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## 125 Questions

**Que. 1** Which of the following is a club moss?

1. Selaginella
2. Equisetum
3. Lycopodium
4. None of these

Correct Option - 3

**Que. 2** Raphe in Marsilea is present in

1. female gametophyte
2. sporocarp
3. sporophyte
4. male gametophyte

Correct Option - 2

**Que. 3** The stele type occurring in Marsilea is

1. Solenostele
2. Protostele
3. Amphiphloic Siphonostele
4. All of these

Correct Option - 3

**Que. 4** The morphological nature of rhizophore of Selaginella is

1. root like
2. stem like
3. both root and stem like
4. rhizoid like

Correct Option - 3

**Que. 5** The Selaginella shows

1. large and small leaves arranged spirally
2. all leaves large
3. all leaves small
4. all of these

Correct Option - 1

**Que. 6** The Anatomy of pinus needle reflects the features of a

1. Mesophyte
2. Xerophyte
3. Hydrophyte
4. Epiphyte

Correct Option - 2

**Que. 7** Girdling leaf traces are the characteristic feature of the stem of

1. Cycas
2. Pinus
3. Ephedra
4. Gnetum

Correct Option - 1

**Que. 8** Pinus is a

1. tree
2. shrub
3. herb
4. none of these

Correct Option - 1

**Que. 9** The recent era is

1. Cenozoic
2. Mesozoic
3. Proterozoic
4. Archeozoic

Correct Option - 1

**Que. 10** Fossils are found in

1. igneous rocks
2. quartz
3. soil
4. sedimentary rocks

Correct Option - 4

**Que. 11** Reserve food material in fungi is

1. Glycogen
2. Starch
3. Sucrose
4. Maltose

Correct Option - 1

**Que. 12** Which is rootless fern?

1. Pteris
2. Dryopteris
3. Salvinia
4. Adiantum

Correct Option - 3

**Que. 13** Which is common between aerobic respiration and anaerobic respiration?

1. Similar substrate
2. Glycolysis
3. Pyruvic acid
4. All of these

Correct Option - 2

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**Que. 14** Turpentine oil is obtained from

1. Coal
2. Petroleum
3. cedarwood
4. Pinus

Correct Option - 4

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**Que. 15** Which alga was used by Calvin and his co-workers in their experiments on photosynthesis?

1. Chlamydomonas
2. Chlorella
3. Chara
4. Volvox

Correct Option - 2

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**Que. 16** Which of the following is an oilseed crop?

1. Marigold
2. Chrysanthemum
3. Rose
4. Sunflower

Correct Option - 4

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**Que. 17** The first transgenic plant used for commercial production was

1. cotton
2. tomato
3. tobacco
4. rice

Correct Option - 3

---

**Que. 18** Rare hybrid plants can be saved by

1. pollen culture
2. embryo culture
3. protoplast culture
4. none of these

Correct Option - 3

---

**Que. 19** Which is not a category?

1. Ecotype
2. Species

3. Genus

4. Order

Correct Option - 1

**Que. 20** Linnaeus published his concept of binomial nomenclature first in

1. Systema Nature
2. Species Plantarum
3. Genera Plantarum
4. Philosophia Botanica

Correct Option - 2

**Que. 21** When chlorophyll is burnt which element is obtained?

1. Ca
2. Na
3. Mg
4. Mn

Correct Option - 3

**Que. 22** Iron deficiency results in

1. leaf tip necrosis
2. small leaves disease
3. decreased protein synthesis
4. Intervenal chlorosis appearing first in young leaves

Correct Option - 4

**Que. 23** A phytohormone is

1. naturally produced
2. synthetic substance
3. both (1) and (2)
4. None of these

Correct Option - 3

**Que. 24** During the seismonastic movements in Mimosa pudica turgor changes occur in

1. leaflets
2. stipules
3. pulvinus leaf base
4. petiole and stem

Correct Option - 3

**Que. 25** Evergreen trees remain green throughout the year on account of

1. cold climate
2. absence of leaf fall
3. leaves falling in small number at intervals
4. supply of moisture throughout the year

Correct Option - 3

**Que. 26** Phenotypic ratio of dihybrid test cross is

1. 15 : 1
2. 3 : 1
3. 9 : 3 : 3 : 1
4. 1 : 1 : 1 : 1

Correct Option - 4

**Que. 27** The damaged ozone layer is situated in

1. Inosphere
2. Mesosphere
3. Stratosphere
4. Troposphere

Correct Option - 3

**Que. 28** Which one of the following is ordinarily not an air pollutant?

1. CO<sub>2</sub>
2. CO
3. SO<sub>2</sub>
4. Hydrocarbons

Correct Option - 1

**Que. 29** Genes are made by

1. Histones
2. Lipoproteins
3. Hydrocarbons
4. Polynucleotides

Correct Option - 4

**Que. 30** The term 'ecosystem' was proposed by

1. Odum
2. Tansley
3. Whittaker
4. Goli

Correct Option - 2

**Que. 31** The first juvenile larva of Ascaris is known as

1. Filiform larva
2. Rhabditiform larva
3. Miracidium larva
4. Microfilariae

Correct Option - 2

**Que. 32** Chromosomes contain

1. Protein only
2. DNA and protein
3. DNA, RNA and protein
4. DNA, RNA, histone and non-histone proteins

Correct Option - 4

**Que. 33** Which are phagocytes in liver?

1. Kupffer cells
2. Aciner cells
3. Dieter cells
4. Hensen's cell

Correct Option - 1

**Que. 34** Termites digest wood with the help of an enzyme secreted by the

1. salivary glands
2. cells in the midgut
3. symbiotic protozoa
4. bacteria and fungi outside the body

Correct Option - 3

**Que. 35** In honeybee colony, the drones are produced by

1. fertilized eggs
2. unfertilized eggs
3. larvae fed upon leaves
4. fasting larvae

Correct Option - 2

**Que. 36** Jacobson's organ is concerned with

1. smell
2. burrowing
3. touch
4. vision

Correct Option - 1

**Que. 37** Body organisation in Hydra is of

1. Tissue grade
2. Organ grade
3. Cellular grade
4. Organ system grade

Correct Option - 1

**Que. 38** Leech obtains continuous blood stream from its victim by pouring in it

1. Heparin



2. Hirudin
3. Insulin
4. Pepsin

Correct Option - 2

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**Que. 39** Spicules of Sponges are formed by

1. Porocytes
2. Pinacocytes
3. Scleroblasts
4. Thesocytes

Correct Option - 3

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**Que. 40** Heterocoelous centrum is a characteristic of

1. Amphibia
2. Reptilia
3. Birds
4. Mammalia

Correct Option - 3

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**Que. 41** Especially sedentary protocord animals are found in the class

1. Pterobranch
2. The larva
3. Ascites disease
4. Thalisia

Correct Option - 1

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**Que. 42** Cytophyge is found in

1. Paramecium
2. Entamoeba
3. Amoeba
4. Trypanosoma

Correct Option - 1

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**Que. 43** Littoral form of animals is found

1. in fresh water
2. in sea water near the shore
3. in deep sea
4. at the bottom of the sea

Correct Option - 2

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**Que. 44** Bladder worm is a larva of

1. Obelia
2. Silkworm
3. Taenia

4. Nereis

Correct Option - 3

**Que. 45** Which of the following secretions associated with digestion does not have enzymes?

1. Bile
2. Gastric juice
3. Saliva
4. Pancreatic juice

Correct Option - 1

**Que. 46** Yellow fever is transmitted by

1. Female Culex
2. Female Anopheles
3. Female Aedes
4. Housefly

Correct Option - 3

**Que. 47** The covering membrane of the vacuole is known as

1. Tonoplast
2. Cell wall
3. Plasma layer
4. none of these

Correct Option - 1

**Que. 48** Age of fishes was known as

1. Devonian
2. Ordovician
3. Crustaceous
4. Silurian

Correct Option - 1

**Que. 49** 'Quartan malaria' is caused by

1. Plasmodium vivax
2. Plasmodium malariae
3. Plasmodium ovale
4. Plasmodium falciparum

Correct Option - 2

**Que. 50** The word 'species' was coined by

1. John Ray
2. Mayer
3. J. Huxley
4. C. Linnaeus

Correct Option - 1

**Que. 51** An embryo of chick with 4 pairs of somites is

1. 20 hours old
2. 22 hours old
3. 24 hours old
4. 18 hours old

Correct Option - 3

**Que. 52** In the mammals, cleavage results in the formation of solid mass of cells known as

1. Blastula
2. Gastrula
3. Morula
4. Neurula

Correct Option - 3

**Que. 53** F<sub>1</sub> particles are found in

1. Lysosomes
2. Mitochondria
3. Golgi Body
4. Endoplasmic reticulum

Correct Option - 2

**Que. 54** The name 'polytene chromosome' was suggested by

1. E. G. Balbiani
2. Kollar
3. Heitz
4. Bauer

Correct Option - 2

**Que. 55** Centriole is found in \_\_\_\_.

1. animal cells
2. red algae
3. prokaryotes
4. flowering plants

Correct Option - 1

**Que. 56** The first phylum of animal kingdom to exhibit bilateral symmetry is

1. Arthropoda
2. Annelida
3. Mollusca
4. Plathelminthes

Correct Option - 4

**Que. 57** The fresh water sponge is \_\_\_\_\_.

1. Spongilla
2. Grantia
3. Euplectella
4. Euspongia

Correct Option - 1

**Que. 58** Flame cells are related with

1. excretory system
2. digestive system
3. circulatory system
4. respiratory system

Correct Option - 1

**Que. 59** The intermediate host in the life cycle of *F. hepatica* (Liver fluke) is

1. Sheep
2. Snail
3. Man
4. Bird

Correct Option - 2

**Que. 60** Vitelline membrane is found in

1. Birds
2. Tunicates
3. Fishes
4. Mammals

Correct Option - 1

**Que. 61** Two-pigment system theory of photosynthesis was proposed by

1. Hill Emerson
2. Emerson
3. Blackmann
4. Hatch and Slack

Correct Option - 2

**Que. 62** Photosynthetic pigments in chloroplast are embedded in membrane of

1. Thylakoids
2. Photoglobulin
3. Matrix
4. Envelope of Chloroplast

Correct Option - 1

**Que. 63** The rate of photosynthesis is maximum in

1. green light
2. blue light

3. red light
4. white light

Correct Option - 3

**Que. 64** All energy is stored in pigment system-1 in

1. ATP
2. Carbohydrate
3.  $\text{NADH}_2$
4. P-700

Correct Option - 4

**Que. 65** ATP molecules required for synthesis of a glucose molecule in Calvin-Benson cycle are

1. 6
2. 38
3. 12
4. 18

Correct Option - 4

**Que. 66** Father of taxonomy is

1. De Candolle
2. Hooker
3. Linnaeus
4. Aristotle

Correct Option - 3

**Que. 67** For entry in gene Poole, a mutation must occur in

1. Somatic cells
2. Germ cells
3. Plasma proteins
4. Somatic DNA

Correct Option - 2

**Que. 68** Vessels differ from tracheids

1. in being living
2. in being derived from a single cell
3. in having vertical row of cells with cross wall dissolved
4. because they conduct water

Correct Option - 3

**Que. 69** Which one is true nut?

1. Walnut
2. Cashewnut
3. Groundnut
4. Coconut

Correct Option - 2

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**Que. 70** After transcription, the DNA molecule

1. disintegrates
2. moves into cytoplasm
3. replicates itself
4. reassociates to form its original structure

Correct Option - 4

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**Que. 71** Fossilization is also known by the name

1. Acclimatization
2. Pasteurization
3. Preservation
4. Tyndallization

Correct Option - 3

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**Que. 72** The branch that deals with the plant life of the geological past is called

1. Pteridology
2. Palaeobotany
3. Neurology
4. Archaeology

Correct Option - 2

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**Que. 73** Birbal Sahni Institute of Palaeobotany is situated at

1. Allahabad
2. Delhi
3. Mumbai
4. Lucknow

Correct Option - 4

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**Que. 74** In plants, largest egg is found in

1. Cycas
2. Sequoia
3. Pinus
4. Selaginella

Correct Option - 1

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**Que. 75** Which one of the following is an example of symbiosis

1. Utricularia
2. Agricus
3. Lichen
4. Mango

Correct Option - 3

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**Que. 76** Which of the following pteridophytes is known as 'Horse-tail'?

1. Rhynia
2. Selaginella
3. Equisetum
4. None of these

Correct Option - 3

**Que. 77** Marsilea is a

1. Homosporic pteridophyte
2. heterosporic pteridophyte
3. non-sporic pteridophyte
4. seeded pteridophyte

Correct Option - 2

**Que. 78** A plant bearing two types of spores is termed as

1. heterospory
2. seed habit
3. homosporous
4. all of these

Correct Option - 1

**Que. 79** In Pinus present only

1. male cone
2. female cone
3. male and female cones
4. all of these

Correct Option - 3

**Que. 80** Number of cotyledons found in the embryo of cycas is

1. 4
2. 2
3. 3
4. 1

Correct Option - 2

**Que. 81** Bryophytes are

1. Aquatic
2. Terrestrial
3. Amphibious
4. None of these

Correct Option - 3

**Que. 82** Sporophyte is dependent on gametophyte in

1. Algae

2. Pteridophyta
3. Fungi
4. Bryophyta

Correct Option - 4

**Que. 83** In gametophytic phase of Bryophyta the last cell is

1. Gamete
2. Spore
3. Elater
4. Zygote

Correct Option - 1

**Que. 84** In Funaria, the calyptra is formed by

1. Antheridium
2. Columella
3. Capsule
4. Archegonium

Correct Option - 4

**Que. 85** A bryophyte differs from pteridophyte in

1. archegonia
2. lack of vascular tissue
3. independent gametophyte
4. none of these

Correct Option - 2

**Que. 86** Acid rain is mainly a mixture of

1. sulphuric acid and nitric acid
2. hexane and methane
3. acetic acid and bromine
4. ascorbic acid and citric acid

Correct Option - 1

**Que. 87** Ribosomes are sites for

1. Protein synthesis
2. Photosynthesis
3. Fat synthesis
4. Respiration

Correct Option - 1

**Que. 88** Pyramid of energy is

1. always inverted
2. always upright
3. sometimes inverted and sometimes upright



4. none of these

Correct Option - 2

**Que. 89** ATP is

1. an enzyme which brings about oxidation
2. a hormone
3. a molecule with high energy phosphate bond
4. a protein

Correct Option - 3

**Que. 90** Which one of the following is not a feature of prokaryotic cell?

1. Absence of nuclear membrane and the nucleus
2. Absence of cell organelles
3. Absence of genetic material
4. Absence of histone protein in the chromosome

Correct Option - 3

**Que. 91** Which one of the following is highly dangerous radioactive pollutant?

1. Phosphorus - 32
2. Sulphur - 35
3. Strontium - 90
4. Calcium - 40

Correct Option - 3

**Que. 92** The indicator is  $\text{SO}_2$  pollution of air is

1. Lichen
2. Fern
3. Black mould
4. Moss

Correct Option - 1

**Que. 93** The founder of cell theory was

1. Wolf
2. Rudolf Virchow
3. Myen, Von Moll and Raspail
4. Schleiden and Schwann

Correct Option - 4

**Que. 94** Fats in our body are formed when

1. there is little glycogen in the body
2. blood sugar level becomes constant
3. glycogen storage in liver and muscles is completed
4. intake of protein is high

Correct Option - 3

**Que. 95** Liver performs several functions. One of these functions is

1. histolysis
2. digestion of proteins
3. glycogenesis
4. maintaining salt balance

Correct Option - 3

**Que. 96** Poison fangs of snakes are

1. maxillary teeth
2. specialized structures
3. premaxillary teeth
4. vomerine teeth

Correct Option - 1

**Que. 97** Wings of butterfly, bird and bat are

1. Homologous organs
2. Analogous organs
3. Unrelated organs
4. Vestigial organs

Correct Option - 2

**Que. 98** 'Ozone Day' is observed on

1. January, 30
2. April, 21
3. September, 16
4. December, 25

Correct Option - 3

**Que. 99** Which one of the following is the connecting link between Annelida and Mollusca?

1. Archaeopteryx
2. Peripatus
3. Neopilina
4. Coelacanth

Correct Option - 3

**Que. 100** The heartbeat is regulated by

1. Pacemaker
2. Vagus nerve
3. Sympathetic nerve
4. all of these

Correct Option - 4

**Que. 101** Which pair is correct?

1. Microlecithal eggs - Dipnoi
2. Homolecithal eggs - Amphibia
3. Mesolecithal eggs - Bird
4. Centrolecithal eggs - Insect

Correct Option - 4

**Que. 102** The hypothesis of 'Coupling and Repulsion' for linkage was formulated by

1. Sutton and Boveri
2. Bateson & Punnett
3. T. H. Morgan
4. W. Sutton

Correct Option - 2

**Que. 103** Balanoglossus is commonly known as

1. Earthworm
2. Tapeworm
3. Corn worm
4. Tongue worm

Correct Option - 4

**Que. 104** In Drosophila, sex determination depends on

1. Y chromosome
2. X chromosome
3. Autosome
4. X chromosome & autosome both

Correct Option - 4

**Que. 105** Nonsense codons are

1. AUG, AAU, UAG
2. GGU, AGU, AUG
3. UAG, UAA, UGA
4. GAU, AAU, GUA

Correct Option - 3

**Que. 106** In which stage does centromere divide into two?

1. Metaphase I
2. Prophase I
3. Metaphase II
4. Anaphase II

Correct Option - 4

**Que. 107** Which animal is egg laying mammal?

1. Didelphys
2. Macropus

3. Pteropus
4. Tachyglossus

Correct Option - 4

**Que. 108** An oil producing gland on the tail of some birds is known as

1. Preen gland
2. Mucus gland
3. Green gland
4. Sebaceous gland

Correct Option - 1

**Que. 109** A snake that is viviparous is

1. the Russell's
2. the pit viper
3. Rattle snake
4. Kraits

Correct Option - 2

**Que. 110** A gland which is found on the undersurface of the thighs of male lizard is

1. Sudorific gland
2. Femoral gland
3. Green gland
4. stink gland

Correct Option - 2

**Que. 111** Which of the following is not a pathogenic flagellate?

1. Leishmania
2. Giardia
3. Trypanosoma
4. Noctiluca

Correct Option - 4

**Que. 112** The Glochidium larva of Unio

1. is free swimming
2. is ectoparasite of fish
3. is endoparasite on fish
4. lives in bottom

Correct Option - 2

**Que. 113** The term 'Plasmalemma' was given by

1. C. Nageli & C. Cramer
2. J. Q. Plowe
3. Dancilli & Davson
4. Robertson

Correct Option - 2

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**Que. 114** Smooth endoplasmic reticulum performs

- a) Synthesis of lipids
- b) Glycogenolysis
- c) Sterol metabolism
- d) Detoxification

- 1. Only d is correct
- 2. a and b both are correct
- 3. b and c both are correct
- 4. All are correct

Correct Option - 4

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**Que. 115** The innermost layer of egg albumen in birds is called

- 1. inner thin albumen
- 2. vitelline membrane
- 3. dense albumen
- 4. chalaziferous

Correct Option - 4

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**Que. 116** In which one of the following is the anus absent?

- 1. Leech
- 2. Roundworm
- 3. Earthworm
- 4. Flatworm

Correct Option - 4

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**Que. 117** Which type of jaw suspension is found in mammals?

- 1. Autostylic
- 2. Holostylic
- 3. Craniostylic
- 4. Hyostylic

Correct Option - 3

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**Que. 118** Synthesis of urea in liver takes place by

- 1. nitrogen cycle
- 2. Krebs cycle
- 3. glycolysis
- 4. ornithine cycle

Correct Option - 4

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**Que. 119** Sexual dimorphism is found in

- 1. Hydra
- 2. Earthworm

3. Ascaris
  4. Fasciola
- Correct Option - 3

**Que. 120** Which of the following animals has a nervous system but no brain?

1. Amoeba
2. Hydra
3. Cockroach
4. Eathworm

Correct Option - 2

**Que. 121** Aristotle's Lantern occurs in

1. Asteroidea
2. Echinoidea
3. Holothuroidea
4. Crinoidea

Correct Option - 2

**Que. 122** Neoteny is observed in

1. Ambystoma
2. Alytes
3. Sycon
4. Sacculina

Correct Option - 1

**Que. 123** Kidneys are vital organs of the body because they help in

1. regulation of body fluids
2. regulation of acid-base balance
3. removal of metabolic wastes
4. all of these functions

Correct Option - 4

**Que. 124** The infective stage of malarial parasite is

1. Trophozoite
2. Merozoite
3. Sporozoite
4. Cyst

Correct Option - 3

**Que. 125** Parasitic castration occurs in

1. Fasciola
2. Nereis
3. Sacculina
4. Palaemon

