNA join. Explain how the sticky ends are formed and get joined. *2 mark*

- Q. 13. (i) Mention the number of primers required in each cycle of polymerase chain reaction (PCR). Write the role of primers and DNA polymerase in PCR**
(ii) Give the characteristic feature and source organism of the DNA polymerase in PCR. 2 mark

Q. 14. Define the term, health, mention any two ways of maintaining it. 2 mark

OR

Why does a doctor administer tetanus antitoxin and not a tetanus vaccine to a child injured in a roadside accident with a bleeding wound.? Explain.

Q. 15. Giving two reasons explain why there is more species biodiversity in tropical Latitudes than in temperate ones. 2 mark

Q. 16. Name an opioid drug and its source plant. How does the drug affect the human body? 2 mark

Q. 17. Mention the major cause of air pollution in metro cities. write any three ways by which it can be reduced. 2 mark

Q. 18. (a) Name the source of Taq polymerase. Explain the advantage of its use in biotechnology. 2 mark

SECTION - C

Q.19. (i) Write the characteristics features of anther, pollen and stigma of wind pollinated flowers.

(ii) How do flowers reward their insect pollinators? Explain. 3 marks

Q.20. (i) Why are grasshopper and Drosophila said to show male heterogamy? Explain.

(ii) Explain female heterogamy with the help of an example. 3 marks

Q.21. In a series of experiments with Streptococcus and mice F. Griffith concluded that R-strain bacteria had been transformed. Explain. 3 marks

Q.22. (a) How does the Hardy – Weinberg's expression ($p^2 + 2pq + q^2 = 1$) explain that genetic equilibrium is maintained in a population? 3 marks

(b) List any two factors that can disturb the genetic equilibrium.

Q. 23. Name the insect pest that is killed by the products of cryIAC gene. Explain how the gene makes the plant resistant to the insect pest. 3 marks

- Q.24. (i) Mention the property that enables the explants to regenerate into a new plant.**
- (ii) A banana herb is virus-infected. Describe the method that will help in obtaining healthy banana plants from this diseased plant. 3 marks**

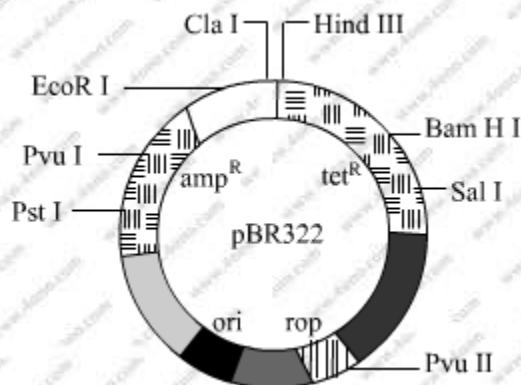
Q. 25. Mention the product and its use produced by each of the microbes listed below:

- (i) Streptococcus. (ii) Lactobacillus. (iii) Saccharomyces Cerevisiae. 3 marks**

Q. 26. (i) Name the organism in which the vector shown is inserted to get the copies of the desired gene.

- (ii) Mention the area labelled in the vector responsible for controlling the copy number of the inserted gene.**

- (iii) Name and explain the role of a selectable marker in the vector shown. 3 marks**



Q. 27. How do organisms like fungi, zooplanktons and bears overcome the temporary short-lived climatic stressful conditions? Explain. 3 marks

SECTION – D

Q. 28. Describe in sequence the events that lead to the development of a 3-celled pollen grain from microscope mother cell in angiosperms. 5 marks

Q. 29. (a) State the law of independent assortment. 5 marks

- (b) Using Punnett Square demonstrate the law of independent assortment in a cross involving two heterozygous parents.**

OR

How did Alfred Hershey and Martha Chase arrive at the conclusion that DNA is the genetic material?

Q. 30. (a) Why are herbivores considered similar to predators in the ecological context?

Explain.

(b) Differentiate between the following interspecific interactions in a population:

(i) Mutualism and Competition.

(ii) Commensalism and Amensalism. 5 marks

