

Attempt all questions.

Group 'A'

Write the correct answer in your answer book from the given alternatives.

[6 × 1 = 6]

1. The trachea of human is internally lined by.....
 - a. Cuboidal epithelium
 - b. Columnar epithelium
 - c. Pseudostratified ciliated epithelium
 - d. Germinal epithelium
2. The egg of frog is
 - a. Telo-lacithal
 - b. Homo lacithal
 - c. Isolacithal
 - d. Centro lacithal
3. Which one of the following is viral disease?
 - a. Typhoid
 - b. AIDS
 - c. Tuberculosis
 - d. Cholera
4. Which teeth is not found in deciduous dentition
 - a. Incisor
 - b. Molar
 - c. premolar
 - d Canine
5. The respiratory center is located in the
 - a. Pons
 - b. Cerebrum
 - c. cerebellum
 - d. Medulla oblongata
6. The duration of one complete heart beat is
 - a. 8 sec.
 - b. 0.8 sec
 - c. 0.08sec
 - d. 80sec

Group B

Short questions: [4×4= 16]

Candidates are required to give their answers in their own words as far as practicable. The figure in the margin indicates full marks.

7. Describe the process of cleavage in frog.
8. State the symptoms of typhoid.
9. Describe the process of transport of Oxygen
10. Describe the process of Carbohydrate digestion.

OR

Control of measures of AIDS

Group C: Long questions:

11. What is drug abuse? State the types of drugs those are used drug addict. [1+ 7= 8.0]
12. Describe internal structure of heart. Why human heart is called myogenic? [7+1=8.0]

Attempt all questions.

Group A

Write the correct answer in your answer book from the given alternatives.

[6 × 1 = 6]

1. Which one the following cell never divide?
a. Epithelial cell b. Bone cell c. Cartilage cell d. Neuron
2. The cavity of gastrula is called
a. Archenteron b. Neurocoel c. Balstocoel d. None of above
3. Payer's patch is found in
a. Ractum b. Stomach c. Ileum d. Jejunam
4. The chemical surfactant is secreted by
a. Septal cell b. TypeI Pnemocyte c. Goblet cell d. Argentifffin cell
5. The left aurculo-ventricular aperture is guarded by
a. Haversin Valve b. Semilunar valve c. Mitral valve d. Tricuspid valve
6. The incubation period of typhoid is
a. 12 days b. 14 days c. 30 days d. 24days

Group B

Short questions: [4x4= 16]

Candidates are required to give their answers in their own words as far as practicable. The figure in the margin indicates full marks.

7. Describe structure and functions of neuron. *ℓ*
8. Describe the process of blastulation.
9. Mention the symptoms AIDS.
10. Describe the structure of lungs of human.

OR

Write short note on valves of heart

Group C: Long questions:

11. What is drug addiction? State the causes and symptoms of drug addiction.
[1+7=8.0]
12. Describe the mechanism of pulmonary ventilation.
[8.0]

Section A: Botany

Attempt all questions.

Group A

Write the correct answer in your answer book from the given alternatives.

[5 × 1 = 5]

1. The 1st stable product in carbon assimilation is
a. PGA b. Oxygen c. Pyruvic acid d. Glucose
2. In the Calvin cycle, one molecule of glucose is formed from.....
a. $6\text{CO}_2 + 30\text{ATP} + 12\text{NADPH}$ b. $6\text{CO}_2 + 18\text{ATP} + 12\text{NADPH}$
c. $6\text{CO}_2 + 12\text{ATP}$ d. $6\text{CO}_2 + 18\text{ATP} + 30\text{NADPH}$
3. Annual ring is helpful in determining.....
a. Lateral growth b. Diameter of plants
c. Secondary growth d. Age of plant
4. Pollination that takes place by wind is called
a. Anemophily b. Hydrophily c. Autogamy d. Geitonogamy
5. The primary endosperm nucleus is
a. Haploid b. Diploid c. Triploid d. Tetraploid

Group B

Short questions: [4×4= 16]

Candidates are required to give their answers in their own words as far as practicable. The figure in the margin indicates full marks.

6. Describe L.S. of ovule with well labeled diagram.
7. Describe the process of micro gametogenesis with well labeled diagrams.
8. Differentiate between photosynthesis and respiration.
9. What is cyclic photophosphorylation? Explain its events.

OR

Write short note on grafting.

Group C

Long questions

10. What is microsporogenesis? Describe the process of development of microspores in angiosperms. [1+7=8.0]
11. Explain the process of glycolysis in plants [8.0]

Time: 3 Hrs Subject: Biology, Grade XII, Subject Code: 2021

Section A: Botany

Attempt all questions.

Group A

Write the correct answer in your answer book from the given alternatives.

[5 × 1 = 5]

1. An important product of Kreb's cycle is
a. Methane ~~a~~ b. ATP c. ADP d. Water
2. In the light phase of photosynthesis, there is formation of.....
~~a~~ a. Both ATP & NADPH₂ b. Carbohydrates
c. ATP d. NADPH₂
3. Which meristem helps in increasing the girth of the plant?.....
~~a~~ a. Primary b. Intercalary meristem
c. Lateral meristem d. Apical meristem
4. Pollination that takes place by insects is called
a. Anemophily ~~a~~ b. Entomophily c. Autogamy d. Geitonogamy
5. The point of attachment of funicle with chalazal end is called
~~a~~ a. Hilum b. Placenta c. Integuments d. Nucellus

Group B

Short questions: [4×4= 16]

Candidates are required to give their answers in their own words as far as practicable. The figure in the margin indicates full marks.

- ~~6~~ 6. Describe the process of fertilization with well labeled diagram.
- ~~7~~ 7. Describe the process of megagametogenesis with well labeled diagrams.
- ~~8~~ 8. Differentiate between C₃ and C₄ plants.
- ~~9~~ 9. Describe in brief the process of non-cyclic photophosphorylation.

OR

Differentiate between xylem and phloem.

Group C

Long questions

- ~~10~~ 10. What is embryogenesis? Describe dicot embryo with well labeled diagrams. [1+ 7= 8.0]
11. Describe various steps of Kreb's cycle. Give the estimates of water, CO₂ and formation of ATP. [7+1=8.0]