

General Science Model Test Questions 2 With Answers [Botany - 1]

1. Which one of the following is a green house gas?
(A) Oxygen (B) Nitrogen **(C) Carbon dioxide** (D) Ozone
2. The tallest living tree is
(A) Eucalyptus (B) Palm tree **(C) Sequoia** (D) Tree fern.
3. Which one of the following plants is biennial?
(A) Banana (B) Pineapple (C) Jack fruit **(D) Carrot**
4. Sea weeds are an important source of
(A) Iron (B) Chlorine (C) Bromine **(D) Iodine**
5. Polio is caused by
(A) Bacterium (B) Fungus **(C) Virus** (D) Insect
6. "Ozone" as such
(A) Protects the earth from ultraviolet sunrays
(B) Is catalyst in a number of chemical reactions
(C) Is utilized in green house farming
(D) Is a gas which is hazardous when inhaled
7. The climatic changes, soil erosion and decreased rainfall is due to
(A) Eco system changes **(B) Deforestation**
(C) Global warming (D) Green house effect
8. AGMARK is
(A) Co – operative society (B) Regulated market
(C) Farmers co-operative **(D) A quality assurance for agricultural products**
9. Refrigeration is a process which
(A) Kills bacteria **(B) Slows down the bacterial growth**
(C) Inactivates the bacteria (D) Plasmolyses the bacteria
10. The blue – green algae are

- (A) Photoheterotrophs **(B) Photoautotrophs**
(C) Chemoautotrophs (D) Chemoheterotrophs
11. Which of the following acts as a coenzyme?
(A) Zn^{++} (B) Lipase (C) Pyridoxin (D) Lysine
12. The phenotypic ratio of monohybrid cross is
(A) 1 : 1 : 1 : 1 (B) 1 : 2 : 1 **(C) 3 : 1** (D) 1 : 1
13. Smallest measuring unit in cytology is
(A) Micron (B) mm **(C) Angstrom** (D) Rem
14. It is believed that life evolved in its early stage under oxygen – free condition. Which of the following organisms might have been able to survive in that environment?
(A) Obligate anaerobic bacteria (B) Obligate halophytes
(C) Lichens (D) Thermophilic algae
15. Sexual reproduction is absent in which of the group of fungi mentioned below?
(A) Deuteromycetes (B) Basidiomycetes
(C) Phycomycetes (D) Ascomycetes
16. One of the characteristics that differentiates prokaryotes from eukaryotes is
(A) RNA (B) DNA (C) Protein **(D) Membrane – bound organelles**
17. The most common method of vegetative reproduction in usnea is
(A) Fragmentation **(B) Soredia** (C) Gemmae (D) Hormogonia
18. Which of the fungi mentioned below is employed as a genetic tool?
(A) Aspergillus **(B) Neurospora** (C) Gibberella (D) Penicillium
19. Heterotrichous habit is exhibited by
(A) Vaucheria (B) Dictyota **(C) Eutocarpus** (D) Spirogyra
20. Photosynthesis cannot take place in
(A) Red light (B) Blue light **(C) Ultraviolet light** (D) Green light
21. Consider the following statements:

I. In pinus only cleavage polyembryony is seen

II. In pinus both simple polyembryony and cleavage polyembryony are present.

III. In pinus polyembryony is not seen

IV. In pinus embryogenesis is not clear.

Of the statements:

(A) IV alone is correct

(B) III alone is correct

(C) I alone is correct

(D) II alone is correct

22. What is the cause for deforestation?

(A) Destruction

(B) Rapid explosion of human and live stock population

(C) Loss of green wealth

(D) none of these

23. How soil get eroded?

(A) By collection of wastes

(B) By disposal of wastes

(C) By floods and rains

(D) By mechanical methods

24. The shape of Human Immuno deficiency Virus (HIV) is

(A) Spherical in shape

(B) Rod like in shape

(C) Spiral like in shape

(D) Comma like in shape

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

List-I

List-II

- (a) Virus
- (b) Bacteria
- (c) Nucleus
- (d) Cell

- 1. Robert Hooke
- 2. Robert Brown
- 3. Dimitry Ivanowsky
- 4. Anton Van Leeuwenhoek

Codes:

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

26. Polyploidy is most common in
(A) Animal kingdom (B) **Plant kingdom**
(C) Fungi (D) Protista
27. In photosynthesis, the light reaction is known as hill reaction and the dark reaction is known as
(A) Dark reaction (B) Black reaction
(C) **Blackman reaction** (D) Darkman reaction
28. DNA structure was first described by
(A) Catcheside (B) Lederberg (C) Nirenberg (D) **Watson and Crick**
29. What is an example for cymose in florescence?
(A) Theopesia (B) Achiranthus (C) **Crotalaria** (D) Caelsalpinia
30. Rice is a staple food of people of India. In the milling process, polishing is the final process and the polished rice is rich in
(A) Cellulose (B) Sugar (C) **Starch** (D) Chitin
31. The ratio 9 : 3 : 3 : 1 represents a ratio of
(A) Monohybrid (B) **Dihybrid** (C) Trihybrid (D) Back cross
32. Which one of the following is correctly matched?
(A) Manihot - Grain
(B) Wheat - Cotyledon
(C) **Castor - Endosperm**
(D) Saccharum - Stem tuber
33. Gnetum is a
(A) Herb (B) Shrub (C) **Climber** (D) Tree
34. Largest living tree on earth is
(A) Eucalyptus (B) **Giant oak** (C) Sequoia (D) Juniperus
35. Protonema appears in the life cycle of
(A) Riccia (B) Marchantia (C) **Funaria** (D) Anthoceros

36. Sugar is obtained from
(A) Sugarcane (B) Beet (C) Palmyrah (D) All these
37. When a plant cell is placed in a sugar solution ----- takes place.
(A) Osmosis (B) Plasmolysis (C) Diffusion (D) Imbibition
38. The kinds of ribose nucleic acid present in any plant cell will be
(A) 2 (B) 3 (C) 4 (D) 5
39. VERNATION means the arrangement of leaf
(A) On the stem (B) On the root (C) Inside the bud (D) Outside the bud
40. In plants, energy is produced during
(A) Transpiration (B) Photosynthesis (C) Respiration (D) Absorption
41. The yellowing of leaf is caused by the deficiency of
(A) Iron (B) Cobalt (C) Copper (D) Zinc
42. Identify the correct sequence of evolution in plants:
(A) Pteridophyte – Gymnosperms – Thallophyte – Bryophyte
(B) Gymnosperms – Pteridophyte – Bryophyte – Thallophyte
(C) Bryophyte – Pteridophyte – Gymnosperms – Thallophyte
(D) Thallophyte – Bryophyte – Pteridophyte – Gymnosperms
43. The vascular bundles arranged in a cycas petiole is
(A) T- shaped (B) L – shaped
(C) C – shaped (D) Inverted omega (u) shaped
44. Which one of these is correctly matched?
(A) Paddy - Blast disease (B) Sugarcane - Ring disease
(C) Potato - Leaf spot (D) Groundnut - Red rot
45. When the soil is rich in organic debris, it is known as
(A) Humus soil (B) Clayey soil (C) Loam soil (D) Organic soil
46. A plant growing inside another plant of different species symbiotically is called

- (A) Parasite (B) Saprophyte (C) Semi – parasite **(D) Endophyte**
47. “Survival of the fittest” was proposed in his theory of evolution by
(A) Darwin (B) Mendel (C) Lamarck (D) De Vries
48. In rice polish which is left as a residue
(A) Is of no value (B) Has the same nutritive value
(C) Twice as nutritive value **(D) None of the above**
49. This pteridophyte produces two kinds of spores
(A) Lycopodium **(B) Selaginella** (C) Psilotum (D) Adiantum
50. Lepidodendron is a fossil which represents
(A) Root **(B) Stem** (C) Fruit (D) Leaf
51. These cells are loosely arranged in a plant body
(A) Parenchyma (B) Collenchyma (C) Sclerenchyma (D) Acrenchyma
52. Maximum rate of photosynthesis occurs in
(A) White light **(B) Red light** (C) Green light (D) Red and blue light
53. Resupination is a characteristic feature to the flowers of this family
(A) Oleaceae (B) Myrtaceae **(C) Orchidaceae** (D) Malvaceae
54. Gemma cup is present in
(A) Riccia (B) Marchantia (C) Anthoceros (D) Funcaria
55. Which one is correctly matched?
(A) Black gram - Tree (B) Teak wood - Climber
(C) Banana - Herb **(D) Bengal gram - Shrub**
56. How many types of cell division are there in plant cells?
(A) 1 (B) 2 **(C) 3** (D) 4
57. Flowers emit fragrance to
(A) Purify air (B) Drive away flies
(C) Attract insects (D) Perform all these works

58. Recently pattern right was given to which plant in America
(A) Ginger **(B) Turmeric** (C) Onion (D) Garlic
59. Reduction in chromosome number occurs after
(A) Mitosis (B) Amitosis **(C) Meiosis** (D) Linkage
60. The male cone of cyas consist of
(A) Microsporophylls (B) Megasporophylls
(C) Microsporangia (D) Megasporangia
61. Botanical name of paddy is
(A) Triticum vulgare (B) Solanum nigrum
(C) Qryza sativa (D) Eleusine coracana
62. The male filament of oedo gonium is known as
(A) Gynandrium **(B) Nannandrium** (C) Micrandrium (D) Megandrium
63. Guard cells in the stomata help in
(A) Transpiration (B) Respiration (C) Photosynthesis (D) All of these
64. Syngensis means union of
(A) Anthers (B) Stamens
(C) Filaments (D) Androecium and gyneecium
65. Identify the correct sequence of protein synthesis
(A) Polyribosomes – Aminoacid + tRNA – Polypeptide – Messenger RNA
(B) Polypeptide – Polyribosome – Messenger – RNA – Aminoacid + tRNA
(C) Messenger – RNA – Polyribosomes – Aminoacid + tRNA – Polypeptide
(D) Messenger RNA – Aminoacid + tRNA – Polypeptide – Polyribosomes
66. The study of individual plant throughout their life – history in relation to the environment is called
(A) Autecology **(B) Synecology** (C) Biology (D) Life – cycle
67. Which one of the following is correctly matched?
(A) Papain - Tobacco **(B) Jute - Phloem fibre**

- (C) Nicotin - Tea (D) Thein - Papaya
68. Fern prothallus is a
(A) Gametophyte (B) Sporophyte (C) Vegetative body (D) None of these
69. What is the correct sequence of the life – cycle of fern?
(A) Spore – Sporophyte – Gamete – Gametophyte
(B) Zygote – Gametophyte – Sporophyte – Spore
(C) Zygote - Gametophyte – Spore – Sporophyte
(D) Zygote – Sporophyte – Spore – Gametophyte
70. Consider the following statements:
Assertion (A): Onion is a monocot plant.
Reason (R): It has adventitious roots.
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
71. Consider the statements:
I. Viruses are obligatory endoparasites of living cells
II. Viruses have genetic material
III. Viruses can be crystallized
IV. Viruses do not have mitochondria
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
72. Which of the following lights is necessary for photosynthesis?
(A) Green **(B) Red** (C) Blue (D) White
73. The fruit of Tomato belongs to the type?

- (A) Drupe **(B) Berry** (C) Pepe (D) Pome
74. The edible part of Cauliflower is
(A) Inflorescence (B) Flower (C) Fruit (D) Flower bud
75. The genetic material of a cell resides in
(A) Cytoplasm (B) Protoplasm (C) Ribosome **(D) DNA**
76. An ecosystem has two components, namely
(A) Weeds and trees **(B) Biotic and abiotic**
(C) Frogs and men (D) Plants and animals
77. Development of a sporophyte directly from the sporophytic tissue is called
(A) Double fertilization (B) Triple fusion
(C) Apospory (D) Syngamy
78. Root hairs absorb water from the soil on account of
(A) Plasmolysis **(B) Difference in osmotic concentration**
(C) Difference in turgor (D) Different ions present in the soil water
79. Pollination by birds is known as
(A) Ornithophily (B) Anemophily (C) Hydrophily (D) Entomophily
80. Autotrophs in an ecosystem are called
(A) Producers (B) Consumers
(C) Decomposers (D) Abiotic constituents
81. A dye is prepared from
(A) Sida **(B) Indigofera** (C) Tephrosia (D) Tridax
82. What is the phenotypic ratio of complementary genes in pea?
(A) 9 : 3 : 3 : 1 **(B) 9 : 7** (C) 15 : 1 (D) None of these
83. Thymidine is
(A) A nitrogenous base found in DNA (B) A nitrogenous base found in RNA
(C) A nucleotide (D) None of these

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

List-I	List-II
(a) Malaria	1. Plasmodium
(b) Small pox	2. Bacterium
(c) Goitre	3. Virus
(d) Leprosy	4. Iodine deficiency

Codes:

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

85. The first effective vaccine against polio was prepared by

- (A) John H. Gibbon **(B) Jonas E. Salk**
(C) James Simpson (D) Robert Edwards

86. Which among the following is a non-photosynthesis pigment?

- (A) Chlorophyll – a (B) Chlorophyll – b
(C) Anthocyanin (D) Phycobilins

87. Unit of classification is

- (A) Family (B) Class **(C) Species** (D) Phylum

88. Plants that grow in saline water are called

- (A) Halophytes** (B) Hydrophytes (C) Mesophytes (D) Thallophytes

89. Diatomaceous earth is a deposit of organisms of

- (A) Xanthophyceae (B) Phaeophyceae
(C) Bacillariophyceae (D) Rhodophyceae

NOTE: Chrysophyceae

90. The physiological phenomenon considered as a “necessary evil” in plants is

- (A) Transpiration** (B) Photosynthesis (C) Respiration (D) Osmosis

91. The type of phyllotaxy in caltropis is
(A) **Opposite decussate** (B) Alternate
(C) Superposed (D) Whorl
92. Frankia produces root nodules in
(A) Legumes (B) Rice (C) **Casuarina** (D) Gossypium
93. Red tides are caused by
(A) Diatoms (B) **Red dinoflagellates** (C) Red algae (D) Brown algae
94. The development of fruit without fertilization is known as
(A) Apomixis (B) Apospory (C) **Parthenocarp** (D) Apogamy
95. The agent that carries information from DNA to RNA is
(A) l – RNA (B) **m – RNA** (C) r – RNA (D) DNA itself
96. To induce callus which one of the following chemicals is necessary?
(A) **NAA** (B) BAP (C) 2, 4-D (D) 2, 4, 5-T
97. Arachis hypogae (groundnut) belongs to the family
(A) Malvaceae (B) Euphorbiaceae
(C) Musaceae (D) **Papilionaceae (Fabaceae)**
98. A definite number of cells arranged in a specific manner in an algal colony is known as
(A) Coenobium (B) **Thallus** (C) Globule (D) Nucule
99. Which of the groups of plants mentioned below consists of phycobiont and mycobiont living together as an unit?
(A) **Lichens** (B) Mycoplasm (C) Algae (D) Bacteriophages
100. Which of the scientists mentioned below for the first time, observed and described bacteria?
(A) Loeffler (B) Louis Pasteur
(C) Koch (D) **Anton Van Leeuwenhoek**