

10. Microbes have a size of less than
a) 0.5 mm
b) 0.10 mm
c) 0.1 mm
d) 0.2 mm
11. In the cell cycle, DNA synthesis takes place during
a) G1 phase
b) G2 phase
c) S phase
d) Prophase
12. Lethal genes are
a) Dominant homozygous
b) Recessive
c) Dominant heterozygous
d) Co dominant
13. 9:3:3:1 ratio is modified to 9:7 due to
a) Epistatic gene
b) Complementary gene
c) Supplementary gene
d) Incomplete gene
14. The correct ratio which shows the masking of gene interaction is
a) 12:3:1
b) 9:3:4
c) 1:2:1
d) 9:7
15. Cytoskeletons are chemically
a) Nucleoprotein filaments
b) lipids
c) ribonucleoproteins
d) protein filaments
16. The exchange of chromosome segments is believe to take place during
a) Metaphase I
b) Anaphase I
c) Telophase I
d) Prophase I
17. Classical theory of Chiasma formation during crossing over is also known as
a) Two plane theory
b) One plane theory
c) Both a and b
d) none of the above
18. The strength of linkage between two genes is determined by
a) The frequency of crossing over
b) The distance between them
c) The position of centromere
d) The number of chromosomes in a cell
19. Chromosome which is concerned with the determination of sex are
a) X-chromosome
b) Y-chromosome
c) Autosomes
d) X and Y chromosome

20. The distance between two genes is determined by their
a) interference
b) recombination frequency
c) coefficient of coincidence
d) mapping function
21. The theory of pangenesis was proposed by
a) Jean Baptiste Lamarck
b) Hugo de vries
c) G.L.Stebbins
d) Charles Robert Darwin
22. Hugo de vries conducted his mutation experiment on
a) *Homo sapiens*
b) *Oenothera lamarckiana*
c) *Pisum sativum*
d) None
23. The book called 'Philosophic Zoologique' was published by
a) Darwin
b) Lamarck
c) Hugo de vries
d) None
24. Theory of inheritance of acquired character was proposed by
a) Darwin
b) Lamarck
c) Hugo de vries
d) Malthus
25. 'On the origin of Species' was published by
a) Darwin
b) Hugo de vries
c) Lamarck
d) Malthus

FILL IN THE BLANKS

1. A tuft of polar flagella at both ends in bacteria is called _____
2. Extra chromosomal, circular, double stranded, self replicating DNA molecule in bacteria is called _____
3. The transfer of genes from one cell to another by a bacteriophage is known as _____
4. Cheese prepared directly from milk is _____ cheese.
5. Micoorganisms like species of _____ are used as biopesticides.
6. Organic acid first produced through fermentation is _____
7. _____ is the longest phase in the cell cycle.
8. Cytoplasm along with the nucleoplasm is known as _____
9. The phenomenon of incomplete dominance was first observed by _____

10. When only parental character combinations are recovered and recombinant combinations are absent in test cross progeny, it is called _____
 11. To determine the cytological basis of crossing over, C. Stern (1931) used heteromorphic homologous chromosomes of _____
 12. The sex chromosome in birds are designated as _____
 13. According to Darwin's Pangenesis theory, every part of the body exists tiny particles called _____
 14. _____ is a change in the heritable characteristics of biological populations over successive generations.
 15. The first theory of evolution was proposed by _____
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Key Answer

MCQ: 1-d. 2-b. 3-d. 4-c. 5-a. 6-b. 7-c. 8-c. 9-b. 10-c. 11-c. 12-a. 13-b. 14-a. 15-d. 16-d. 17-a. 18-a. 19-d. 20-b. 21-d. 22-b. 23-b. 24-b. 25-a.

Fill in the blanks:

- 1-lophotrichous.
- 2- Plasmid.
- 3- Transduction.
- 4- Raw.
- 5- *Gliocladium* .
- 6- Lactic acid.
- 7- Interphase.
- 8- Protoplasm.

- 9- Carl Correns.**
- 10- Complete linkage.**
- 11- Drosophilla.**
- 12- ZW.**
- 13- gemmules.**
- 14- Evolution.**
- 15- Lamarck.**