

NAME OF THE PLANTS

(iii).....

TERM USED TO DENOTE SUCH PLANT

(iv).....

17. What are Cannabinoids? From which plant Cannabinoids are obtained? Which part of the body is affected by consuming these substances?
18. Trace the life cycle of malarial parasite in the human body when bitten by an infected female anopheles. (Diagrams only)
19. Describe any three methods to overcome inbreeding depression in animal husbandry.
20. Mark the statement True OR False :
- Exonucleases remove nucleotides from the ends of the D.N.A.
 - D.N.A. fragments are negatively charged molecules.
 - Microparticles of gold and tungsten coated with D.N.A. are used in a method called microinjection.
 - Enzyme lysozyme is used to break the plant cell.
 - A protein encoding gene expressed in a heterologous host is called a recombinant protein.
 - Plasmids are chromosomal double strand, D.N.A. molecules of plant cells.
21. How is the Bt cotton plant created as a GM plant? How is it protected against bollworm infection?
22. a) Differentiate between food chain and food web.
b) Construct labelled grazing and detritus food chains with minimum 3 trophic levels each.

SECTION – D (4x1=4 marks)

23. A team of research workers observed that the population of fish eating birds is declining every year after the establishment of a pesticide factory nearby five years ago.
- What may be the possible reason in your opinion? Explain?
 - Can you suggest alternative to pesticide so that factory may be stopped.

SECTION - E (5x3=15 marks)

24. Answer the following with respect to Cancer.
- How does a cancerous cell differ from a normal cell?
 - Benign tumor is less dangerous than malignant tumor. Why?
 - Describe causes of cancer.
 - Mention two methods of treatment of the disease.
- (OR)
- The immune system of a person is suppressed. He was found positive for a pathogen in the diagnostic test ELISA.
- Name the disease, the patient is suffering from.
 - Which pathogen is identified by ELISA test?
 - Which cells of the body are attacked by the pathogen?
 - Suggest preventive measure of the infection.
25. a) Draw well labelled diagram of mature female gametophyte of an angiosperm.
b) Make a list of post fertilization changes that occurs in the angiosperms.
c) How is apomixis different from parthenocarpy?
- (OR)
- Where are corpus luteum and corpus albicans present? Do they have any specific function?
 - Draw a well labelled diagram of mature graafian follicle.
 - Describe the endocrine functions of human placenta.
26. a) Write what DNA replication refers to.
b) State the properties of DNA replication model.
c) List any three enzymes involved in the process along with their functions.

(OR)

Inheritance patterns of flower colour in garden pea plant and snap dragon differ. Why is the difference observed? Explain the difference with the help of crosses in their inheritance patterns.

