

Type: MCQ

Q1. In protoplast fusion, the lack of _____ allows the plasma membrane of two or more protoplast to come into intimate contact. (1)

1. Cytoplasmic membrane
2. **Cell wall
3. Cell membrane
4. Nuclear membrane

Q2. Introduction of DNA into cells via liposomes is known as _____. (1)

1. Protoplast fusion
2. **Lipofection
3. Electroporation
4. Electrophoresis

Q3. Which one of the following elements need not be present in expression vector? (1)

1. Selection marker to select host cells containing the vector
2. **Two different origins of replication
3. Promoter sequence upstream of the cloned gene
4. Unique restriction enzyme sites for insertional cloning

Q4. Northern blotting technique is used for the detection of _____. (1)

1. DNA
2. **RNA
3. Proteins
4. Amino acids

Q5. _____ are the DNA molecules which can carry a foreign DNA fragment to be cloned. (1)

1. Host
2. **Vector
3. Pathogen
4. Fungi

Q6. When a vector is designed for expression that is production of protein specified by DNA insert is termed as _____. (1)

1. Shuttle vector
2. **Expression vector
3. Bifunctional vector
4. Phagemid

Q7. _____ Vector have been designed in such a way that it can propagate in two different host species. (1)

1. **Shuttle
2. Expression
3. Phagemid
4. Phage

Q8. Particle gun method is also known as _____. (1)

1. Protoplast fusion
2. Electroporation
3. Lipofection
4. **Biolistic

Q9. PCR stands for _____. (3)

1. Phagocytic chain reaction
2. **Polymerase chain reaction
3. Phagocytic chain reactant
4. Pathological chain reaction

Q10. Enzymes that restrict the viral replication are also known as _____. (3)

1. **Restriction enzymes
2. DNA polymerase
3. DNA ligase
4. Kinase

Q11. _____ Map gives the relative position of genetic markers according to the frequency of recombination. (3)

1. **Genetic
2. Physical
3. Geographical
4. Genome sequences

Q12. RFLP stands for _____. (3)

1. Polymerase chain reaction
2. Random Amplification of DNA
3. Amplified Fragment Length Polymorphism
4. **Restriction Fragment Length Polymorphism

Q13. A complete set of chromosome or genetic material of any organism is called as _____. (3)

1. Gene
2. DNA
3. RNA
4. **Genome

Q14. Human genome project started in ____ and ended in _____. (3)

1. **1990, 2003
2. 1993, 2003
3. 1993, 2006
4. 1990, 2006

Q15. The number of autosomal chromosome in human beings are ____.(3)

1. **44
2. 22
3. 42
4. 24

Q16 The prime objective of HGP was ____ . (3)

1. To find out the exact functions of proteins in humans
2. To sequence the entire base pairs that makes up the 23 chromosomes
3. **To sequence the entire base pairs that makes up the 24 chromosomes
4. To find out the active genes in human genome

Q17 Cystic fibrosis (CF) is an inherited disease. How is CF passed down through families?

1. One parent is carrier of CF
2. One grand parent is carrier of CF
3. **Both parent are carrier of CF
4. Not a single parent is carrier of CF

Q18. A company wishes to ensure that no one else can use their logo (4)

1. Copy rights
2. **Trade marks
3. Patent
4. Industrial designs

Q19. A Singer wishes to assign the rights to reproduce a video she has made of her concert. (4)

1. **Copy rights
2. Trade marks
3. Patent
4. Industrial designs

Q20. A new way to process milk so that there is no fat in any cheese made from it is covered under (4)

1. Copy rights
2. Trade marks
3. **Patent
4. Industrial designs

Q21. Intellectual Property Rights protect the use of information and ideas that are of_____. (4)

1. Ethical value
2. Moral value
3. Social value
4. **Commercial value

Q22. Invention means _____. (4)

1. New product having inventive step and capable industrial application
2. New process
3. **New product or process having inventive step and capable industrial application
4. Existing product or process.

Q23. Bovine somatotropin is a _____ hormone produced by cow's pituitary gland. (4)

1. Steroid
2. **Peptide
3. Lipid derived
4. Alkaloid

Q24. TPA protein converts plasminogen in to _____. (4)

1. **Plasmin
2. Fibrin
3. Fibrinogen
4. Pectin

Q25. Which of the following condition is not satisfied for an invention to be patentable? (4)

1. Novelty
2. Inventiveness
3. Industrial application and usefulness
4. **Already existing product