

General Science Model Test Questions 4 With Answers [Botany - 3]

1. An example of a Hesperidium is
(A) Banana (B) Guava **(C) Citrus** (D) Grape
2. Which of these is an antibiotic?
(A) Penicillin (B) Terramycin (C) Aureomycin **(D) All of these**
3. The number of dry plants in the herbaria found in the Indian Botanical Garden at Kolkata is about
(A) 70 lakhs **(B) 1 million** (C) 5 lakhs (D) 15 lakhs
4. Mycoses are diseases caused by
(A) Mycobacteria **(B) Fungi** (C) Algae (D) Cyanobacteria
5. Which one of the following is not a correct pair in relation to function?
(A) Golgi complex - Breakdown of complex molecules
(B) Mitochondria – Production of energy
(C) Chromosomes – Vehicles of heredity
(D) Chloroplast – Hill reaction
6. The parasitic algae is
(A) Cephaleuros (B) Chlorella (C) Spirogyra (D) Chara
7. In which plant are scleriods abundant?
(A) Nymphaea (B) Hydrilla (C) Vallisneria **(D) None of these**
8. The fruiting body namely, cleistothecium is formed in
(A) peziza **(B) agaricus** (C) puccinia (D) Aspergillus
9. If the genetic name of the fossil plant ends with “Dendron” or “xylon” it denotes
(A) The leaf of the fossil **(B) The stem of the fossil**
(C) The root of the fossil (D) The reproductive part of a fossil
10. Sewage treatment is carried out with the help of
(A) Chlorella **(B) Bacteria** (C) Yeast (D) Blue green algae
11. “Ikebana” pertains to

- (A) Linear manner (B) Scattered manner
 (C) Circular manner (D) Zig – zag manner
23. Soil erosion leads to
 (A) Loss of water (B) Loss of air
(C) Loss of vegetation (D) Loss of animal life
24. The plant used by mendel in his early experiments was
 (A) Potato **(B) Pea plant** (C) Banana (D) Lemon
25. The medicine prepared by genetic exchange in bacteria is
 (A) Tyrothricin (B) Polymycin **(C) Insulin** (D) Bacitracin
26. Penicillin was discovered by
 (A) Louis Pasteur **(B) Alexander fleming** (C) J.C.Bose (D) E.J.Corey
27. The leaves with sori are called as
 (A) Scale leaves **(B) Sporophylls** (C) Leaflets (D) Compound leaves
28. Saprophytic organism is
 (A) Earthworm (B) Euglena (C) Amoeba **(D) Fungi**
29. The plant used by mendel for his research was
 (A) Bean plant (B) Brinjal plant **(C) Pea plant** (D) Bengal gram plant
30. Match List I with list II correctly and select your answer using the codes given below:

List I	List II
(a) Carrot	1. Cotyledon
(b) Groundnut	2. Stem
(c) Lady's finger	3. Root
(d) Potato	4. Fruit

Codes:

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

(C) 4 2 3 1

(D) 1 4 2 3

31. Consider the following statements:

I. The DNA controls all the activities of the cell

II. It transfers the hereditary characters from one generation to the next

III. It controls protein synthesis

IV. It produces RNA

Of the statements:

(A) I alone is correct

(B) I and II are correct

(C) I, II and III are correct

(D) All are correct

32. Which one of the following statements is wrong about meiosis?

(A) It brings about genetic variations

(B) Reduction in the number of chromosomes in the gametes

(C) It maintains the number of chromosomes in an organism

(D) It happens in the meristematic region

33. Penicillium is

I. A fungus

II. A green mould

III. A bacterium

IV. A medicine

Of the statements:

(A) I alone is correct

(B) I and II are correct

(C) I, II and IV are correct

(D) All are correct

34. Consider the following statements:

Assertion (A): Fungi take up food from the substratum

Reason (R) : They excrete digestive enzymes into the substratum

Of the statements:

(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 (A)

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

- (D) (A) is false, but (R) is true
35. Which one of the following plants is used in the treatment of jaundice?
(A) Hibiscus (B) Musa **(C) Eclipta** (D) Croton
36. Which of the following is wrongly matched?
(A) Rhizobium – Symbiotic nitrogen fixation
(B) Streptococcus lactis – Vinegar production
(C) Azotobacter – Non symbiotic nitrogen fixation
(D) Yeast – Fermentation
37. The smallest angiosperm is
(A) Utricularia **(B) Wolfia** (C) Arabidopsis (D) Ceratophyllum
38. Identify the correct sequence of the following
(A) Electron transport, ATP synthesis, Glycolysis, Krebs' cycle
(B) Krebs' cycle, Glycolysis, ATP synthesis, Electron transport
(C) Glycolysis, Krebs' cycle, Electron transport, ATP synthesis
(D) ATP synthesis, Glycolysis, Krebs' cycle, Electron transport
39. Which one of the following is correctly matched?
(A) Mitochondrion – Photophosphorylation
(B) Ribosomes – Protein synthesis
(C) Yeast – Aerobic fungus
(D) Ferredoxin – Catalyst
40. The stiffness of paddy straw is due to
(A) hard fibres (B) Stone cells (C) Collenchyma (D) Silica
41. Which of the following plants is endemic?
(A) Ginkgo (B) Eucalyptus (C) Teak (D) Neem
42. The wood is made of
(A) Primary phloem (B) Primary xylem

(C) Secondary xylem

(D) Secondary phloem

43. Match the following using the codes given below:

- | | | |
|--------------|---|-------------|
| (A) Caffeine | – | 1. Tobacco |
| (B) Opium | - | 2. Coffee |
| (C) Nicotine | - | 3. Cinchona |
| (D) Quinine | - | 4. Poppy |

Codes:

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

44. "Berry" fruit is found in

- (A) Tulsi **(B) Tomato** (C) Cashewnut (D) Pea

45. DNA structure was discovered by

- (A) Watson and crick** (B) Hargobind Khorana
(C) Kari Landsteiner (D) Gregor Mendel

46. The growing of plants under soilless condition is called

- (A) Hydrology (B) Hydrotropism **(C) Hydroponics** (D) Hydrotaxis

47. Spore is a

- (A) Sexual reproductive cell **(B) Asexual reproductive cell**
(C) Vegetative cell (D) Plant

48. Quickly available respiratory substrate is

- (A) Glucose (B) Fructose **(C) Starch** (D) Lactose

49. In nature, ammonification takes place in

- (A) Lake (B) Sea (C) River **(D) Ditch**

50. What kind of plant is an 'Alga'?
- (A) Chlorophyllous (B) Achlorophyllous
(C) Parasitic (D) Saprophytic
51. Ganong's photometer is used in the study of
- (A) photosynthesis (B) Respiration (C) Transpiration (D) Photorespiration
52. Coconut is dispersed in nature by
- (A) Animals (B) Water (C) Wind (D) All the three
53. Pillar roots of banyan help in
- (A) The absorption of water (B) The support of the branches
(C) The production of more leaves (D) All the above
54. The organic compounds that contain nitrogen is
- (A) Glucose (B) Fructose (C) Protein (D) Fats
55. Which one of the following is a climax forest?
- (A) Thorn forest (B) Deciduous forest
(C) Evergreen forest (D) Alpine forest
56. Red colour of riped tomato is due to
- (A) Lycobean (B) Riboflavin (C) Chromatophore (D) Haemoglobin
57. Cultivation of trees and vegetables is
- (A) Apiculture (B) Arboriculture (C) Moriculture (D) Oyster – culture
58. Jaya is variety of
- (A) Cotton (B) Paddy (C) Groundnut (D) Maize
59. Absorption of water by plants takes place
- (A) When the sun shines (B) During photosynthesis only
(C) When the atmosphere is dark (D) All round the day
60. Which are the most important element necessary for plant growth?
- (A) Calcium, Sodium, Potassium (B) Oxygen, Iron, Phosphorus

(C) Magnesium, Iron, Carbon (D) Oxygen, Hydrogen, Carbon

NOTE: Nitrogen, Phosphorous, Potassium

61. Osmosis is synonymous with

(A) Diffusion (B) Imbibition (C) Turgor pressure (D) **None of these**

62. What is the first stable product of photosynthesis?

(A) **Starch** (B) Sugar (C) Protein (D) Amino acids

63. The water absorbed by the plant moves through

(A) Phloem tissues (B) Coelenchyma (C) **Xylem tissues** (D) Leaves

64. Ganong's photometer is used to measure the

(A) intensity of light (B) **Loss of water by plants**
(C) Rate of photosynthesis by the plants (D) Amount of food materials in the plant

65. What does phloem tissue have?

(A) **Sieve elements** (B) Cork cells
(C) Osteoscleriodes (D) Chlerenchyma

66. Piliferous layer of root is produced from

(A) Parenchyma cells (B) **Epidermal cells**
(C) Fibrous cells (D) Hypodermal cells

67. Endodermis is found as a single layer of cells

(A) Inside the xylem tissue (B) Within the phloem
(C) Present in the mesophyll tissue (D) **Forming the outermost layer of the stele**

68. The fascicular cambium is present in the stem of

(A) Oryza (B) **Sorghum** (C) Citrus (D) Cyperus

69. Dixon and Jolly formulated their theory on the ascent of sap in plants based on

(A) Capillary attraction (B) Imbibition theory
(C) Vital theory (D) **Union of water molecules**

70. Find out the only plant among the four given below. Which is not a xerophytes?

- (A) Opuntia (B) Cereus **(C) Euphorbia tirucally** (D) Butea frondosa

71. Where do you find the largest number of Eucalyptus species?

- (A) India** (B) Malaya (C) Australia (D) America

72. Match the following:

- | | |
|-----------------|--------------------------------|
| (a) Jute | 1. Wood |
| (b) Coconut oil | 2. Bark |
| (c) Teak | 3. Fibres |
| (d) Clove Oil | 4. Endosperm |
| | 5. Bud and stalk of the flower |

Codes:

- | | | | | |
|------------|----------|----------|----------|----------|
| | a | b | c | d |
| (A) | 3 | 4 | 1 | 5 |
| (B) | 1 | 2 | 3 | 4 |
| (C) | 2 | 3 | 1 | 4 |
| (D) | 3 | 5 | 4 | 1 |

73. Match the following:

- | | |
|--------------------|-----------------------------------|
| (a) Pomology | 1. Growing plants from tissue |
| (b) Floriculture | 2. Study of bee keeping |
| (c) Apiculture | 3. Study of flowering plants |
| (d) Tissue culture | 4. Study of fruit yielding plants |

Codes:

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

74. Match the following:

- | | |
|------------|---------------|
| (a) Corn | 1. Cotyledon |
| (b) Pea | 2. Endosperm |
| (c) Tomato | 3. Stem tuber |
| (d) Potato | 4. Pericarp |

Codes:

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

75. Match the following:

(a) Ethylene	1. Pesticide
(b) Gibberellin	2. Parthenocarphy
(c) Toxins	3. Apical dominance of shoot
(d) BHC	4. Fungal infections

Codes:

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

76. Match the following:

(a) Turger pressure	1. Osmosis
(b) Photosynthesis	2. Stamata
(c) Transpiration	3. Yeast
(d) Fermentation	4. O ₂ evolution

Codes:

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

77. Which among the following statements are wrong?

1. Short day plants cannot grow in equator because there is too much of rain
2. Short day plants grow very well in tropics

3. Short day plants require less than 12 hours of light per day
4. Short day plants produce no flowers when grown in 16 hours of light per day

(A) 1 & 2 are wrong statements (B) 2, 3 and 4 are wrong statements
(C) 3 & 4 are wrong statements (D) 1, 3 & 4 are wrong statements

78. Find out the wrong statements from among the following

1. All fungi are not multicellular
2. Fungi have chloroplast
3. Fungi can grow on human beings also
4. Fungi can cause diseases

(A) 1 (B) 2 (C) 3 (D) 2 & 3

79. Find out the correct statements:

1. Diatoms are unicellular plants
2. Diatoms are found in water
3. Diatoms have silica coatings
4. Diatoms are not green in colour

(A) 1, 2 & 3 (B) 2, 3 & 4 (C) 4, 3 & 1 (D) 1, 2 & 4

80. The electron transport chain is a group of molecules located in the

- (A) Inner membrane of mitochondria (B) Outer membrane of mitochondria
(C) Perimotochondrial space (D) lysosome

81. What is penicillium?

- (A) Virus (B) Alga (C) Fungus (D) Bacterium

82. Inside a seed, the plant remains in a/an

- (A) Active state (B) Dead state (C) Dormant state (D) None of these

83. Plasmids are used as vectors in gene transfer, they are present in

- (A) Cells of all living organisms (B) All viruses
(C) Certain viruses (D) Certain bacteria

84. Transgenic plants and animals can be produced through
(A) Bio-technology (B) Microbiology
(B) Genetic engineering (D) Cytology
85. Guttation is a process in plants by which
(A) Carbon dioxide and oxygen are removed
(B) Carbon dioxide is removed
(C) Excess of water is removed as water drops
(D) Excess of water is removed as water vapour
86. Ability to fix atmospheric nitrogen is found in
(A) Leaves of some crop plants (B) Some red algae
(C) Chlorella **(D) Some blue green algae**
87. Opposite decussate phyllotaxy is seen in
(A) Calotropis (B) Hibiscus Rosa-sinensis (C) Cassia (D) Nymphae
88. The natural systems of classification was postulated by
(A) Engler and prandti **(B) Bentham**
(C) Aristotle and Linnaeus (D) Theophrastus and Aristotle
89. In plants, energy is produced during the process of
(A) Transpiration **(B) Respiration** (C) Photsynthesis (D) Water absorption
90. In which of the following the pollen grains are liberated as clouds of yellow powder and also called "sulphur shower"?
(A) Fern (B) Moss (C) Cycas **(D) Pinus**
91. In botany, the latin names are used because
(A) Latin is a simple language
(B) In whole world there would be only one name for one plant
(C) It is easy to write
(D) Most of the names in other languages are not correct

92. The flowers are variously coloured to
(A) Prepare food (B) Store food
(C) Attract insects (D) Receive sunlight
93. Agar- agar is derived from
(A) Gelidium (B) Batrachospermum (C) Chara (D) Cladophora
94. The plant which is used as medicine for jaundice is
(A) Phyllanthus emblica (B) Phyllanthus niruri
(C) Phyllanthus mandras patensis (D) Phyllanthus indicus
95. The most commonly used higher plant vector for gene transfer is
(A) pBR 322 (B) CaMV (C) Transposon **(D) Ti plasmid**
96. Genetic material of virus is/are
(A) DNA only (B) RNA only **(C) DNA (or) RNA** (D) DNA & RNA
97. Primary organs of photosynthesis are
(A) Stems (B) Roots (C) Vessels **(D) Leaves**
98. The abundance of blue – green algae in paddy fields results in saving on
(A) Irrigation (B) Phosphorus (C) Potash **(D) None of these**
99. Sessile leaves are seen in
(A) Nerium (B) Mangifera **(C) Calotropis** (D) Hibiscus
100. Angiosperms are
(A) Cryptogams (B) Non-Flowering point
(C) Spermatophytes (D) Non – Spermatophytes