



**DELHI PUBLIC SCHOOL, GWALIOR**  
**MODEL TEST PAPER**  
**CLASS – VII**  
**SUBJECT – SCIENCE**

Time: 3 hrs.

M.M.: 80

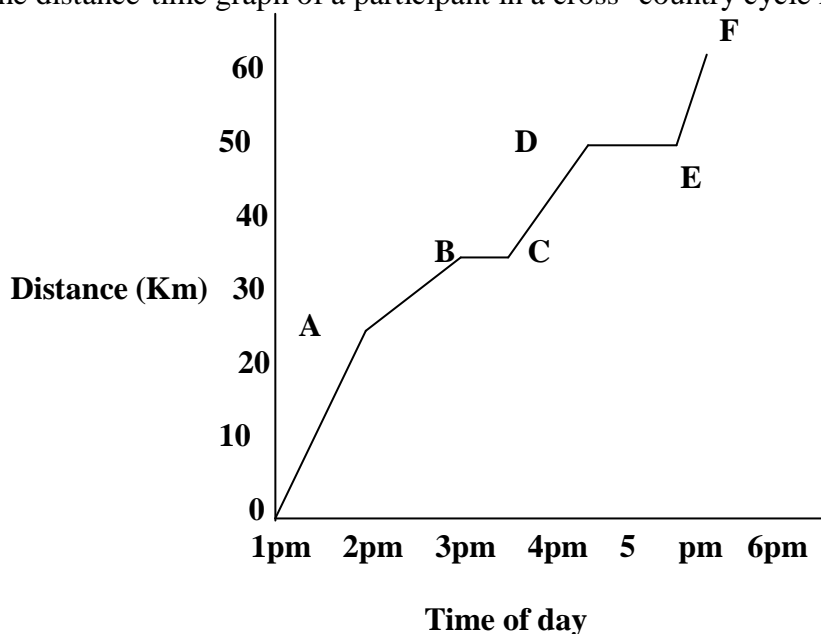
**General Instructions**

1. All questions are compulsory.
2. Wherever necessary, the diagram drawn should be neat and properly labeled.
3. This question paper consists of three sections A, B & C.

**Section A- Physics**

**Answer the following questions:**

- Q1. Outline your role as an active citizen in relation to sanitation. Give any three points.
- Q2. Why in places of hot climate it is advisable that the outer walls of houses be painted white?
- Q3. Explain why holes are made in hanging banners and hoardings.
- Q4. Differentiate between conduction, convection and radiation.
- Q5. What is the function of bar screens in a waste water treatment plant?
- Q6. What actions on the part of the people should be taken in cyclone alert areas? Give any three points.
- Q7. The distance-time graph of a participant in a cross- country cycle race is given below.



- a) How long did he travel?
  - b) How far did he travel?
  - c) How many stops did he make?
- Q8. State 'Laws of Reflection 'along with the diagram.

**OR**

What are the precautions to be taken if you are staying in a cyclone hit area. Give any five points.

**Q9. Multiple Choice Questions (MCQ's):**

- (a) Land and sea breezes occur due to-
- |                 |                    |
|-----------------|--------------------|
| (i) Conduction  | (ii) Convection    |
| (iii) Radiation | (iv) None of these |
- (b) Storms blow at a speed of-
- |                   |                 |
|-------------------|-----------------|
| (i) 40-50 km/h    | (ii) 50-60 km/h |
| (iii) 89-102 km/h | (iv) 77-96 km/h |
- (c) Which one is an inorganic impurity?
- |                  |             |
|------------------|-------------|
| (i) Animal waste | (ii) Oil    |
| (iii) Urea       | (iv) Metals |
- (d) Value of 40<sup>0</sup>C in K is-
- |             |                    |
|-------------|--------------------|
| (i) 320 K   | (ii) 313 K         |
| (iii) 310 K | (iv) none of these |
- (e) Diseases like cholera and typhoid are caused due to-
- |                |                    |
|----------------|--------------------|
| (i) Virus      | (ii) Bacteria      |
| (iii) Protozoa | (iv) None of these |
- (f) Moving air is known as
- |                |                    |
|----------------|--------------------|
| (i) Wind       | (ii) Steam         |
| (iii) Pressure | (iv) None of these |

**Section B- Chemistry**

**Answer the following questions:**

- Q1. Ammonia is found in many household products such as window cleaners. It turns red litmus blue. Why?
- Q2. Why is setting of curd a chemical change?
- Q3. Explain why burning of wood and cutting it into small pieces are considered as two different types of changes.
- Q4. Write short notes on: (a) Lichens (b) Neutral solution
- Q5. State differences between acids and bases.
- Q6. Define:
- a) Reeling (b) Scouring
- Q7. Draw line diagram to explain sewage treatment plant.
- Q8. Describe how crystals of Copper sulphate are prepared.

**OR**

Describe the process of neutralization with the help of an example.

**Q9. Multiple Choice Questions (MCQ's):**

- (a) The removal of wool from sheep is called-
- |                 |               |
|-----------------|---------------|
| (i) Sericulture | (ii) Shaving  |
| (iii) Shearing  | (iv) Spinning |
- (b) Which of the following is not an indicator?
- |                     |                      |
|---------------------|----------------------|
| (i) Blue litmus     | (ii) Phenolphthalein |
| (iii) Methyl orange | (iv) Digene          |
- (c) The rearing of silkworms for the production of silk is called:
- |                        |                  |
|------------------------|------------------|
| (i) Pisciculture       | (ii) Sericulture |
| (iii) Animal husbandry | (iv) Apiculture  |
- (d) Acids turn phenolphthalein
- |              |                 |
|--------------|-----------------|
| (i) Pink     | (ii) Colourless |
| (iii) Yellow | (iv) Orange     |

- (e) Anaerobic bacteria digest animal waste and produce biogas (change-A). The biogas is then burnt as fuel (change-B). The following statements pertain to these changes:
- (i) Process-A is a chemical change
  - (ii) Process-B is a chemical change
  - (iii) Both process A and B are chemical changes
  - (iv) None of these processes is a chemical change
- (f) A compound having a bitter taste is
- (i) Acid
  - (ii) Base
  - (iii) Both
  - (iv) None of these

### Section C - Biology

#### Answer the following questions:

- Q1. Villi increase the absorptive area. Justify this statement.
- Q2. Pitcher plant is green in colour. Then why is it insectivorous in nature?
- Q3. How does elephant living in tropical rain forest adapt itself?
- Q4. The tropical rainforest has a large population of animals. Explain, why it is so.
- Q5. Differentiate between parasites and saprophytes.
- Q6. Write short notes on (a) Lichens (b) Stomata
- Q7. Write the functions of Bile.
- Q8. How do plants get atmospheric nitrogen?
- Q9. Make a well labeled diagram of internal structure of tooth.
- Q10. (a) Explain how polar bear is able to survive in extreme cold climate.  
(b) Define : (i) Ingestion (ii) Extracellular digestion.

#### OR

- (a) Define: (i) Egestion (ii) Intra cellular digestion  
(b) How would you test the presence of starch in leaf?

#### Q11. Multiple Choice Questions (MCQ's):

- (a) Stomata are surrounded by:
- (i) Guard cells
  - (ii) Leaves
  - (iii) Carbohydrates
  - (iv) None of these
- (b) Slimy green patches found in pond are due to:
- (i) Plants
  - (ii) Fishes
  - (iii) Algae
  - (iv) None of these
- (c) Which is a producer?
- (i) Cow
  - (ii) Paramecium
  - (iii) Cactus
  - (iv) none of these
- (d) The grass is rich in:
- (i) Cellulose
  - (ii) Starch
  - (iii) Proteins
  - (iv) None of these
- (e) The salivary glands secrete:
- (i) Pepsin
  - (ii) Trypsin
  - (iii) Amylase
  - (iv) None of these
- (f) Which instrument is used for measuring rainfall?
- (i) Rain guage
  - (ii) Barometer
  - (iii) Odometer
  - (iv) None of these

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