

## Section -A (40 Marks)

## (Compulsory)

## Q1. A: Name the following:

(5)

- The control centre of the cell.
- The longest cell in human body.
- A flexible supporting tissue in animals. *Adipose*
- A pistil with many carpels.
- Outer thick layer of a pollen grain.

## (B) Fill in the blanks:-

(5)

- Bird pollinated flowers may be .....shaped & have .....stigmas. *mon*
- A fruit is a mature.....containing .....
- In exalbuminous seeds, the food is stored in the .....

## (C) Match the following:-

(5)

- | Column A         | Column B                |
|------------------|-------------------------|
| (i) Tuberculosis | (a) Water borne disease |
| (ii) Cholera     | (b) Hydrophobia         |
| (iii) Polio      | (c) Venereal disease    |
| (iv) Rabies      | (d) Infection in lungs  |
| (v) Syphilis     | (e) Paralysis of limbs. |

## (D) Give one word for the following:-

(5)

- A disease in which skin becomes yellowish & liver gets affected.
- Organisms that carry the pathogens from one person to another.
- Chemicals used to kill insects.
- Rehydration mixture given to prevent dehydration. *X*
- State of complete physical, mental & social well being.

## (E) Choose the correct answer of the following:-

(5)

- Which one of the following is nonbiodegradable?  
(a) Paper (b) plastic bottle (c) Cooked food (d) Cloth
- Waste is burnt at a very high temperature in  
(a) incinerator (b) precipitator (c) scrubber (d) composting
- The secondary treatment of an Effluent Treatment Plant  
(a) physical process (b) chemical process (c) physio-chemical process (d) biological process
- Humerus articulates with the  
(a) hind limb (b) Tibio-fibula (c) Pelvic-girdle (d) Radio-ulna
- Number of sacral vertebrae in children are  
(a) 1 (b) 3 (c) 4 (d) 5

## (F) Write True or False:-

(5)

- Lactic acid is produced during anaerobic respiration.
- Kreb's cycle is common to both aerobic & anaerobic respiration. *F*
- Xylem is a type of simple tissue.
- Tendons have large number of yellow elastin fibres. *F*
- Suberin is present in the cell walls parenchyma.

## (G) Fill in the blanks with the association as mentioned in the first part:-

(5)

- Chloroplast: Photosynthesis; Mitochondria: .....
- Ribosomes: Protein Synthesis; Centrosome:.....

- (iii) Cell wall: Cellulose; Cell membrane:.....
- (iv) Mitochondria: Oxidation enzymes; Lysosomes:.....
- (v) Adenine: Thymine ; Cytosine;.....

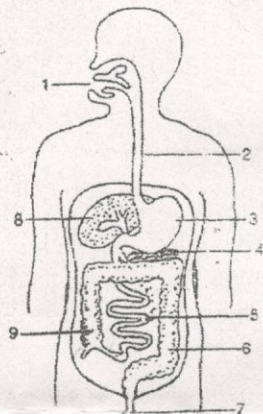
(H) Identify the phylum on the basis of following features:-

(5)

- (i) Diploblastic, multicellular, animals with coelenterons *Echi*
- (ii) Jointed legs, exoskeleton of chitin, haemocoel. *Arthropod*
- (iii) Spiny skinned, radially symmetrical, have tube feet. *Rhizo Echinoder*
- (iv) Anterior mouth, gills in operculum, two chambered heart. *P*
- (v) Dry scaly skin, 3 chambered heart with partial septum *A*

**SECTION- B (40 marks)**  
**(Do any four questions)**

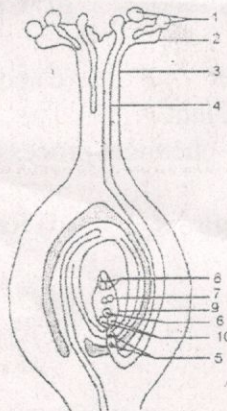
Q. II (A) The figure shows alimentary canal of man.



- (i) Label the parts 1 to 9.
- (ii) What changes take place in part-1 & part-5.
- (iii) Name the enzyme present in part-3.
- (iv) Name the digestive glands visible to the diagram.
- (v) Write the function of part-6.

(4)  
(2) ✓  
(1)  
(2)  
(1)

Q. III (A) The figure shows the L.S of ovary at the time of fertilization,



(i) Label the parts 1 to 10.

(5)

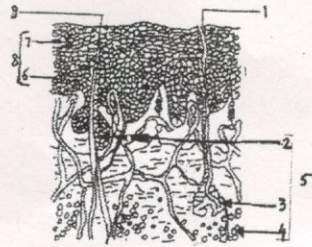
(B) Write the difference between the following:-

(5)

- (i) True ribs & False ribs
- (ii) Voluntary muscle & Involuntary muscle
- (iii) Unisexual flower & Bisexual flower
- (iv) Ebracteate & Bracteate
- (v) Sessile & Pedicillate

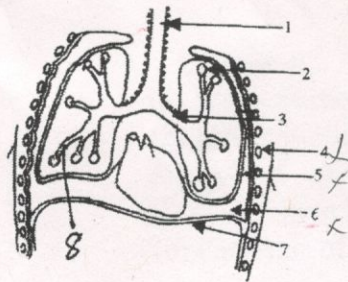
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Q.IV (A) Study the figure given below & answer the questions that follow:-



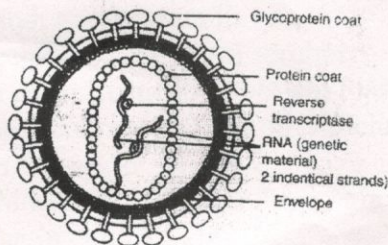
- (A) (i) Label the parts 1 to 9. (4)  
 (ii) How does skin help in maintaining body temperature? (1)  
 (iii) State the functions of parts 3 & 4. (2)  
 (iv) What are the excretory substances present in the sweat. (1)
- (B) Write two differences between vasodilation & vasoconstriction. (2)

Q.V (A) The adjoining diagram represents the organ of human thorax.



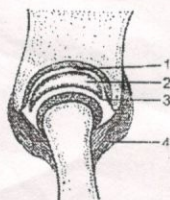
- (i) Label the parts 1 to 8. (4)  
 (ii) What are the functions of part-2 & part-7. (2)
- (B) Give one word for the following:- (4)  
 (i) The wastes that can be broken down by micro-organisms. *Chemical waste*  
 (ii) Wastes produced from computers & other gadgets. *Electronic waste*  
 (iii) Plants used for treatment of industrial wastes. *Phytoplankton*  
 (iv) A method to prepare manure & is environment friendly. *Composting*

Q.VI (A) The figure shows the structure of a disease causing organism:-



- (i) Name the organism. (1)  
 (ii) Name the disease caused by it. (1)  
 (iii) Write five symptoms of the disease caused by the above organism. (5)

(B) Study the figure & answer the following:-



- (i) Identify the figure. (1)  
 (ii) Label the parts 1 to 4. (2)