



# BIOLOGY

## BOOKS - NDA PREVIOUS YEARS

### BOTANY

#### Multiple Choice Questions

1. Which one of the following is a fungus ?

A. Agaricus

B. Funaria

C. Rhizobium

D. Spirogyra

**Answer: A**



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2. The oxygen released during photosynthesis of green plants comes from the breakdown of which one of the following ?

A. Carbon dioxide

B. Fatty acids

C. Carbohydrates

D. Water

**Answer: D**



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**3. Consider the following statements :**

1. Beans are richer source of proteins than potatoes.

2. Apples are richer source of carbohydrates than bananas.

Which of the statements given above is/are correct ?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

**Answer: A**



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4. Which one of the following causes the disease Syphills ?

A. Bacteria

B. Fungus

C. Protozoan

D. Virus

**Answer: A**



**View Text Solution**

5. Which one of the following contains powerful oxidative enzymes and helps in removing toxic substances from cells ?

A. Plastids

B. Lysosomes

C. Dictyosomes

D. Peroxisomes

**Answer: D**



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6. Which one of the following pairs is not correctly matched ?

A. Funaria : Bryophyta

B. Chlorella : Pteridophyte

C. Spirogyra : Algae

D. Cycas : Gymnosperm

**Answer: B**



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7. Consider the following statements :

1. In algae, the reproductive organs are single-celled.
2. Fern plants lack true vascular system.

Which of the statements given above is /are correct ?

A. Only 1

B. Only 2

C. Both 1 and 2

D. Neither 1 nor 2



**Answer: A**



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**8.** In plants, which one of the following tissues is dead ?

- A. Parenchyma
- B. Collenchyma
- C. Sclerenchyma
- D. Phloem

**Answer: C**



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**9.** Which one of the following is considered as a cell within a cell ?

A. Ribosome

B. Chloroplast

C. Lysosome

D. Golgi complex

**Answer: B**



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**10.** Which one of the following is the principal structural element of a living cell ?

A. Oxygen

B. Hydrogen

C. Carbon

D. Nitrogen

**Answer: C**



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**11.** Which one of the following types of plants produces spores and embryo, but without seeds and vascular tissues ?

A. Gymnosperms

B. Pteridophytes

C. Bryophytes

D. Angiosperms

**Answer: C**



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**12.** Consider the following statements :

1. Brinjal is a good source of iron.
2. Pumpkin is good source of vitamin A.

Which of the statements given above is/are correct ?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

**Answer: C**



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**13.** In a living cell, what is the site of ribosome formation ?

A. Golgi bodies

B. Endoplasmic reticulum

C. Plasma membrane

D. Nucleolus

**Answer: D**



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**14.** Who are the first time saw bacteria through a microscope made by himself ?

A. Anton Van Leeuwenhoek

B. Louis Pasteur

C. Robert Hooke

D. Robert Virchow

**Answer: A**



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**15.** Which of the following contain enzymes for cellular respiration ?

A. Distyosomes

B. Endoplasmic reticula



C. Lysosomes

D. Mitochondria

**Answer: D**



**View Text Solution**

**16.** Which one of the following statements is correct ?

A. ovary

B. flower

C. gynoecium

D. ovule

**Answer: D**



**View Text Solution**

**17.** Who of the following invented the cotton gin that separates the seeds from cotton three hundred times faster than by hand ?

A. Eli Whitney

B. George Stephenson

C. McAdam

D. James Watt

**Answer: A**



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**18.** Which one of the following cell organelles is responsible for cellular respiration ?

A. Endoplasmic reticulum

B. Golgi body

C. Lysosomer

D. Mitochondrium

**Answer: D**



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**19.** Consider the following statements :

In fern plants,

1. vascular system is absence
2. reproductive organs are multi-cellular.

Which of the statements given above is/are correct ?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

**Answer: B**



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**20.** Consider the following plants :

1. Jasmine

2. Sugercane

3. Turmeric

Which of the above is/are propagated by vegetative method ?

A. 1 only

B. 1 and 2

C. 2 and 3

D. 1, 2 and 3

**Answer: D**



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**21.** Which one of the following diseases is caused by bacteria ?

- A. Chicken Pox
- B. Poliomyelitis
- C. Influenza
- D. Tuberculosis

**Answer: D**



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**22.** The natural dye present in turmeric is known as

- A. Cinnamin
- B. Phenolphthalein
- C. Methyl orange
- D. Curcumin



**Answer: D**



**View Text Solution**

**23.** Which of the following organelles of a cell is/are involved in photosynthesis ?

A. Chloroplast

B. Mitochondrion

C. Endoplasmic reticulum

D. Golgi bodies

**Answer: A**



**View Text Solution**

**24.** Which one of the following processes takes place in lakes during eutrophication ?

- A. Rapid destruction of algal growth
- B. Excessive availability of dissolved oxygen
- C. Loss of dissolved nutrients from water
- D. Excessive entry of nutrient into water

**Answer: D**



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**25.** Consider the following statements :

1. Different plant species grow together.
2. Light cannot penetrate into the lower strata full of undergrowth.

Which of the following types of vegetation is characterised by the above ?

A. Equatorial moist evergreen

B. Tropical deciduous

C. Mediterranean

D. Warm temperature broad leaved  
deciduous

**Answer: C**



**View Text Solution**

**26.** From which one of the following is the percentage of reflected amount of radiation highest ?

A. Wet ground

B. Thick cloud

C. Forest

D. Snow cover

**Answer: D**



**View Text Solution**

**27.** Which of the following crops would be preferred for sowing in order to enrich the soil with nitrogen ?

A. Wheat

B. Mustard

C. Sunflower

D. Gram

**Answer: D**



**View Text Solution**

**28.** Which of the following plants is referred to as a living fossil ?

A. Ephedra

B. Cycas

C. Ginkgo

D. Adiantum

**Answer: C**



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**29.** Which one of the following vegetables is not obtained from wild cabbage ?

A. Lettuce

B. Broccoli

C. Kale

D. Kohlrabi

**Answer: A**



**View Text Solution**

**30.** Softening of mature ripe fruits is due to

A. dissolution of middle lamella



B. degradation of primary wall

C. delignification

D. removal of suberin deposits in the cell  
wall

**Answer: A**



**View Text Solution**

**31.** Which part of saffron plant is used to obtain the spice 'saffron' ?

A. Dry stigma

B. Leaves

C. Fruits

D. Petals

**Answer: A**



**View Text Solution**

**32.** To which one of the following types of organism do mushrooms belong ?

A. Algae

B. Ferns

C. Fungi

D. Lichens

**Answer: C**



**View Text Solution**

**33.** Which one amount the following produces seeds but not a true flowers ?

A. Cashewnut

B. Coffee

C. Groundnut

D. Pine

**Answer: D**



**View Text Solution**

**34.** Which among the following is not a true fruit ?

A. Apple

B. Date

C. Grape

D. Plum

**Answer: A**



**View Text Solution**

**35.** When dried raisins are put in plain water, they swell up. If put again in brine solution,

they shrivel up. This phenomenon indicates the property of

- A. diffusion
- B. perfusion
- C. osmosis
- D. fusion

**Answer: C**



**View Text Solution**

**36.** Which one among the following statement regarding cell is not correct ?

- A. Shape and size of cells are related to specific function
- B. Some cells have changing shapes
- C. Each cell has its own capacity to perform
- D. Same type of cells are present in all body tissues

**Answer: D**



37. Which one among the following Indian scientists proposed a theory for long distance transport of water in plants ?

A. JC Bose

B. Birbal Sahni

C. P Maheshwari

D. NS Parihar

**Answer: D**





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**38.** Sandalwood tree is considered a

A. total root parasite

B. total stem parasite

C. stem parasite

D. partial root parasite

**Answer: D**



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**39.** The common edible mushroom is a

A. mass of fungal spores

B. type of hypha

C. tightly packed mycelium

D. structure used for producing asexual  
spores

**Answer: C**



**View Text Solution**

**40.** A biogeographic region with significant reservoir of biodiversity that is under threat from humans is called as

- A. bioendangered region
- B. biodiversity hotspot
- C. biodiversity reservoir
- D. environmentally endangered region

**Answer: B**



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**41.** The main function of the inner bark of a woody plant is to

A. transport minerals water from the roots

to the leaves

B. act as a membrane impermeable to

water and gas

C. transport food from the leaves to the

other parts of the plant

D. protect the plant from herbivorous animals

**Answer: C**



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**42.** Birds like Flamingos can stand on one leg.

Which among the following statements relating to this is/are correct?

1. By standing on one leg Flamingos can conserve body heat and energy because they

can reduce great deal of surface area for the loss of heat.

2. By standing on one leg, one Flamingo makes a courtship display, which is a part of ritual prior to reproduction.

Select the correct answer using the code given below :

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

**Answer: A**



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**43.** Which one of the following processes of weathering belongs to both mechanical and chemical weathering ?

A. Crystallization

B. Exfoliation

C. Hydration

D. Carbonation

**Answer: B**



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**44.** With regard to animal breeding, which one among the following is not correct ?

A. In-breeding : Mating of more closely related animals within the same breed for 1 -2 generations



B. Out-breeding : Breeding of unrelated animals of the same breed without common ancestors for 4 - 6 generations

C. Cross-breeding : Superior males of one breed are mated with superior females of another breed

D. Out-crossing : Offspring is called an 'out-cross'

**Answer: C**



**View Text Solution**

45. Which one among the following cell organelles is semi-permeable ?

- A. Cell membrane
- B. Plasma membrane
- C. Cell wall
- D. Nucleus

**Answer: D**



**View Text Solution**

**46.** Which one among the following nutrients is a structural component of the cell wall of plants ?

A. Manganese

B. Potassium

C. Phosphorus

D. Calcium

**Answer: D**



**View Text Solution**

47. Certain parts of a plant can be bent easily without breaking. This flexibility in certain parts, like leaf and stem, can be attributed to the abundance of

- A. parenchyma
- B. collenchyma
- C. Sclerenchyma
- D. xylem and phloem

**Answer: B**

 [View Text Solution](#)

48. Which of the following is not a micronutrient for a plant ?

A. Iron

B. Magnesium

C. Molybdenum

D. Manganese

**Answer: B**



**View Text Solution**

**49.** Cell membrane is selectively permeable because

A. it is made up of selected organic molecules

B. it does not allow transport of some substances from region of higher concentration to the region of lower concentration

C. the movement of organic molecules

occurs only at specific concentration

D. it allows the movement of certain

molecules in and out of the cell while

the movement of other molecules is

prevented

**Answer: D**



**View Text Solution**

**50.** Which of the following statements about sexual reproduction in flowering plants are correct ?

1. Stamen is present in the centre of a flower.
2. Stamen produces pollen grains in the ovary.
3. The swollen bottom part of carpel is the ovary.
4. The fusion of green cells gives rise to zygote.

Select the correct answer using the code given below.



A. 2, 3 and 4 only

B. 2 and 4 only

C. 1 and 3 only

D. 1,2, 3 and 4 only

**Answer: C**



**View Text Solution**

**51.** Consider the following statemnt in relation to plant tissue chlorenchyma :

1. It is formed by the palisade and spongy

mesophyll.

2. It is a form of parenchyma which contains chloroplasts.

3. It serves to transport organic solutes made by photosynthesis.

4. It is a thin transparent layer which has chiefly a protective function.

A. 1 and 2 only

B. 1, 2 and 4

C. 2 and 3

D. 1 only

**Answer: B**



**View Text Solution**

**52.** The next items consist of two statements, statement I and statement II. You are to examine these two statements carefully and select the answers to these items using the code given below.

Statement I : Autotroph plants contain the pigment chlorophyll for meeting their requirement of carbon and energy.

Statement II : Photosynthesis is the process of converting water into food using sunlight and oxygen.

A. Both the statements are individually true and statement II is the correct explanation of statement I.

B. Both the statements are individually true but statement II is not the correct explanation of statement I

C. Statement I is true but statement II is false

D. Statement I is false but statement II is true.

**Answer: B**



**View Text Solution**

**53.** From which part of turmeric, is the turmeric powder obtained ?

A. Dried rhizome

B. Dried root

C. Dried fruit

D. Seed

**Answer: C**



**View Text Solution**

**54.** Leaves of which of the following plants are not used for the rearing of silkworms ?

A. Mulberry

B. Castor

C. Oak

D. Teak

**Answer: B**



**View Text Solution**

**55.** Which of the following statements about vitamins are correct ?

1. Vitamin C is essential to make connective

tissue in body.

2. Vitamin D is needed for synthesis of eye pigment.

3. Vitamin  $B_{12}$  helps in maturation of RBC

4. Vitamin C is required to make use of calcium absorbed from the intestine.

Select the correct answer using the code given below.

A. 1 and 2

B. 1 and 3

C. 2 and 4



D. 1 and 4

**Answer: B**



**View Text Solution**

**56.** Statement I : Amoeba is a unicellular organism and the single cell performs all functions of a living organism.

Statement II : Cell is the fundamental unit of level organism

A. Both the statements are individually true and Statement II is the correct explanation of Statement I.

B. Both the statements are individually true but Statement II is not the correct explanation of Statement I.

C. Statement I is true but Statement II is false.

D. Statement I is false but Statement II is true

**Answer: A**



**View Text Solution**

**57. Which one among the following is a plant hormone ?**

- A. Insulin
- B. Thyroxin
- C. Gibberellin
- D. Estrogen

**Answer: C**



**View Text Solution**

**58.** Which of the following groups of plants can be used as indicators of  $SO_2$  pollution of air ?

A. Ferns

B. Mentha

C. Lichens

D. Hornworts

**Answer: C**



**View Text Solution**

**59.** Statement I : Growth of plants is smooth with a complete fertilizer.

Statement II : A complete fertilizer always contains N, P, K.

A. Both the statements are individually true and statement II is the correct explanation of Statement I.

B. Both the statements are individually true but Statement II is not the correct explanation of Statement I

C. Statement I is true but Statement II is false.

D. Statement I is true but Statement II is false.

**Answer: B**



**View Text Solution**

**60.** Energy is required for maintenance of life.

It is obtained by a process called

- A. Metabolism
- B. Phagocytosis
- C. Photorespiration
- D. Decomposition

**Answer: A**



**View Text Solution**

61. All life forms contain "molecules of life ".

These are

A. Carbohydrates

B. Proteins

C. Nucleic acids

D. All of these

**Answer: D**



**View Text Solution**



**62.** Which one of the following is the smallest unit showing the properties of life such as capacity for metabolism, response to the environment, growth and reproduction ?

A. Gene

B. Chromosome

C. Nucleus

D. Cell

**Answer: d**



**View Text Solution**

**63.** In plants, which one of the following gases is released during Photosynthesis ?

A. Carbon dioxide

B. Oxygen

C. Hydrogen

D. Methane

**Answer: b**



[View Text Solution](#)

**64.** Gametophytes of sexually reproducing flowering plants are

A. Haploid

B. Diploid

C. Tetraploid

D. Polyploid

**Answer: a**



**View Text Solution**

**65.** The seeds of flowering plants are made up of

A. Ovary and ovary wall

B. Embryo, food reserves and coat

C. Cotyledons

D. Zygotes

**Answer: b**



**View Text Solution**

**66.** Which of the following are the characteristics of organic farming ?

1. Use of chemical fertilizers to improve soil fertility.
2. Frequent decomposing and fallowing.
3. Use of herbs to control pests.
4. Higher productive per hectare.

Select the correct answer using the code given below :

A. 1 and 4 only

B. 1, 3 and 4

C. 2 and 3 only

D. 2, 3 and 4

**Answer: c**



**View Text Solution**

**67.** When heat rays relected from Earth, gases like Carbon dioxide, Nitrous oxide do not allow them to escape back to the space causing our planet to heat up. These gases are known as

A. Noble gas

B. Green- house gas

C. Hot gas

D. Blue gas

**Answer: b**



**View Text Solution**

**68.** Precursor of which one of the following vitamins comes from  $\beta$ -carotene ?

A. Vitamin A

B. Vitamin C

C. Vitamin D

D. Vitamin K

**Answer: a**



**View Text Solution**

**69.** Who among the following discovered the antibiotic producing fungus from *Penicillium* genus ?



A. Louis Pasteur

B. Sir Alexander Fleming

C. Stanley Prusiner

D. Robert Hooke

**Answer: b**



**View Text Solution**

**70.** Which one of the following is not an example of eukaryotic organism ?

A. Yeast

B. Bacteria

C. Plant

D. Human being

**Answer: b**



**View Text Solution**

**71.** Carbon and energy requirements of autotrophic organisms are fulfilled by :

A. Photosynthesis

B. Gluconeogenesis

C. Glycogenesis

D. External sources

**Answer: a**



**View Text Solution**

**72.** Stung by hairs of nettle leaves causes burning pain. This is due to injection of

A. Acetic acid

B. Methanoic acid

C. Suphuric acid

D. Hydrochloric acid

**Answer: b**



**View Text Solution**

**73.** Cell wall of any fungus is different from plants in having

A. cellulose

B. chitin

C. cholestrol

D. glycogen

**Answer: b**



**View Text Solution**

**74.** Sugarcane is one of the important cash crops in India. It is grown to obtain

A. Starch

B. Glucose

C. Fructose

D. Sucrose

**Answer: d**



**View Text Solution**

**75.** The colourful part of the Sunflower or Marigold plant is

A. Flower

B. Inflorescence

C. Fruit

D. Seed

**Answer: b**



**View Text Solution**

**76.** The accidental touch of Nettle leaves creates a burning sensation, which is due to inject of

A. Hydrochloric acid

B. Methanoic acid

C. Citric acid

D. Suphuric acid

**Answer: b**



**View Text Solution**

**77. Which one of the following is an organelle that is NOT found in prokaryotic cells ?**



A. Cell wall

B. Mitochondria

C. Plasma membrane

D. Ribosome

**Answer: b**



**View Text Solution**

**78.** Which one of the following statements about classification of plants is correct ?

- A. Thallophytes have well differentiated body design
- B. Funaria is a fungus
- C. All Pteridophytes are Phanerogams
- D. Vascular system is not found among Bryophytes

**Answer: d**



**View Text Solution**

79. Which one of the following statements about meristematic tissues in plants is correct ?

- A. These are dead tissues and form wood
- B. They provide flexibility to plant due to their thickened walls
- C. These are present in the bark of a tree only
- D. Growth occurs in plants due to division of cells of these tissues

**Answer: d**



**View Text Solution**

**80.** Who among the following first discovered cell ?

A. Robert Brown

B. Robert Hooke

C. Leeuwenhock

D. RudolfVirchow

**Answer: b**



**View Text Solution**

**81.** Statement I : Phytoplankton produce most of the organic carbon in the ocean.

Statement II : Algae are produced in the cold water biome.

A. Both the statements are individually true and statement II is the correct explanation of statement I.

B. Both the statements are individually true but Statement II is not the correct explanation of Statement I

C. Statement I is true but Statement II is false.

D. Statement I is false but Statement II is true.

**Answer: c**



**View Text Solution**

82. Damage to the apical meristem of a growing young plant will affect the

- A. length of the plant
- B. colour of the flower
- C. colour of the leaves
- D. taste of the fruits

**Answer: a**



**View Text Solution**

**83.** Which of the following kingdoms has/have only unicellular organisms ?

A. Monera only

B. Protista only

C. Monera and Protista both

D. Protista and Fungi both

**Answer: c**



**View Text Solution**



**84.** The oxygen evolved during photosynthesis comes from splitting of

A. water

B. carbon dioxide

C. oxygen

D. light

**Answer: a**



**View Text Solution**

**85.** In one set of chromosomes for a given plant is represented as  $N$ , in case of double fertilization, the zygote and the endosperm nucleus of a diploid plant would have how many sets of chromosomes respectively ?

A.  $N$  and  $2N$

B.  $2N$  and  $2N$

C.  $N$  and  $3N$

D.  $2N$  and  $3N$

**Answer: d**





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**86.** Which one of the following cell organelles does NOT possess nucleic acid ?

A. Nucleolus

B. Chloroplast

C. Ribosome

D. Plasma Membrane

**Answer: d**



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**87.** Which one of the following cell organelles does NOT possess its own genetic material encoding proteins ?

A. Ribosome

B. Nucleus

C. Mitochondria

D. Chloroplast

**Answer: a**



**View Text Solution**

88. Which one of the following is NOT a component of conducting tissue in plants ?

A. Fibres

B. Tracheids

C. Pericycle

D. Sieve tubes

**Answer: c**



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**89.** Which one of the following organisms has vascular tissues ?

A. Cladophora

B. Penicillium

C. Marsilea

D. Anabaena

**Answer: c**



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