

GREENLAWNS SCHOOL, WORLI
TERMINAL EXAMINATION 2025-26
SCIENCE

Std: VII
Date: 18/09/2025

Marks: 80
Time: 2 hours

Attempt all questions. Diagrams to be drawn with a pencil.

Figures to the right indicate the marks []

Q I) Choose one correct answer to the questions from the given options: [10]

- a. If a piece of ice is dropped into a glass of juice, heat flows from:
(i) Juice to Ice (ii) Ice to juice
(iii) both (i) and (ii) (iv) No heat flow happens
- b. The frequency of sound is measured in:
(i) Hertz (ii) Pascal (iii) Seconds (iv) Metres
- c. If the angle of incidence is 45° , the angle between the incident ray and reflected ray is:
(i) 60° (ii) 45° (iii) 30° (iv) 90°
- d. Most insects have _____ pair(s) of legs:
(i) one (ii) two (iii) three (iv) four
- e. The end product(s) of aerobic respiration are:
(i) CO_2 (ii) $\text{CO}_2 + \text{H}_2\text{O}$
(iii) $\text{CO}_2 + \text{H}_2\text{O} + \text{energy}$ (iv) $\text{CO}_2 + \text{energy}$
- f. All vertebrates lay eggs except:
(i) Fish (ii) Reptiles (iii) Birds (iv) Mammals
- g. Gases have no fixed shape and volume because of _____ intermolecular distance:
(i) Maximum (ii) Minimum (iii) Intermediate (iv) None
- h. The change in which heat energy is absorbed is called:
(i) Exothermic (ii) Endothermic (iii) Physical (iv) Chemical
- i. Which method of separation is based on the principle of adsorption:
(i) Distillation (ii) Fractional Distillation
(iii) Chromatography (iv) Centrifugation
- j. The molecular formula of phosphorous pentoxide is :
(i) PO_2 (ii) P_2O_4 (iii) P_2O_3 (iv) P_2O_5

Q II A) State whether the following statements are true or false. If false, rewrite the correct statement by changing the underlined word / words: [5]

- a. Kingdom fungi includes prokaryotic, multicellular organisms having absorptive mode of nutrition.
- b. Sea cucumber, Sea lily and Sea urchin are organisms belonging to phylum Echinodermata.

- c. Reflection from any rough surface is known as Diffuse Reflection.
- d. High pitched sounds are called Bass and low-pitched sounds are called Treble.
- e. Alcohol has a lower boiling point as compared to water.

Q II B) Fill in the blanks by choosing the correct option from the brackets given below:

[5]

- a. Heart in amphibians is _____. (three chambered/four chambered)
- b. _____ is the transfer of heat due to the mass motion of the fluid as a result of temperature difference. (conduction/convection)
- c. The space between the molecules inside any particle of matter is called _____ space. (intermolecular/intramolecular)
- d. The body of an arthropod is covered by an exoskeleton of cuticle made up of _____. (cellulose/chitin)
- e. Fermentation of a sugar solution in the presence of enzymes is an example of _____ change. (physical/chemical)

Q II C) Match the following:

[5]

- | | |
|---------------------------|--------------------------------|
| a. Amplitude | i. Aluminium, copper |
| b. Frequency | ii. Requires no medium |
| c. Good conductor of heat | iii. Wood, glass |
| d. Bad conductor of heat | iv. Number of waves per second |
| e. Radiation | v. Distance from mean position |

Q II D) Complete the correlation:

[5]

- a. Hydra : Coelenterata :: Planaria : _____
- b. Euglena : _____ :: Paramecium : cilia
- c. _____ : Oil and water :: Cream from milk : Centrifugation
- d. Sulphuric acid : H_2SO_4 :: Nitric acid : _____
- e. Speed of light in air : _____ :: Speed of light in glass : 2×10^8 m/s

Q II E) Define the following terms:

[5]

- | | |
|--------------------------|----------------|
| a. Heterogeneous mixture | d. Respiration |
| b. Longitudinal wave | e. Taxonomy |
| c. Reflection of Light | |

Q II F) Distinguish between the following with reference to what is stated within the brackets:

[6]

- a. Real image and Virtual image (nature of image)
- b. Aerobic Respiration and Anaerobic Respiration (energy released in terms of ATP)
- c. Phylum Nematoda and Phylum Annelida (one example each)
- d. Class Pisces and Class Reptilia (respiratory organ)
- e. Compounds and Mixtures (formation)
- f. Cold-blooded animals and warm-blooded animals (meaning)

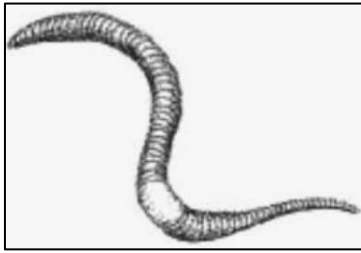
Q III A) Give a scientific reason for the following:

[4]

- a. Cooking of food is a chemical change.
- b. Ovens have double walls and lining of cotton wools.
- c. A land plant may die if its roots remain waterlogged for a long time.
- d. Some bacteria like Rhizobium and Azotobacter are considered to be useful bacteria.

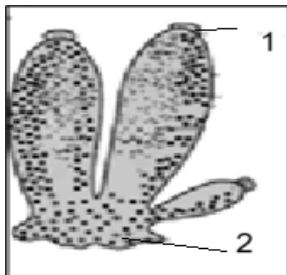
Q.IV) Answer the following diagram-based questions:

A) Observe the organisms A and B as shown in the pictures given below and answer the questions that follow:



A

- Sarthak visited an agricultural farm and saw this organism crawling all around in the soil. Identify the organism given and state its phylum. [2]
- What type of symmetry is found in such organisms? [1]
- What are the external segmentation and internal segmentation of such organisms known as? [1]



B

- Meera saw a marine organism which was sedentary and lacked locomotory organs. Identify the organism and its phylum. [2]
- What are the large number of pores present all around the body of this organism known as? State its function. [2]
- Label parts '1' and '2'. State the function of part '2'. [2]

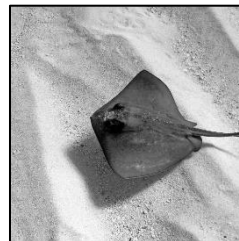
B) Snigdha went to a visit a zoological garden. The pictures given below depicts the various animals she saw over there. Can you help her in resolving her doubts that she has in her mind after coming back from the garden?



(a) Elephant



(b) Salamander



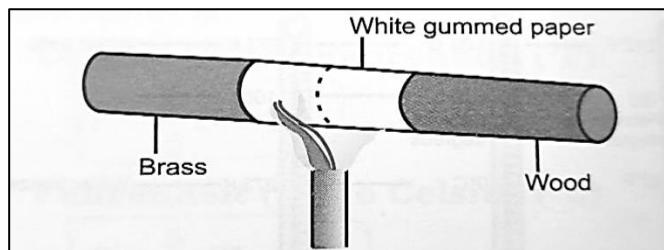
(c) Sting ray



(d) tortoise

- Identify the classes of animals 'a', 'b', 'c', and 'd'. [2]
- Which phylum do they all belong to? Why have they been allotted this phylum? [2]
- Give two characteristics of this phylum. [2]
- Define notochord. [1]

C) Krish was performing the below given experiment taught to him by his science teacher in the class. Can you answer a few questions that he needs to prepare for a test in school, the very next day?



- What do you observe in this experiment? [1]
- Explain the reason for your observation. [2]
- What do you conclude from the experiment? [1]

Q.V) Complete the table by writing the chemical formula of the following compounds: [4]

Sr. No.	Name	Chemical formula
1.	Hydrogen Sulphide	a)
2.	Carbon monoxide	b)
3.	Acetic acid	c)
4.	Calcium hydroxide	d)

Q VI A) Answer the following questions:

- What do you mean by lateral inversion and the type of mirror that suffers from the same. [2]
- How is heat loss by convection, conduction and radiation (all three) prevented in a vacuum flask? [2]
- Explain the principle on which the technique of Centrifugation works. [2]
- Rita conducts the bell-jar experiment in Std 7 to prove that sound requires a medium to propagate. How does the working of the bell differentiate in the following situations: [2]
 - with air
 - without air

Q VI B) Draw a neat labelled diagram of a Starfish. [2]
