



ST. JOSEPH'S COLLEGE, PRAYAGRAJ

FINAL EXAMINATION 2024-25

BIOLOGY

CLASS - IX

TIME: 2 Hours

MM: 80

Note: You will not be allowed to write in the first 15 minutes. This time is to be spent in reading the question paper. The time given at the head of this paper is the time allowed for writing the answers.

Section A is compulsory. Attempt any four questions from Section B. The intended marks for questions or parts of questions are given in the brackets []

SECTION - A [40 Marks]

(Attempt all questions from this section)

Q 1) Choose the correct answer from the options given below:

[15]

1. A water soluble vitamin is
a) Vitamin B b) Vitamin K c) Vitamin A d) Vitamin E
2. Water absorption takes place in
a) Small intestine b) Large intestine c) Stomach d) Liver
3. A polysaccharide among the following is
a) Glucose b) Maltose c) Fructose d) starch
4. An organelle that synthesizes protein
a) Golgi body b) Plastid c) Ribosome d) Lysosome
5. Gastric juice is secreted by
a) Stomach b) Liver c) Pancreas d) Intestine
6. The joint present in cranium is
a) Hinge b) Gliding c) Immovable d) Pivot
7. Skin pigment melanin is present in
a) Dermis b) Granular layer c) Malpighian layer d) Stratum corneum
8. Emulsification of fat is brought about by
a) Ptyalin b) Pepsin c) Bile d) Lipase
9. The modified sweat glands are
a) Meibomian glands b) Ceruminous glands c) Mammary glands d) Salivary glands
10. The mineral required for the formation of hemoglobin is
a) Calcium b) Iron c) Sodium d) Potassium
11. The number of teeth in a boy of 15 year is
a) 20 b) 16 c) 28 d) 32
12. The hardness of the bone is due to
a) Calcium b) Sodium c) Iron d) Potassium
13. Assertion(A): In hills, lack of oxygen leads to dizziness, loss of hearing and even blackouts.
Reason(R): As we go higher the air we breathe in decreases in pressure.
a) A is true and R is False.
b) A is False and R is True.
c) Both A and R are True.
d) Both A and R are False.
14. World Health Day is celebrated on
a) 14 April b) 7 April c) 8 May d) 15 June
15. Penicillin is
a) an antiseptic b) an anti-toxin c) a disinfectant d) an antibiotic

Q 2) [A] Name the following:

[5]

1. A wave of constriction pushing the food in oesophagus.
2. Vaccine for poliomyelitis.
3. The first cervical vertebrae.
4. The pulp like form attained by food in stomach.
5. Infoldings of the inner membranes of mitochondria.

[B] Arrange the terms in correct order beginning with the underlined term:

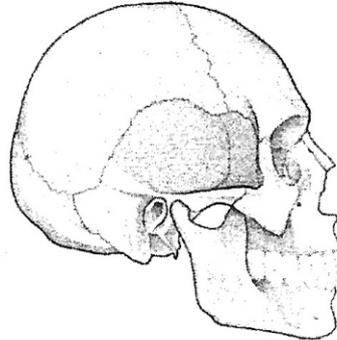
[5]

1. Salivary glands, Gall bladder, Pancreas, Mouth, Liver.
2. Cytoplasm, nucleus, nucleolus, cell wall, cell membrane.
3. Bronchioles, Alveolar duct, Bronchi, Alveolus, Trachea.

4. Premolars, Molars, Incisors, Wisdom tooth, Canines.
5. Tarsal, Phalanges, Metatarsal, Femur, Tibia-fibula.

[C] Complete the following by filling in the blanks:

[5]



_____ (a) is the skeleton of head. It contains two parts. The upper top part the _____ (b) is made of _____ (c) bones. The other part forms the face which contains _____ (d) bones. The back part contains a large hole called _____ (e) through which the spinal cord after emerging from brain continues into the backbone.

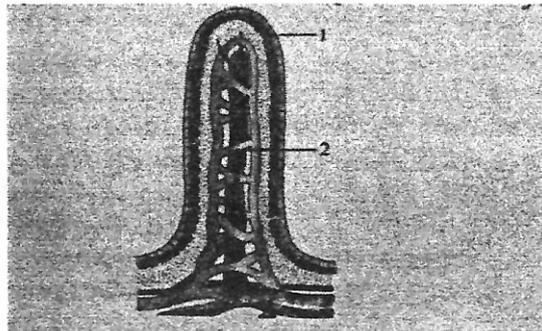
[D] Write the full form of the following:

[5]

- a) DPT b) BCG c) ATP d) AIDS e) HIV

[E] Study the diagram and answer the questions:

[5]



- a) Name the structure shown in the diagram.
b) In which part of intestine is it present?
c) Label the parts 1 and 2.
d) Name the lymph vessel present inside the structure.

SECTION – B [40 Marks]

(Attempt any four questions from this section)

- Q 3) a) Define immunity. [1]
b) What is the difference between leukoderma and Albinism. [2]
c) Name the pigments present in bile. How are these pigments produced? [2]
d) Give two differences between kwashiorkor and Marasmus. [2]
e) Draw a well labelled diagram showing different parts of internal structure of a tooth. [3]

- Q 4) a) Define Malnutrition. [1]
b) Nucleus is the most important part of the cell. Give suitable reason. [2]
c) What do you understand by the term 'Dental formula'? Write the dental formula of a human adult. [2]
d) What will happen if the bone is: [2]
i) Placed in hydrochloric acid
ii) Strongly heated

e) Given below is a diagram depicting a physiological process in Human. Study the same and answer the following: [3]

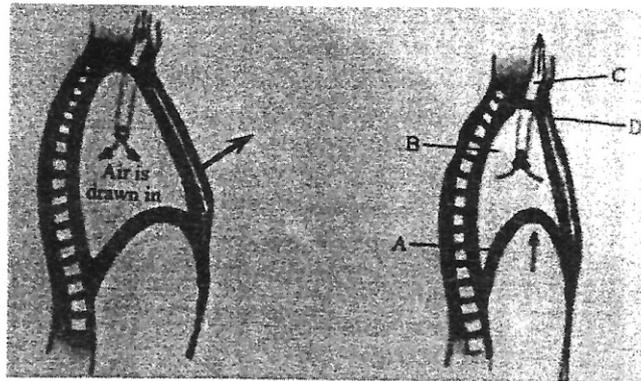


Diagram 1

Diagram 2

- What do the given diagrams 1 and 2 represent?
- Differentiate between the position of (A) in both conditions.
- Name the layer that covers part B.

Q 5) a) Define Tidal volume.

b) How is active immunity different from passive immunity?

c) What is goose flesh? How is it brought about?

d) What is the role of following enzymes:

- Trypsin
- Steapsin

e) Study the diagram and answer the questions:

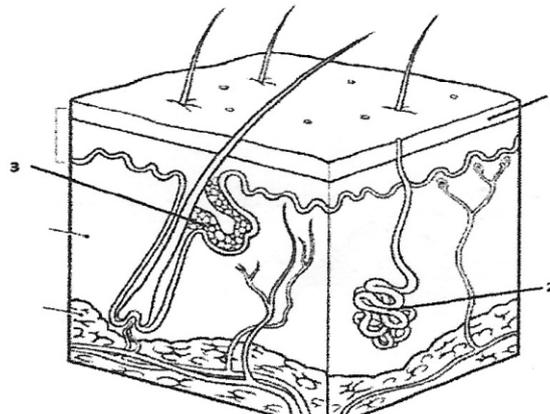
[1]

[2]

[2]

[2]

[3]



i) Give the function of labelled part 3.

ii) Name the protein present in labelled part 1.

iii) Name the fluid secreted by labelled part 2.

Q 6) a) Define Assimilation of food.

b) What is vasoconstriction? When vasoconstriction occurs, it makes the person look pale. Why?

c) Give two differences between prokaryotic and eukaryotic cell.

d) Roughage is useful in our diet. Give reason.

e) Study the diagram and answer the following:

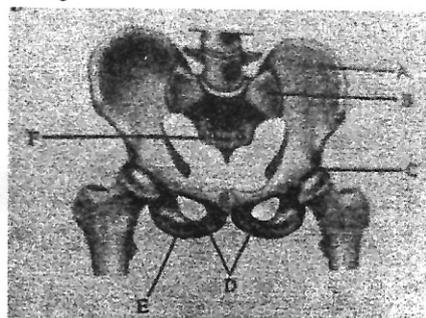
[1]

[2]

[2]

[2]

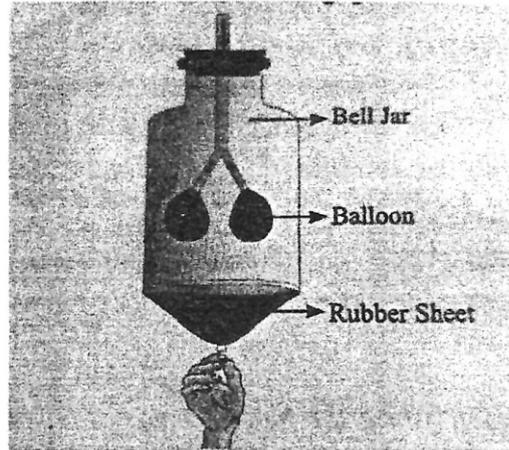
[3]



[3]

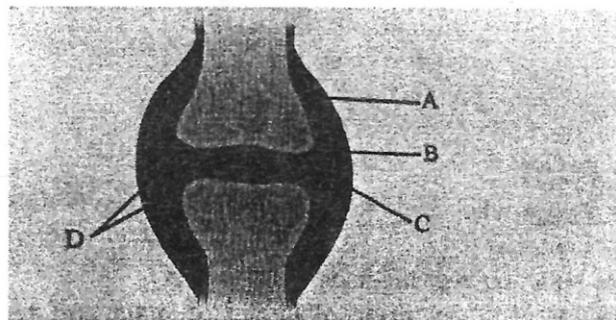
- i) Identify the given figure.
- ii) Name the structure which fits into part C.
- iii) Label part A.

- Q 7) a) Define heterodont dentition. [1]
b) Name three pairs of salivary glands. Also mention the enzyme present in saliva. [2]
c) Differentiate between True ribs and False ribs. [2]
d) What are the two deficiency diseases caused due to lack of vitamin A? [2]
e) Study the diagram and answer the following: [3]



- i) What is the aim of experiment?
- ii) What do balloon and rubber sheet in the diagram represent that of human body?
- iii) What will happen to balloons when rubber sheet is pulled down?

- Q 8) a) Define vaccination. [1]
b) Differentiate between hypoxia and asphyxiation. [2]
c) What is the role of following: [2]
i) Ceruminous glands.
ii) Meibomian glands.
d) Write two structural differences between a plant cell and an animal cell. [2]
e) The figure given below depicts a joint: [3]



- i) Name the joint,
- ii) What is the lubricating fluid marked as C known as?
- iii) Write one location of given joint.