

**KARNATAK UNIVERSITY, DHARWAD**  
**DEPARTMENT OF BOTANY**  
**BOTANY MCQ MODEL PAPER 2020-21**

---

1. Bacteria are  
(A) Saprophytic (B) Symbiotic  
(C) Hyper parasitic (D) All of these
  
2. *Laminaria* belongs to  
(A) Chlorophyta (B) Chrysophyta  
(C) Phaeophyta (D) Pyrrophyta
  
3. Which of the following is not the biofertilisers producing bacteria  
(A) *Nostoc* (B) *Anabaena*  
(C) Both (A) and (B) (D) *Clostridium*
  
4. During fermentation, pyruvic acid is converted into organic products such as  
(A) Glucose and sucrose  
(B) Starch and cellulose  
(C) Ethyl alcohol and lactic acid  
(D) Citric acid and isocitric acid
  
5. Black spot in meat are produced mainly by  
(A) *Cladosporium* (B) *Thamnidium*  
(C) *Mucor* (D) *Rhizopus*
  
6. Strobiloid theory of origin of angiosperm flower is proposed by  
(A) Bessey (B) Cronquist  
(C) Hutchinson (D) Thorne
  
7. Bubble diagram is also called  
(A) Takhtajan's phylogenetic tree (B) Dhalgren's phylogenetic tree  
(C) Bessey's phylogenetic tree (D) Cronquist's phylogenetic tree
  
8. Royal Botanical Garden, Kew located in  
(A) London (B) New York  
(C) California (D) Switzerland
  
9. Amoeboid type of tapetum is found in  
(A) Asteraceae (B) Scrophulariaceae  
(C) Bignoniaceae (D) Lentibulariaceae

10. In Double fertilization \_\_\_\_\_ involved in fusion  
 (A) 3 nuclei (B) 4 nuclei (C) 5 nuclei (D) 2 nuclei
11. The  $C_4$  plants are different from  $C_3$  plants with reference to the  
 (A) Type of pigment involved in photosynthesis  
 (B) Types of end products of photosynthesis  
 (C) Number of ATP that are consumed in preparing sugars  
 (D) Substance that accepts  $CO_2$  in carbon assimilation
12. Premature leaf fall is due to deficiency of  
 (A) Phosphorus (B) Nitrogen (C) Iron (D) Calcium
13. The source of energy for carbon assimilation is  
 (A) Chlorophyll (B)  $CO_2$  (C) Water (D) Sunlight
14. The role of PS-II in photosynthesis is  
 (A) To cause photolysis of water  
 (B) To release energy  
 (C) To trap  $CO_2$   
 (D) To reduce NADP to  $NADPH_2$
15. The etiological agent of Head smut of Sorghum is  
 (A) *Cercospora arachidicola* (B) *Pyricularia grysea*  
 (C) *Sclerosporagram inicola* (D) *Sphacelotheca sorghi*
16. The organism which grows best above  $45^\circ C$  are called  
 (A) Psychrophilic (B) Mesophilic  
 (C) Thermophilic (D) All of these
17. Agar-Agar is obtained from  
 (A) Geladium (B) Fucus  
 (C) Polysiphonia (D) Laminaria
18. Transfer of genetic material from one bacterium to another by a virus is called  
 (A) Transduction (B) Transformation  
 (C) Conjugation (D) Lysogeny
19. Mycoplasma differs from bacteria is not possessing  
 (A) Cell membrane (B) Ribosome  
 (C) Cell wall (D) DNA

20. Crown galls are produced due to infection of  
(A) Insects (B) Bacterium  
(C) Virus (D) Fungus
21. Which of the following is not associated with apomictic embryo  
(A) Dihaploid (B) Apogamy  
(C) Apospory (D) Parthenogenesis
22. Obturator is associated with  
(A) Embryogenesis (B) Fertilization  
(C) Placentation (D) Adventive embryony
23. Ubisch bodies are associated with development of  
(A) Embryo (B) Embryo sac  
(C) Endosperm (D) Exine
24. Stem cuttings are treated with IAA or NAA to promote  
(A) Development of buds (B) Formation of root  
(C) Formation of shoot (D) Both (B) and (C)
25. Complete the equation: glucose + fructose.....?  
(A) Maltose (B) Sucrose (C) Lactose (D) Hexose
26. The nature and type of life cycle shown by T-phages is  
(A) Virulent and lytic (B) Temperate and lysogenic  
(C) Virulent and lysogenic (D) Temperate and lytic
27. The nature of nucleic acids in viroids is  
(A) Double stranded RNA (B) Double stranded DNA  
(C) Single stranded RNA (D) Single stranded DNA
28. How many pollen mother cells should undergo meiotic division to produce 64 pollen grains?  
(A) 64 (B) 32 (C) 16 (D) 8
29. All the following plants can be propagated by leaf cuttings except  
(A) Begonia (B) Hibiscus  
(C) Bryophyllum (D) Sansevieria
30. Pick the right difference between a DNA and RNA

- (A) Sugar and phosphate
  - (B) Sugar and purine
  - (C) Purine and phosphate
  - (D) Sugar and pyrimidines
31. Fungi producing usually eight spores in sac like structure belong to
- (A) Phycomycetes
  - (B) Ascomycetes
  - (C) Basidiomycetes
  - (D) Deuteromycetes
32. Heterothalism in fungi was discovered by
- (A) Bessey
  - (B) Blackslee
  - (C) Micheli
  - (D) de Berry
33. Rhizopus black bread mold undergoes sexual reproduction and produce
- (A) Ascospores
  - (B) Spores
  - (C) Zygosporangia
  - (D) Basidiospores
34. Dichogamy refers to
- (A) Maturation of male reproductive organ only
  - (B) Maturation of male and female reproductive organ at same time
  - (C) Maturation of female reproductive organ only
  - (D) Maturation of male and female reproductive organ at different time
35. Development of zygote from egg cell without fertilization
- (A) Apogamy
  - (B) Parthenogenesis
  - (C) Apospory
  - (D) Heterospory
36. The 10% energy transfer law of food chain was given by
- (A) Lindemann
  - (B) Taneley
  - (C) Stanley
  - (D) Welsmann
37. When huge amount of sewage is dumped into river, its B.O.D. will
- (A) Slightly decrease
  - (B) Remain unchanged
  - (C) Increase
  - (D) Decrease
38. The Tajmahal is threatened due to the effect of
- (A) Oxygen
  - (B) Hydrogen
  - (C) Chlorine
  - (D) Sulphur dioxide

39. Identify the correctly matched pair
- (A) Basal convention - Global warming
  - (B) Kyoto protocol - Climate change
  - (C) Montreal protocol - Biodiversity conservation
  - (D) Ramsar convention - Ground water pollution
40. Indian mustard
- (A) *Brassica oleracea*
  - (B) *Brassica juncea*
  - (C) *Brassica napus*
  - (D) *Brassica campestris*
41. Mitochondrial DNA is
- (A) Circular double stranded
  - (B) Circular single stranded
  - (C) Linear double helix
  - (D) None of these
42. Standard deviation is the square of
- (A) Mode
  - (B) Standard error
  - (C) Variance
  - (D) Regression
43. Cistron is
- (A) The coding sequence of DNA
  - (B) The functional unit of DNA molecule that codes for a particular gene product
  - (C) Intervening noncoding sequence of DNA
  - (D) The sequence which are removed during RNA splicing
44. The structural genes of lac operon transcribe mRNA which is
- (A) Polycistronic
  - (B) Replicative
  - (C) Monokaryotic
  - (D) Monocistronic
45. Microsoft Word is an example of
- (A) An operating system
  - (B) Application software
  - (C) Processing device
  - (D) System software
46. Which of the following having true endosperm?
- (A) Podostemaceae
  - (B) Trapaceae
  - (C) Orchidiaceae
  - (D) Scrophulariaceae

47. Theory of Gene Frequency is proposed by

- (A) Mendel
- (B) Darwin
- (C) Morgan
- (D) Hardy-Weinberg

48. Giraffe is taken of an example to explain evolution by

- (A) Lamarck
- (B) Hardy-Weinberg
- (C) Fischer
- (D) Darwin

49. Homeostasis is

- (A) Tendency of biological systems to change with change in environment
- (B) Tendency of biological systems to resist change
- (C) Disturbance of self-regulatory system and natural controls
- (D) Biotic materials used in homeopathic medicines

50. Pyramid of numbers deals with number of

- (A) Species in an area
- (B) Individuals in a community
- (C) Individuals in a trophic level
- (D) Subspecies in a community

Sd/-

**Chairman**

## Key Answers

<b>Question</b>	<b>Answer</b>	<b>Question</b>	<b>Answer</b>
1	D	26	A
2	C	27	A
3	C	28	C
4	C	29	B
5	A	30	D
6	A	31	B
7	A	32	B
8	A	33	C
9	A	34	D
10	C	35	B
11	D	36	A
12	A	37	C
13	A	38	D
14	A	39	B
15	D	40	B
16	C	41	A
17	A	42	C
18	A	43	B
19	C	44	A
20	B	45	B
21	A	46	D
22	B	47	D
23	D	48	A
24	B	49	B
25	B	50	C

Sd/-

**Chairman**