

**F.Y.B.Sc. SEM-I**  
**BOTANY PAPER –II**  
**SAMPLE QUESTION**

1. Which of the following is not cell organelles
  - a) Microsome.
  - b) Mitochondria
  - c) Golgi complex
  - d) Ribosome.
  
2. The chief component of plant cell wall is
  - a) Chitin
  - b) Cellulose.
  - c) Peptides
  - d) Xylose
  
3. Which is prokaryotic cell
  - a) Mango plant
  - b) Homo sapians
  - c) Cyanobacteria
  - d) Cotton plant
  
4. The endoplasmic reticulum discovered by
  - a) Golgi
  - b) Porter
  - c) Benda
  - d) Altmann.
  
5. The important function of endoplasmic reticulum is
  - a) To give shape to the cell
  - b) Secretion of material.
  - c) Nourishing nucleus
  - d) Protein synthesis
  
- 6 The mitochondria are the power house of
  - a) Fat
  - b) Glucose
  - c) ATP
  - d) Protein
  
7. What is diameter of chloroplast?
  - a) 1-2 micrometer
  - b) 2-4 micrometer
  - c) 4-5 micrometer
  - d) 4-6 micrometer

8. Which pigment is responsible for photosynthesis?
- a) Chlorophyll-d
  - b) Chlorophyll-c
  - c) Chlorophyll-b
  - d) Chlorophyll-a
9. The function of stroma in chloroplast.
- a) Carry photochemical reaction
  - b) Carry biochemical reaction
  - c) Synthesis of ATP
  - d) Synthesis of NADPH<sub>2</sub>
10. Chloroplasts are present in
- a) Algae
  - b) Fungi
  - c) Bacteria
  - d) Viruses
11. ----- is not amphibian species.
- a) Turtle.
  - b) Snakes
  - c) Salamander.
  - d) Hippos
12. Terrestrial ecosystem occupies
- a) 82 %.
  - b) 28 %
  - c) 70 %
  - d) 30 %
13. Tropical rain forest having rain annual fall
- a) 200-201 cm
  - b) 200-220 cm
  - c) 200 -210 cm
  - d) 200-250 cm
14. Organism with repeated stages of eating and being eaten is
- a) Food web
  - b) Food chain
  - c) Pyramid
  - d) Inverted pyramid.

15. The term genetics was coined by
- a) Griffith
  - b) Bateson
  - c) Mendel
  - d) Johansen
16. In biparental sexual reproduction, the offsprings
- a) Similar with both parents.
  - b) similar with male parents.
  - c) similar with female parents.
  - d) shows mixtures of characters of both parents.
17. Identical twins are produced from
- a) Two zygotes
  - b) Two eggs
  - c) Single zygotes
  - d) Individuals
18. Mendel's research paper was published in
- a) Annual proceedings of the Natural History Society of Brunn
  - b) Genera plantarum
  - c) Species plantarum
  - d) Systema naturae
19. Monohybrid cross is cross of
- a) One parent only.
  - b) One male and other female.
  - c) Two parents differing in single pair of contrasting characters.
  - d) Cross of unisexual parents

20. The percentage of 'yr' gametes produced by a YyRr parent will be

- a) 75%
- b) 50%
- c) 25%
- d) 12.5%

21. Multiple alleles are characterized by

- a) More than two alternative forms of gene found at the same locus
- b) More than two alternative forms of gene found at the different loci
- c) Occurrence of one gene in two chromosomes
- d) None of the above

22. Which of the following statement is true?

- a) Allele  $I^A$  is dominant over  $I^B$
- b) Allele  $I^B$  is dominant over  $I^A$
- c) Alleles  $I^A$  and  $I^B$  are co-dominant and dominant over  $i^O$
- d) Allele  $i^O$  is dominant over  $I^A$  and  $I^B$

23. Multiple alleles occur due to

- a) Crossing over
- b) Syngamy
- c) Fusion of egg by more than one sperm
- d) Mutation in wild type of a gene

24. When both alleles express their effect on being present together, the phenomenon is called

- a) Dominance
- b) Pseudodominance
- c) Codominance
- d) Amphidominance

25. Multiple alleles control inheritance of

- a) Phenylketonuria
- b) Colour blindness
- c) Sickle cell anaemia
- d) Blood groups

26. In Man, skin colours are controlled by

- a) A pair of allele
- b) Two pair of alleles
- c) Three pair of alleles
- d) Four pair of alleles

27. Incomplete dominance was firstly studied in

- a) *Antirrhinum majus*
- b) *Mirabilis jalapa*
- c) Horses
- d) Man

28. How many genotypes and phenotypes are possible in human blood groups?

- a) 1 and 2
- b) 2 and 4
- c) 4 and 6
- d) 6 and 4

29. Which of the following blood group is universal acceptor?

- a) AB
- b) O
- c) A
- d) B

30. which of the following blood group has no antigen?

- a) A
- b) B
- c) O
- d) AB