General Science Model Test Questions 36 With Answers [Botany - 7]

1. Apple is a

(A) False fruit (B) True fruit (C) Multiple fruit (D) Simple fruit

2. Non-flowering lower plants are studied under

(A) Morphology **(B) Microbiology** (C) Ecology (D) Economic botany

3. Ancestors of vascular plants are

(A) Yeast (B) Gnetum (C) Chara **(D) Adiantum**

4. A vascular plant is

(A) Adiantum (B) Chara (C) Penicillium (D) Yeast

5. Which resembles dicotyledoneus plant?

(A) Polytirichum (B) Penicicillium **(C) Gnetum** (D) Adiantum

6. The seed contain three coats in

(A) Paddy (B) Wheat (C) Gnetum (D) Polytrichum

7. Which of the following substances is abundantly present in the middle lamella of cells?

(A) Silica **(B) Pectin** (C) Cutin (D) Lignin

8. Protoplasm found inside the nucleus is known as

(A) Nucleoplasm (B) Amyloplast (C) Elaioplast **(D) Cytoplasm**

9. The example of saprophyte is

(A) Nepenthes (B) Utricularia **(C) Dionaea** (D) Monotropa

10. Which of the following is an example of insectivorous plant?

(A) Brassica (B) Cuscuta (C) Mucor **(D) Nepenthes**

11. Some plants are called “insectivorous” plants because

(A) All insects eat these plants **(B) They catch insect for food**

(C) They are herbivorous (D) Appearance of the plants are like insect

12. Top layer of pond water is

(A) Epilimnion (B) Thermocline (C) Hypolimnion (D) Eurythermal

13. Match List I with List II correctly and select your answer using the codes given below:

List I	List II
(a) Genetics	1. Study of fungi
(b) Cytology	2. Study of bacteria
(c) Mycology	3. Study of cells
(d) Bacteriology	4. Study of heredity

Codes:

	a	b	c	d
(A)	1	2	3	4
(B)	4	3	2	1
(C)	**4**	**3**	**1**	**2**
(D)	1	2	4	3

14. The plant which possesses "anticancerous activity" is

(A) Seetha (B) Polylthia (C) Teak (D) Murungai

15. The marine algae commercially exploited for the production of "agar" is

(A) Sargassum **(B) Gracilaria** (C) Laminaria (D) Caulerpa

16. Match List I with list II correctly and select your answer using the codes given below:

List I	List II
(a) Banana tree	1. Ornamental purpose
(b) Acacia tree	2. Festival purpose
(c) Teak tree	3. Fuel purpose
(d) Polyalthia tree	4. Timber purpose

Codes:

	a	b	c	d
(A)	3	1	2	4
(B)	4	3	2	1
(C)	**2**	**3**	**4**	**1**
(D)	1	2	3	4

17. Traditional medicinal plant used for the treatment of "Jaundice" in Tamil Nadu is

(A) Mango (B) Arasu (C) Vembu **(D) Keelanalli**

18. Which of the following is the chief component of fungal cell wall?

(A) Mucopolysaccharide (B) Cellulose

(C) α – D- Glucopyranose **(D) None of these**

19. Which of the following is correctly matched?

(A) Maltose – Disaccharides (B) Fructose – Hexose sugar

(C) Cellulose – Structural polysaccharide **(D) All of these**

20. Natural lipids are readily soluble in

(A) Oil (B) Water (C) Mercury **(D) None of these**

21. The number of ATP molecules yielded from 2 $NADH_2$ molecule is

(A) 3 (B) 4 **(C) 6** (D) 12

22. Consider the following statements:

Assertion (A): Nitrogen plays an important role in growth, metabolism, heredity and respiration

Reason (R) : It suppressed formation of flowers

Now select your answer according to the coding scheme given below:

(A) Both (A) and (R) are true, and (R) is the correct explanation of (A)

(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A)

(C) (A) is true, but (R) is false

(D) (A) is false, but (R) is true

23. Consider the following statements:

Assertion (A): The primary physiological effects of auxin in plants is to stimulate the "elongation of cells in shoots"

Reason (R): Dormancy of buds can be broken by auxin treatment.

Now select your answer according to the coding scheme given below:

(A) Both (A) and (R) are true, and (R) is the correct explanation of (A)

(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A)

(C) (A) is true, but (R) is false

(D) (A) is false, but (R) is true

24. Consider the following statements:

Assertion (A): Green vegetable, soyabean oil, tomatoes etc. are chief sources of vitamin K

Reason (R) : Vitamin K prevents erosion of the skin in higher animals.

Now select your answer according to the coding scheme given below:

(A) Both (A) and (R) are true, and (R) is the correct explanation of (A)

(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A)

(C) (A) is true, but (R) is false

(D) (A) is false, but (R) is true

25. The cell responsible for fixing atomospheric nitrogen in blue green algae is

(A) Akinetes **(B) Heterocysts** (C) Aplanospores (D) Parthenospores

26. The synthesis of glucose from fat is called

(A) Glycolysis (B) T.C.A. **(C) Glyconeogenesis** (D) Saponicication

27. A rough endoplasmic recticulum specially developed in cell engages in

(A) Nucleotide synthesis **(B) Protein Synthesis**

(C) Lipid synthesis (D) Starch synthesis

28. Krebs cycle takes place in

(A) Chloroplast (B) Peroxisomes **(C) Mitochondria** (D) Cytoplasm

29. Lysosome is also known as

(A) Suicidal bags (B) Powerhouse of the cell

(C) Chondriosome (D) Dictyosome

30. In plants, respiration takes place

(A) During day only (B) During night only

(C) All the 24 Hours (D) At dusk

31. Respiration is a/an ---------- process

(A) Anabolic **(B) Catabolic** (C) Chemical (D) All of these

32. Anaerobic respiration takes place in

(A) Ribosome (B) Nucleus **(C) Cytoplasm** (D) Vacuole

33. In which process oxygen is directly used?

(A) Glycolysis (B) Fermentation **(C) Kreb's cycle** (D) Electron transport

34. The living part of a cell is called

(A) Cell wall **(B) Protoplasm** (C) Hyaloplasm (D) Cell sap

35. Every living cell has a

(A) Membrane (B) Food vacuole (C) Choloplast (D) Cell wall

36. One micron is equal to

(A) 1/1000 mm (B) 1 /1000 Å (C) 1/1000 m.micron (D) 1/1000 cm

37. Glycolysis take place in

(A) Cytoplasm (B) Mitochondria (C) Vacuoles (D) Chloroplast

38. Select the correct sequence of food chain:

(A) Cattle → Grass → Man (B) Grass → Man → Cattle

(C) Grass → Cattle → Man (D) Man → Cattle → Grass

39. The pathogen of citrus canker is

(A) Xanthomonas citri (B) Tobacco mosaic virus

(C) Albugo candida (D) Leptospira

40. Pick the odd one out

(A) Berry **(B) Capsule** (C) Drupe (D) Pepo

41. Match List I with list II correctly and select your answer using the codes given below:

List I	List II
(a) Perianth	1. Accessory whori
(b) Calyx	2. Monocot
(c) Gynoecium	3. Annona
(d) Valvate	4. Carpel

Codes:

	a	b	c	d
(A)	**2**	**1**	**4**	**3**
(B)	4	3	1	2
(C)	2	3	1	4
(D)	2	3	4	1

42. Pick the odd one out

(A) Carpel (B) Stamen (C) Ovule **(D) Petal**

43. Which of the following is a complex tissue?

(A) Pholem (B) Parenchyma (C) Collenchyma (D) Chlorenchyma

44. The branch of botany which deals with the study of fungi is called

(A) Mycology (B) Cytology (C) Microbiology (D) Algology

45. Pollination by animal is known as

(A) Anemophily (B) Omithopily (C) Entemophily **(D) Zoophily**

46. After fertilization the integument develops into

(A) Seed coat (B) Endosperm (C) Micropyle (D) Raphe

47. The yellowing of leaf is caused by the deficiency of

(A) Fe (B) Cu (C) Co (D) Zn

48. Properties of histone proteins found in nuclei of eukaryotes are

(A) Acidic **(B) Basic** (C) Neutral (D) Amphoteric

49. Chlorophyll is soluble in

(A) Organic solvents

(B) Inorganic solvents

(C) Organic solvents and inorganic solvents

(D) None of these

50. In plants the gas released during respiration is

(A) Oxygen **(B) Carbon dioxide** (D) Sulphur dioxide (D) Ammonia

51. In a bacterial cell, the site of respiration is

(A) Protoplasmic membrane (B) Centrosome

(C) Chondrisome (D) Mitochondrion

52. Receptors in cell membrane are

(A) Carbohydrates **(B) Proteins** (C) Nucleic Acids (D) Lipids

53. The bacteria responsible for nitrogen fixation is found in the root of

(A) Grass (B) Citrus plant **(C) Leguminous Plant** (D) Neem tree

54. Gobar gas contain

(A) Methane (B) Methane and ethane (C) Ethane (D) Petrol gas

55. Which of the following is odd one in phloem tissue?

(A) Sieve tube (B) Companion cell (C) Phloem fibre **(D) Wood fibre**

56. The type of sexual reproduction that takes place in spirogyra is

(A) Frangmentation (B) Sporulation **(C) conjugation** (D) Fission

57. The plant kingdom is divided into two major divisions

(A) Monocot and dicot plants (B) Bryophytes and pteridophytes

(C) Cryptogams and phanerogams (D) Aquatic and terrestrial

58. In the vascular bundle the protoxylems pointing towards the centre are called

(A) Exarch **(B) Endarch** (C) Tetrarch (D) Polyarch

59. Consider the following statements:

I. Xylem vessels are seen in angiosperms

II. Xylem vessels are not seen in gymnosperms

III. Xylem vessels are conduction H_2O

IV. Xylem vessels are giving strength to plants
Of these statements:

(A) I alone is correct (B) I, II, III are correct

(C) I, III, IV are correct **(D) All are correct**

60. Consider the following statements:

Assertion (A) : Fungi get nourishment from the substratum

Reason (R): Fungi secrete digestive enzyme on the substratum

Now select your answer according to the coding scheme given below:

(A) Both (A) and (R) are true, and (R) is the correct explanation of (A)

(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A)

(C) (A) is true, but (R) is false

(D) (A) is false, but (R) is true

61. Which one of the following is correctly matched?

(A) Simple cyme – Musa **(B) Cyathium – Euphorbia**

(C) Simple receme – Hibiscus (D) Spadix – Crotalaria

62. Match List I with List II correctly and select your answer using the codes given below:

List I	**List II**
(a) Telocentric	1. Rod shape with two arms
(b) Acrocentric	2. L shape
(c) Metacentric	3. Rod shape with single arm
(d) Submentacentric	4. V shape

Codes:

	a	b	c	d
(A)	3	1	2	4
(B)	**3**	**1**	**4**	**2**
(C)	2	1	3	2
(D)	1	4	3	2

63. Gregor mendel did hybridization experiment in

(A) Pisum sativum (B) Drosophilla (C) Rabbits (D) Moths

64. The plants which can breakdown cyanide and reduce it to a non-toxic form are

(A) Gibberella fusarium (B) Xerophytes

(C) Pseudomonas (D) Yeast

65. Who was awarded Nobel Prize for the invention of dark reaction?

(A) Melvin calvin (B) Carnar (C) Allart (D) Krebs

66. The organism which causes citrus canker is

(A) Bacterium (B) Fungi (C) Virus (D) Hookworm

67. Select the incorrect one:

(A) Berry **(B) Capsule** (C) Drupe (D) Peppo

68. The most abundant greenhouse gas is

(A) CH_4 (B) NO_2 (C) SO_2 **(D) CO_2**

69. Good plant sources of choline are

(A) Yeast (B) Mushroom **(C) Green leaves** (D) Cereal grains

70. Ornithophily refers to

(A) Pollination through wind **(B) Pollination through birds**

(C) Pollination by insects (D) Dispersal of seeds by wind

71. Indentify the chemosynthetic bacteria among the following:

(A) Rhizobium (B) Clostridium (C) Nitrobacter **(D) Beggiatoa**

72. The removal of water from the plants in the form of liquid droplets is

(A) Guttation (B) Transpiration (C) Transduction (D) Transformation

73. "Sirentin" is a sex hormone produced by

(A) Alga **(B) Fungus** (C) Lichen (D) Bacterium

74. Which one of the following is a total stem parasite?

(A) Cuscuta (B) Drosera (C) Viscum (D) Vanda

75. The plant which was successfully used in the production of edible vaccine is

(A) Pea (B) Mango (C) potato **(D) Cabbage**

76. Identify the characteristic feature of a prokaryotic cell:

(A) Presence of cell wall (B) Presence of 80s Ribosome

(C) Absence of genetic material **(D) Presence of 70s ribosome**

77. During respiration the oxidative phosphorylation takes place in

(A) Matrix of chloroplast (B) Matrix of mitochondrion

(C) Inner membrane of mitochondrion (D) Grana of chloroplast

78. Mitochondria are present in all cells, except

(A) Yeast (B) Bacteria (C) Fungi (D) Algae

79. The plant group which yields 'Taxol' belongs to

(A) Bryophyte **(B) Gymnosperm** (C) Pteridophyte (D) Lichen

80. Alga used for hydrocarbon production is

(A) Gracilaria (B) Chlorella **(C) Botryococcus** (D) Sargassum

81. The law which is based upon the Dihybrid cross is

(A) Law of dominance (B) Law of Segregation

(C) Law of Independent Assortment (D) Law of Purity of gametes

82. The ration of dihybrid cross is

(A) 1 : 2 : 1 (B) 3 : 1 (C) 1 : 1 **(D) 9 : 3 : 3 :1**

83. Which unicellular alga was first used for photosynthetic studies?

(A) Chlorella vulgaris **(B) Chlamydomonas vulgaris**

(C) Spirulina vulgaris (D) Volwax vulgaris

84. Identify the insectivorous plants(s):

I.Nepenthes II. Drosera III. Vanda IV. Cuscuta

Of these:

(A) I alone is correct **(B) I and II are correct**

(C) I, II and III are correct (D) All are correct

85. Which of the following is/are true for mangrove forest?

I. Presence of pneumatophore

II. Viviparous germination

III. Presence of salt secreting glands

IV. Presence of aerenchyma in leaves

Of these:

(A) I alone is correct (B) I and II are correct

(C) I, II and III are correct **(D) All are correct**

86. What are the units of photosynthesis found inside the grana of chloroplasts?

(A) Cristae **(B) Thylakodis** (C) Grana (D) Quantasomes

87. If the sequence of bases in one strand of DNA is ATGACTGTC, then the sequence of bases in its complementary strand is

(A) TACTGACAG (B) TUCTGUCTA (C) GUAGTAGA (D) TGACGATGA

88. The term 'Binominal nomenclature' was coined by

(A) Aristotle (B) Curier **(C) Linnaeus** (D) Lamarck

89. What is acetobularia?

(A) Single – celled fungus (B) Multi – celled fungus

(C) Single – celled alga (D) Multi – celled alga

90. Agrostology is the study of

(A) Grasses (B) Fruits (C) Flowers (D) Dry fruits

91. What is the other name of the dictyosomes of plant cells?

(A) Ribosomes (B) Lysosomes **(C) Golgi Bodies** (D) Polysomes

92. Which of the plant groups is called "non-vascular cryptogams"?

(A) Pteridophytes **(B) Bryophytes** (C) Gymnosperms (D) Angiosperms

93. What is the botanical name of the tallest tree of the world?

(A) Pterocarpus albus (B) Terminalia catapa

(C) Sequoia sempervirens (D) Santalum sempervirens

94. Which of the following are called 'suicidal bags'?

(A) Nucleoli (B) Mitochondria (C) Centrosomes **(D) Lysosomes**

95. Water conducting tissue in plants is

(A) Xylem (B) Sclereids (C) Phloem (D) Collenchyma

96. Glycolysis is the conversion of

(A) Glucose to glycogen (B) Glycogen to glucose

(C) Glucose to pyruvic acid (D) Glucose to citric acid

97. Protoplasm is the 'Physical basis of life' was said by

(A) Dujardin (B) Schwann **(C) Huxley** (D) Watson

98. ATP is

(A) An enzyme which brings about oxidation

(B) A molecule which contains high energy phosphate bonds

(C) A hormone

(D) A protein

99. In annual plant, exchange of gases takes place mainly through

(A) Stomata (B) Stem (C) Leaf scars (D) Lenticels

100. DNA is made up of

(A) Sugar (B) Ribose (C) Amino acid (D) Nucleotides