KANCHI KALVI'S CREATIVE QUESTIONS TEAM

CHAPTER-1 (Heredity and Evolution – 1m,2m)

Class: X STDSubject: SCIENCEMarks: 40Time: 1:15hrs.SECTION – A (20 x 1 = 20)

I. Choose and write the correct answer;

 Mendel focussed on the garden pea plants as Pod colour (Green/purple, Yellow/blue, Green/red, Green / Yellow) Mendel termed those tall and dwarf plants as (Domestic types, wild types, genotypes, phenotypes) Height of the plant-Tall/Dwarf is called (Phenotype, Genotype, Monohybrid Cross, all)
4. The alternate forms of the same gene are called
(alleles, allelomorph, dominant, trait)
5 variation leads to speciation and evolution
 (Intra specific , Somatic , Germinal, Inter specific) 6quotes the example of the development of the long neck of the giraffe.
(Mendel, Lamarck, Darwin, Jenner)
7are bio-catalysts that speed up reaction in cells
(Vitamins, Antibiotics, Vaccines, Enzymes)
8acid is used for the production of vinegar.
(Ethanoic , Acetic , both , none) 9are now used in treatment of cancer.
(Organic Acids, Vitamins, Monoclonal antibodies, Steroids)
10. The natural clones are formed through a natural process called
(DNA replication, r-DNATechnology, RNA replication, Nif-genes)
11. One of the most fascinating branches in applied embryology is
(DNA Technology, Genetic engineering, Cloning, stem cell culture)
12.During the cloning of Dolly, cell taken from mammary gland of sheep (alpha, somatic, beta, all)
13. Infectious germs is otherwise called as
(invitrofertilization, anaemia., pathogens, diploid nucleus)
14. Pollution in drinking water can be monitored by using
(Bio-sensor:, Bio-Chips, both, none)
15can be used to treat defects in Somatic cells.
(Cloning, fertilization ,Gene therapy ,all)
16 .In therapy, egg and sperm of the parents are changed to the next generation. (Somatic gene, Germ line gene, alleles. Magnetic)
17 is derived from amyloproteins of bacteria
(zymase, invertase, glucose, amylase)
18. Embryonic stem cells can be extracted from early embryo which is developed by
(invitro fertilization, post fertilization, bacterio fertilization, cloning) 19act as antigens and stimulate the body to manufacture antibodies.
(Antibiotics , Organic Acids , Vitamins , Vaccines)
20. Monoclonal antibodies are produced from cloned cells bytechnology.
(DNA, Bio, Cloning, hybridoma)

<u>SECTION – B (10 x 2 = 20)</u>

II.Answer (any ten)questions.

- 21. What is called heredity ?
- 22.Write the visible contrasting characteristics Mendel focussed on Pea plants
- 23. Give the Diagrammatic representation of Monohybrid cross(only table)
- 24 .What are called dominant and recessive trait ?
- 25 .What is called Monohybrid Cross ?
- 26 .List out the applications of Bio-technology in various fields.
- 27. Mention any two Merits of Genetic Engineering.
- 28. Write about Enzyme Technology
- 29. List the two important characteristic features of stem cells.
- 30. write any two microbial products with uses.
- 31. Define-Induced clones: with eg.
- 32. Give any one application of BIO-SENSOR AND BIO-CHIPS

PREPARED FOR THE BETTERMENT OF ALL CHILDREN

T.S.SARAVANAN B.Sc(Chem),B.Ed.,M.A(Eng.Lit),M.Phil(Eng.Lit),B.A(His) METTUR DAM (R.S), SALEM (D.T), - 636402 EMAIL; **sharavananvepp@gmail.com** For conversation: **8675509227,9042331256**

