

KENDRIYA VIDYALAYA SITAPUR (FIRST SHIFT)

UNIT TEST II- (2023-24)

CLASS-XII

SUBJECT –BIOLOGY

MM-40

TIME-90 MINUTES

Note:- This question paper consists of four sections . Section –A (MCQs) of one mark each.

SECTION –B (CASE BASED AND SOURCE BASED QUESTIONS) of one marks each.

SECTION –C (ASSERTION & REASON BASED QUESTIONS) of one marks each.

SECTION-D (VERY SHORT /SHORT AND LONG ANSWER QUESTIONS) of 1, 2,3 and 5 marks each.

SECTION –A (MCQs)

- 1) Who proposed that the ratio between Adenine and Thymine and Guanine and Cytosine are constant?
a. Watson and crick b) Erwin chargaff c) Griffith d) Hershey and Chase
- 2) Which human chromosome has least gene?
a. First b) Second c) Y chromosome d) none of these
- 3) Homologous organs shows what type of evolution?
a) Divergent b) Convergent C) Linear D)none of these
- 4) The brain capacity of Neanderthal man was:-
a) 900cc c) 1100cc
b) 1400cc d) 1200cc
- 5) Which method is not used to detect cancer?
a. Biopsy b) CBC c) MRI d) Computed tomography
- 6) Heroin is commonly called:-
a. Cocaine b) Morphine c) Smack d)none of these
- 7) Which is not obtained from Cannabis sativa?
a) Marijuana b) Hashish c) Ganja d) coke
8. Fleming, Chain and Florey were awarded Nobel Prize for the discovery of :-
a)DNA b) RNA c) Penicillin d) Tetracyclin
9. Propionibacterium sharmanii is used to produce :-
a)Curd b) Swiss cheese c) butter d) Roquefort cheese
10. Which of the following is used as immunosuppressive agent:- .
a)Statin b) Cyclosporin -A c) Pectinase d) none of these

SECTION –B (CASE BASED AND SOURCE BASED QUESTIONS)

11. Some of the human diseases are caused by protozoans too. You might have heard about malaria, a disease man has been fighting since many years. Plasmodium, a tiny protozoan is responsible for this disease. Different species of Plasmodium (P. vivax, P. malaria and P. falciparum) are responsible for different types of malaria. Of these, malignant malaria caused by Plasmodium falciparum is the most serious one and can even be fatal.

I. Which of the following will not be affected in malarial infection .

- a)Stomach b) liver c) RBC d) None of these

II. Sexual cycle of plasmodium is completed in which of the following?

- a)Human b) Cow c) Mosquito d) None of these

III. Malignant malaria is caused by :-.

- a)Plasmodium falciparum b) Plasmodium vivax c) P. ovale d) None of these

SECTION –C (ASSERTION & REASON BASED QUESTIONS)

12. **Assertion:**-AIDS is caused by a retrovirus.

Reason:-A retrovirus contain RNA as genetic material.

- a. Both assertion and reason are true, and the reason is the correct explanation of the assertion.
- b. Both assertion and reason are true, but the reason is not the correct explanation of the assertion.
- c. Assertion is true but reason is false.
- d. Both assertion and reason are false

13. **Assertion:**- BOD refers to the amount of the oxygen that would be consumed if all the organic matter in one liter of water were oxidised by bacteria.

Reason:-.More BOD of a water body indicate more pollution load of that body.

- a. Both assertion and reason are true, and the reason is the correct explanation of the assertion.
- b. Both assertion and reason are true, but the reason is not the correct explanation of the assertion.
- c. Assertion is true but reason is false.
- d. Both assertion and reason are false

SECTION-D (VERY SHORT /SHORT AND LONG ANSWER QUESTIONS)

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| 14) Draw a ray diagram to show central dogma. | 1 |
| 15. Protein is not a genetic material? Write any two points in support of this statement. | 1 |
| 16. What is common between thorn of Bougainvillea and tendril of Cucurbita. ? | 1 |
| 17 Why do we call lichens as pollution indicator? | 1 |
| 18 Name the causal organisms of ringworm. | 1 |
| 19 What does H_2L_2 indicates in an antibody molecule. ? | 1 |
| 20 What is importance of colostrum to an infant? | 1 |
| 21 Acetic acid is obtained from which organism?. | 1 |
| 22 What do you know about flocs? | 1 |
| 23 Draw the diagram of a nucleosome and label any two parts. | 2 |
| 24 Define Hardy-Weinberg Principle and write its mathematical expression. | 3 |
| 25 Draw the diagram of an antibody molecule and label it's all parts. | 3 |
| 26 What is the key difference between primary and secondary sewage treatment? | 3 |
| 27 (a) Explain the process of transcription in bacteria with labeled diagram . | 3 |
| (b) Write any two differences between transcription in prokaryotes and eukaryotes. | 2 |

THE END