

General Science Model Test Questions 3 With Answers [Botany - 2]

1. The cambium present within a vascular bundle is known
(A) Interfascicular cambium **(B) Intrafascicular cambium**
(C) Lateral cambium (D) Phellogen
2. The outermost layers of rice grain endosperm rich in proteins, vitamins and minerals are known as
(A) Scutellum (B) Coleoptile (C) Coleorrhiza **(D) Aleurone layers**
3. Syngenesious anther is an important characteristic feature of
(A) Asteraceae (B) Malvaceae (C) Rutaceae (D) Poaceae
4. Heterospory leading to the establishment of seed habit is observed in
(A) Lepidocarpon **(B) Selaginella** (C) Isoetes (D) Marsilea
5. Which of the monocots mentioned below shows anomalous secondary thickening?
(A) Furcraea (B) Agave **(C) Asparagus** (D) Dracaena
6. The botanical name for neem is
(A) Tectona grandis (B) Dalbergia latifolia
(C) Pongamia pinnata **(D) Azadirachta indica**
7. Meristemes are usually present in
(A) Ferns (B) Gymnosperms (C) Equisetum (D) Selaginella
8. Winged pollen grains are present in
(A) Araucaria (B) Gnetum **(C) Pinus** (D) Selaginella
9. Apogeotropic and coral – like roots are produced in
(A) Pinus **(B) Cycas** (C) Vanda (D) Taxus
10. What drug is experimented in the treatment of AIDS?
(A) TZA **(B) AZT** (C) CAT (D) ANC
11. Lysosomes are known as
(A) Secretory granule **(B) Suicide bags**
(C) Dictyosomes (D) Ribosomes

12. The algae used by calvin and his co-workers in elucidating the pathway of carbon in photosynthesis is
(A) Chlamydomonas (B) **Chlorella**
(C) Chara (D) Spirogyra
13. Heredity characters are carried to the next generation by
(A) Plastids (B) Mitochondria (C) **Chromosome** (D) Ribosome
14. Nobel prize for the study of the structure of DNA was won by
(A) Darwin and Wallace (B) Jacob and Monod
(C) **Watson and Crick** (D) Oparin and Haldane
15. Global warming is due to the release of this gas
(A) Hydrogen (B) Oxygen (C) **Carbon dioxide** (D) Nitrogen
16. The secret behind Mendel's success in his experiment lies in this
(A) Pisum sativum is a self – pollinating plant
(B) **There are 7 pairs of strikingly contrasting characters in the garden pea plant**
(C) The life span of pisum sativum is short
(D) The 7 characters which he choose for experiment are present independently on different chromosomes
17. This is used as a biofertilizer
(A) **Azolla** (B) Bagasse (C) Urea (D) Clostridium
18. Match list-I with list-II correctly and select your answer using the codes given below:

List-I	List-II
(a) Indusium	1. Moss
(b) Peristome	2. Marchantia
(c) Rhizoids	3. Cyanophyceae
(d) Heterocyst	4. Fern

Codes:

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

(C) 2 1 4 3

(D) 4 1 2 3

19. Choose the appropriate one connected with heterospory

(A) Lycopodium, equisetum (B) Selaginella, marsilea

(C) Isoetes, ophioglossum (D) Ophioglossum, marsilea

20. Which one of the following is responsible for guttation in Ruhr leaf?

(A) Root pressure (B) Transpiration (C) Photosynthesis (D) Osmosis

21. The bacterium Escherichia coli is present in the

(A) Colon of human beings (B) Soil (C) Water (D) Air

22. Turpentine is obtained from

(A) Pinus (B) Cedrus (C) Eucalyptus (D) Taxus

23. The metal ion involved in stomatal regulation is

(A) Iron (B) Magnesium (C) Zinc (D) Potassium

24. Which one of the following is concerned with the production of ATP molecules?

(A) Cristae (B) Cisternae (C) Vesicles (D) Lamellae

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

List-I

List-II

- | | |
|----------------|------------------------|
| (a) Chlorella | 1. Antibiotic |
| (b) Yeast | 2. Nitrogen fixation |
| (c) Pencillium | 3. Single cell protein |
| (d) Rhizobium | 4. Fermentation |

Codes:

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

26. The ratio 3 : 1 is obtained in

- (A) Dihybrid cross **(B) Monohybrid cross**
(C) Crossing over (D) Mutation

27. Consider the following statements:

Assertion (A): Rhizopus lives on bread

Reason (R): Because it is a parasite.

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

28. Which of the following is not correctly matched?

- (A) Auxin - Cell enlargement (B) Gibberellin - Amylase synthesis
(C) Cytokinin - Promotes ageing process (D) Ethylene - Fruit ripening

29. Coralloid roots are found in

- (A) Paddy (B) Gnetum (C) Araucaria **(D) Cycas**

30. Pulses contain large amount of

- (A) Fats (B) Vitamins **(C) Proteins** (D) Minerals

31. Which one is a xerophytes?

- (A) Hydrilla (B) Nelumbium (C) Nerium **(D) Ceratophyllum**

32. Which of the following diseases is not caused by bacteria?

- (A) Typhoid **(B) Influenza** (C) Diphtheria (D) Cholera

33. Which one of the following is correctly matched?

- (A) Stanley - Penicillin (B) Alexander Fleming - AIDS
(C) Robert Gallo – Tobacco mosaic virus **(D) Iwanoski - Discovery of virus**

34. Gymnosperms are

- (A) Closed seeded plant **(B) Open seeded plant**
(C) Seedless plants (D) Herbaceous plants

35. Reduction division is
(A) Amitosis (B) Mitosis (C) Nuclear division (D) Meiosis
36. The female sex organ of polytrichum is
(A) Antheridium (B) Archegonium (C) Foot (D) Protonema
37. DNA model was first proposed by
(A) Watson and Paul (B) Watson and Crick
(C) Robert Hooke (D) Robert Brown
38. Match list-I with list-II correctly and select your answer using the codes given below:

List-I

- (a) Chloroplast
- (b) Golgi complex
- (c) Endoplasmic reticulum
- (d) Protoplasm

List-II

- 1. Cellulose secretion
- 2. Photosynthesis
- 3. Metabolic activities
- 4. Protein synthesis

Codes:

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

NOTE: (a – 2, b – 4, c – 3, d – 1)

39. Mendel did his hybridization experiments in this plant
(A) Sweet pea plant (B) Pea plant
(C) Tomato plant (D) Cotton plant
40. The sun's energy is fixed in the world by
(A) Soil (B) Water (C) Green plants (D) Animals
41. Fixation of nitrogen in the soil is done by
(A) Virus (B) Fungus (C) Bacteria (D) Protozoa
42. Plasmodium belongs to this group

- (A) Protozoa (B) Virus (C) Bacteria (D) Fungus
43. Genes are located on
- (A) Chromosomes (B) Ribosome (C) Lysosome (D) Dictyosome
44. Select the correct order in the life – cycle of a bryophyte
- (A) Spores – Sporophyte – Gametophyte – Fertilization
- (B) Gametophyte – Gametes – Fertilization – Sporophyte
- (C) Gametophyte – Spores – Fertilization – Sporophyte
- (D) Sporophyte – Spores – Fertilization – Gametophyte**
45. Which one of the following is correctly matched?
- (A) Tuberculosis - Fungus **(B) Cholera - Bacterium**
- (C) Mumps - Bacteriophage (D) Tetanus - Virus
46. The botanical name of Bengal gram is
- (A) Arachis hypogea (B) Pisum sativum
- (C) Cicer arietinum** (D) Phaseolus mungo
47. Select the correct order of stages in mitosis:
- (A) Metaphase, Prophase, Anaphase, Telophase
- (B) Prophase, Anaphase, Metaphase, Telophase
- (C) Prophase, Metaphase, Anaphase, Telophase**
- (D) Prophase, Telophase, Anaphase, Metaphase
48. A pure breeding dwarf pea plant (tt) on hybridization with a pure breeding tall plant (TT) will produce dwarf and tall plants in the ratio (in F₂ generation) of
- (A) 1 : 3** (B) 3 : 1 (C) 1 : 2 : 1 (D) 9 : 3 : 3 : 1
49. The male sex organ in chara is called as
- (A) Archegonium (B) Stamen (C) Nucule **(D) Globule**
50. Bacteria were first discovered by
- (A) Anton Van Leeuwenhoek** (B) W. M. Stanley

- (C) Calvin (D) Robert Gallo
51. Which one of the following is correctly matched?
- (A) **Gnetum** - Gymnosperm (B) Polytrichum - Algae
(C) Chara - Pteridophyte (D) Selaginella - Bryophyte
52. Which one of the following tissues conducts food material in plants?
- (A) Xylem (B) **Pholem** (C) Sclerenchyma (D) Collenchyma
53. Penicillin is a/an
- (A) Alkaloid (B) Resin (C) **Antibiotic** (D) Fungus
54. Polio is caused by
- (A) **Virus** (B) Bacterium (C) Whipworm (D) Tapeworm
55. The energy needed by the living organism is ultimately obtained from
- (A) **Sun** (B) Water (C) Air (D) Petrol
56. In plants, water is conducted by
- (A) Parenchyma (B) Sclerenchyma (C) Pholem (D) **Xylem**
57. Peristomes are present in
- (A) Chara (B) **Polytrichum** (C) Adiantum (D) Penicillium
58. The weed which reached India as a contaminant of wheat imported under PL 480 scheme is
- (A) Lantana (B) Eichornia (C) **Parthenium** (D) Prosopis
59. Polio is caused by a
- (A) Bacterium (B) Fungus (C) Mosquito (D) **Virus**
60. Tobacco contains a poisonous substance called
- (A) Endotoxin (B) Asprin (C) **Nicotine** (D) Caffeine
61. Palaeobotany deals with the study of
- (A) **Fossil plants** (B) Rocks (C) Fossil animals (D) Living plants
62. The work 'Biosphere' means
- (A) **Total assembly of all living organisms**

- (B) Only plants of the world
 (C) Only animals of the world
 (D) Only microorganism of the world
63. Microbial world was discovered in the year
 (A) 1763 (B) 1367 (C) **1673** (D) 1667
64. Gametophytes are
 (A) Haploid structures (B) Gamete producers
 (C) Prothalli (D) **All these**
65. Presence of a cambium indicates
 (A) **Open vascular bundle** (B) Closed bundle
 (C) Incomplete vascular bundle (D) Broken vascular bundle
66. The phyllotaxy of Gnetum is
 (A) **Opposite** (B) Ternate (C) Alternate (D) Decussate
67. Match list-I with list-II correctly and select your answer using the codes given below:
- | List-I | | List-II | |
|---------------------|--|-----------|--|
| (a) Microsporophyll | | 1. Ovule | |
| (b) Megasporophyll | | 2. Pollen | |
| (c) Microspore | | 3. Stamen | |
| (d) Megaspore | | 4. Carpel | |
- Codes:
- | | a | b | c | d |
|-----|----------|----------|----------|----------|
| (A) | 1 | 3 | 4 | 2 |
| (B) | 2 | 1 | 3 | 4 |
| (C) | 3 | 4 | 2 | 1 |
| (D) | 4 | 2 | 1 | 3 |
68. The sperm in cycas is
 (A) Biciliate and spirally coiled (B) Biciliate and pyriform
 (C) **Top – shaped and multiciliate** (D) Top – shaped without cilia

69. Circinate veneration of leaves is a typical character of
(A) Gymnosperms (B) **Ferns**
(C) Pteridophytes in general (D) Orchids
70. All fungi are always
(A) Parasites (B) Autotrophs (C) **Heterotrophs** (D) Saprophytes
71. Why blue green algae are called cyano bacteria?
(A) Because they are prokaryotic
(B) Because they live in watery medium
(C) **Because they have blue colour**
(D) Because they are unicellular organisms
72. The gymnosperms resemble angiosperms in having
(A) Ciliated sperms (B) Presence of archegonia
(C) **Presence of ovules** (D) Presence of monoxyle wood
73. The disease caused by the fungus colletorichum falcatum is known as
(A) Downy mildew (B) Leaf curl
(C) **Red rot** (D) Blight disease
74. Dendrochronology is the study of
(A) Height of a tree
(B) Diameter of a tree
(C) **Age of a tree with the help of annual rings**
(D) Counting the number of branches
75. Clove is obtained from which of the plants parts given below?
(A) Stem (B) **Flower buds** (C) Leaves (D) Root
76. Match list-I with list-II correctly and select your answer using the codes given below:
- | List-I | List-II |
|-----------------|---------------|
| (a) Riccia | 1. Monoecious |
| (b) Selaginella | 2. Homoporous |

- (c) Nephrolepis
(d) Pinus
3. Heterosporous
4. Homothallic

Codes:

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

77. Which of the algae given below grows in sewage ponds?
(A) Chlorella (B) **Volvox** (C) Gelidium (D) Ulva
78. Which of the plant groups mentioned below are popularly known as amphibious of plant kingdom?
(A) Bacteria (B) Fungi (C) Algae (D) **Bryophytes**
79. DNA double helical structure was described for the first time by
(A) Beadle and Tatum (B) McIntosh
(C) Hargobind Khorana (D) **Watson and Crick**
80. Catalytically active enzyme is called
(A) Holoenzyme (B) Coenzyme (C) **Apoenzyme** (D) Ribozyme
81. Water droplets at the tip of the leaf are due to
(A) Cuticular transpiration (B) Lenticular transpiration
(C) Stomatal transpiration (D) **Guttation**
82. Match list-I with list-II correctly and select your answer using the codes given below:

List-I

(Disease)

- (a) Cholera
(b) Polio
(c) Malaria
(d) Dermatitis

List-II

(Spreading agents)

1. Fungi
2. Protozoa
3. Virus
4. Bacteria

Codes:

a b c d

- (A) 2 1 4 3
(B) 3 4 1 2
(C) 4 3 2 1
(D) 1 2 3 4

83. The age of a tree can be determined by

- (A) Measuring the height (B) Measuring its girth
(C) Counting the annual growth rings (D) Measuring its diameter

84. The name "Traveller's palm" refers to

- (A) *Cocos nucifera* (B) *Musa sapientum*
(C) *Revenala madagas cariensis* (D) *Heliconia*

85. Phyllode is seen in the plant

- (A) *Acacia melanoxylon*** (B) *Acacia arabica*
(C) *Acacia concinna* (D) *Acacia sundra*

86. Polyploids can be artificially induced by

- (A) Colchicine** (B) Cross – pollination
(C) Self – pollination (D) Vegetative propagation

87. Parthenocarpy can be induced by

- (A) ABA **(B) IAA** (C) GA (D) C_2H_4

88. *Raphanobrassica* was discovered by

- (A) Karpanchanko (B) Lysanko **(C) Mendel** (D) Brown

89. When $FADH_2$ is oxidized, the following number of ATP is produced

- (A) 3 **(B) 2** (C) 1 (D) 6

90. Half leaf experiment proves the essentiality of

- (A) O_2 **(B) CO_2** (C) H_2O (D) HCO_2

91. The universal CO_2 acceptor molecule is called

- (A) RuBP (B) PEP **(C) OAA** (D) Acetyl CoA

92. In anoxygenic photosynthesis, which of the following takes part as electron donors?

- (A) H_2O (B) CO_2 (C) H_3O **(D) H_2S**

93. Velamen root is found in

- (A) Spathoglottis **(B) Vanda** (C) Cuscuta (D) Pothos

94. Rosewood is obtained from

- (A) Dalbergia latifolia** (B) Thespesia populnea
(C) Mangifera indica (D) Delonix regia

95. Pencillin was invented by

- (A) J. Stalk (B) Hooke **(C) A. Fleming** (D) S. Jenner

96. Spirulina which is a source of SCP is a

- (A) Blue green algae** (B) Red algae
(C) Fungus (D) Bacterium

97. Chlorophyll is formed in the presence of

- (A) Copper (B) Zinc (C) Aluminium **(D) Magnesium**

98. Hormone involved in phototropism is

- (A) Auxin** (B) Gibberellin (C) Kinetic (D) Vitamin

99. Father of genetics is

- (A) Gregor Mendel** (B) Hugo de vries
(C) Robert Hooke (D) Linnaeus

100. The main function of RNA is

- (A) Carbohydrate synthesis (B) Lipid synthesis
(C) Protein synthesis (D) No specific function