QB365 Student Learing Managemnet System
Exam Name: Pre Quarterly - Practice
Std: 12th Standard - Biology
Chapter: Botany - Asexual and Sexual Reproduction in Plants, Botany - Classical Genetics, Botany - Chromosomal Basis of Inheritance, Botany - Principles and Processes of Biotechnology, Botany - Plant Tissue Culture

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Questions:

IV. Answer the following questions:

1. What is endosperm. Explain the types.
2. Describe dominant epistasis with an example.
3. Mention the application of Biotechnology.
4. Explain the basic concepts involved in plant tissue culture

III. Answer any three questions: (Q.NO 19 is compulsory)

5. Differentiate Grafting and Layering.
6. Differentiate incomplete dominance and codominance.
7. Write the salient features of Sutton and Boveri concept.
8. What do you know about the word pBR332?
9. Give an account on Cryopreservation.

II. Answer any four questions:

10. Define the term Diplospory
11. What is back cross?
12. What is the difference between missense and nonsense mutation?
13. Name the chemicals used in gene transfer.
14. Give the examples for micro propagation performed plants .
15. Differentiate between flush end and cohesive end of DNA.

I. Choose the correct answer:

16. A Plant called X possesses small flower with reduced perianth and versatile anther. The probable agent for pollination would be ____.
    (a) water (b) air (c) butterflies (d) beetles
17. Fruit colour in squash is an example of _____.
    (a) Recessive epistasis (b) Dominant epistasis (c) Complementary genes (d) Inhibitory genes
18. Assertion (A): Gamma rays are generally use to induce mutation in wheat varieties.
    Reason (R): Because they carry lower energy to non-ionize electrons from atom
    (a) A and R are correct (b) A is correct. R is wrong (c) A is wrong. R is correct (d) A and R are wrong
19. An analysis of chromosomal DNA using the southern hybridisation technique does not use _____.
    (a) Electrophoresis (b) Blotting (c) Autoradiography (d) Polymerase Chain Reaction
20. Select the incorrect statement from given statement.
    (a) A tonic used for cardiac arrest is obtained from Digitalis purpurea (b) Medicine used to treat Rheumatic pain is extracted from Capsicum annum
    (c) An anti malarial drug is isolated from Cinchona officinalis. (d) Anti-cancinogenic property is not seen in Catharanthus roseus.
21. The term 'Genetics' was introduced by_____
    (a) Gregor Mendel (b) W. Bateson (c) Hugo de Vries (d) Carl Correns
22. The proteins responsible for rejection reaction present in exine cavities of pollen is a derivative of _____
    (a) Stomium (b) Endothecium (c) Tapetum (d) Ubisch bodies
23. Self-ligation is prevented by_____
    (a) DNA Polymerase (b) Helicase (c) Alkaline phosphate (d) DNA lipase