

PODAR INTERNATIONAL SCHOOL
Yearly Examination

Grade: VII

Maximum Marks: 80

Subject: Science

Duration: 3 hours

General Instructions:

- (i) The question paper comprises of five sections – A, B, C, D and E. You are to attempt all the sections.
- (ii) All questions are compulsory.
- (iii) Question numbers 1 and 2 in Section-A are one mark questions. They are to be answered in one word or in one sentence.
- (iv) Question numbers 3 to 5 in Section- B are two marks questions. These are to be answered in about 30 words each.
- (v) Question numbers 6 to 15 in Section-C are three marks questions. These are to be answered in about 50 words each.
- (vi) Question numbers 16 to 21 in Section-D are five marks questions. These are to be answered in about 70 words each.
- (vii) Question numbers 22 to 27 in Section- E are based on practical skills. Each question is a two marks question. These are to be answered in brief.

Section A

1. What is the SI unit of distance? (1)
2. Define deforestation. (1)

Section B

3. State the difference between breathing and respiration. (2)
4. 'The roots of plants grow till the B-horizon.' Give reason. (2)
5. Explain the following terms: (2)
 - a. Solenoid
 - b. MCB

Section C

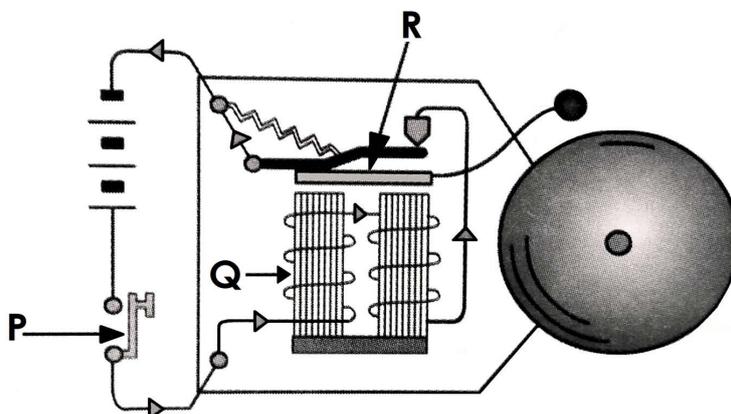
6. Explain what is meant by smoker's cough. (3)
7. A fuse wire prevents damage due to sudden heavy currents which may arise due to some defect in the house wiring or in the appliances. Give reason. (3)
8. (3)
 - a. Why is clayey soil used in pottery?
 - b. What can be added to the soil to make it neutral if it is too alkaline or too acidic?
9. State any three ways to conserve forest. (3)
10. The following data shows the time taken and the distance covered by a car. (3)

time taken (in min)	0	10	20	30	40	50
distance (in km)	0	3	6	9	12	15

- a. What is the total distance covered by the car?
 - b. Identify and define the type of motion shown by the car.
11. Hard water has different properties than soft water. (3)

Give scientific reasons for the following statements, with respect to the properties of hard water.

 - a. It should not be used for bathing.
 - b. It should not be used in industries in the boilers.
 - c. It is sometimes preferred for drinking.
 12. Observe the given diagram and answer the following questions. (3)

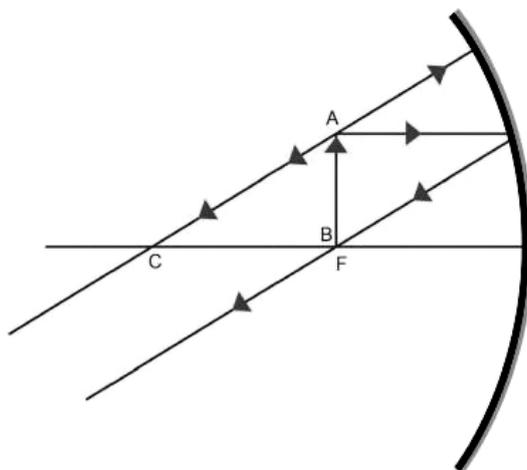


- a. Identify the parts labelled as Q and R in the given diagram.
- b. Explain what role does the part labelled as P play in order to ring the bell.

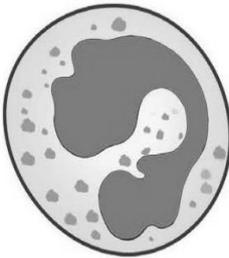
13. (3)
- What is the difference between sanitation and hygiene?
 - Name any two waterborne diseases caused due to poor sanitation.
14. With respect to spherical mirrors, define the terms that are denoted using C, P and R. (3)
15. Classify the following organisms on the basis of the waste products they excrete as ammonotelic, uricotellic, ureotelic. (3)
- Fishes, Lizards, Humans

Section D

16. Observe the diagram given below and answer the following questions. (5)



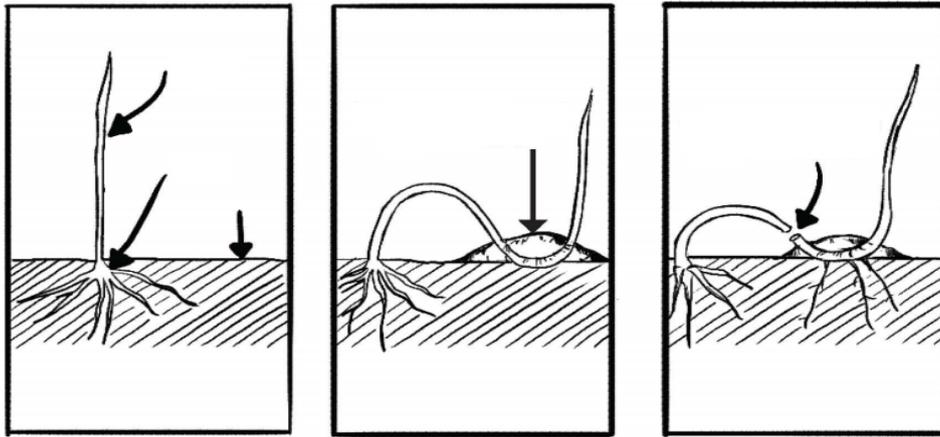
- Identify the kind of mirror illustrated in the given diagram.
 - With respect to the given diagram, state the characteristics of the image that will be formed.
 - State any three uses of this mirror.
17. (5)
- Observe the images of the blood cells given below and complete the table.

			
Identify	_____	_____	_____
Function	_____	_____	_____

- Explain the difference between the process of excretion in unicellular organisms and multicellular organisms.

18. (5)
- Name the type of forest that is called as the 'world's largest pharmacy'. Give reason for your answer.
 - Name any two states in India where we find such forests.
 - Give reasons for the following.
 - Trees prevent soil erosion.
 - Trees regulate climate.

19. Observe the diagram of artificial propagation given below and answer the following questions: (5)



- Identify the mode of artificial vegetative reproduction shown above.
 - Explain the process.
 - Name two plants which are propagated by this method.
 - State one advantage of artificial vegetative reproduction.
20. (5)
- How does untreated sewage released into water bodies lead to the death of aquatic animals.
 - Explain the role of bacteria in the secondary waste water treatment.
21. (5)
- Explain the following terms:
 - Infiltration
 - Aquifer
 - Recharge water
 - How does rainfall affect the water table?

Section E

22. As a part of the science practical, Shriya has constructed an electric circuit. The next task for Shriya is to find out the: (2)
- amount of electric current flowing through the circuit
 - potential difference between the two terminals of the battery
- How can Shriya find out the amount of electric current flowing in the electric circuit?
 - What should Shriya use to find the potential difference between the two terminals of the battery?

23. Seema saw a rotating coloured disc that was painted with colours of white light in the correct proportions. (2)
- List the colours that might be seen on the disc.
 - When the disc was rotated very fast, white colour appeared on the disc. Give reason/s.

24. A train starts from its terminal at 7 am. It travels with a speed of 25 kilometres for the first hour, then travels with a speed of 45 kilometres for the next hour. Find its average speed. (2)

25. Manya has collected some samples of flowers from her garden. She has to observe them carefully and classify them into two categories- complete and incomplete flowers. (2)

State the characteristics of flowers that Manya should be looking at, to classify the flowers into the 'complete flower' category.

26. Ritika conducted an activity where she placed 100g of sandy soil in a funnel lined with filter paper. She added some water over the soil sample. If 50 ml of water percolated from the soil sample in 5 mins, calculate the percolation rate. (2)

27. Devika conducted an experiment by following the procedure given below: (2)

- Fill a quarter of the gas jar with lime water.
- Wrap some pea seeds in a muslin bag and hang it in the gas jar by placing the lid over it.
- Apply vaseline on the lid to make it airtight.

What change will Devika observe in the experimental setup after 2 days? Give a reason/s.