

# GUJCET 2024 Question Paper Mar 31 (Biology)

---

**Ques 1. Which of the following sexually transmitted infections are spread by other means besides sexual intercourse?**

**Ans.** Hepatitis - B

**Ques 2. What does the pointed 'X' in the figure below represent?**

**Ans.** Tumbaika

**Ques 3. On which chromosome of each parent is the gene controlling  $\beta$  - thalassemia located?**

**Ans.** 11<sup>th</sup>

**Ques 4. In in vitro fertilization, the process in which more than 8-celled embryos are transferred to the uterus to complete further development is called what?**

**Ans.** IUT

**Ques 5. If mother's blood group is 'A' and father's blood group is 'O', then what can be the blood group of their child?**

**Ans.** A or O



**Ques 6. "The fetus never passes through the adult stages of other animals" said? Who said this statement?**

**Ans.** Carl Ernst von Bayer

**Ques 7. Which of the following is an example of function membership?**

**Ans.** Sweet potatoes and potatoes

**Ques 8. Which of the following does not affect the Hardy-Weinberg equilibrium?**

**Ans.** Adaptive diffusion

**Ques 9. How many types of receptors are present in a cell?**

**Ans.** 61

**Ques 10. If a double-stranded DNA contains 30% adenine, state the percentage of cytosine in the same DNA.**

**Ans.** 20%

**Ques 11. Based on which of the following symptoms, doctor 'X' will diagnose the patient with pneumonia.**

**Ans.** Lips and fingernails have turned gray and blue.

**Ques 12. Which of the following groups is included in the secondary lymphatic organs?**

**Ans.** Segments of duodenum, tonsils, small intestine pairs

**Ques 13. What is cirrhosis?**



**Ans.** Liver disease caused by excessive alcohol addiction.

**Ques 14.** Which of the following statements is correct?

- (i) Baculoviruses are considered best members for species-specific, short-spectrum insecticide applications.
- (ii) *Bacillus thuringiensis* is used to control butterfly caterpillars.
- (iii) Use of ladybirds is very beneficial in getting rid of mosquitoes.
- (iv) *Trichoderma* fungi are used in the treatment of diseased animals under biocontrol.

**Ans.** Both (i) and (ii)

**Ques 15.** DNA polymerase isolated from which of the following bacteria is used in PCR method.

**Ans.** *Thermos aquaticus*

**Ques 16.** ELISA method works on which of the following principles?

**Ans.** Antigen-antibody interactions

**Ques 17.**  $\alpha$  - 1 antitrypsin is used to treat which disease?

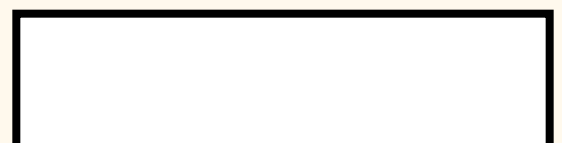
**Ans.** emphysema

**Ques 18.** In which mechanism specific mRNA is inactivated after binding to complementary dsRNA?

**Ans.** RNAi

**Ques 19.** Which naturalist gives an explanation of species-territory relationships?

**Ans.** Alexander von Humboldt



**Ques 20. What interaction occurs between oceanic and cloven fish?**

**Ans.** Cohabitation

