

SYLLABUS : GRAND TEST**GENERAL INSTRUCTIONS : Draw Diagrams with Pencils.**

- All questions are compulsory. **Maximum Marks are 60.**
- The question paper consists of 24 Questions.
- **Section – A** : Question 1 to 6 are 1 mark each.
- **Section – B** : Question 7 to 12 are 2 marks each.
- **Section – C** : Question 13 to 18 are 3 marks each.
- **Section – D** : Question 19 to 24 are 4 marks each.

SECTION: A (1 × 6 = 6)

1. Give a neutralization reaction.
2. The range of clinical thermometer is from _____⁰C to _____⁰C.
3. Transfer of heat, from the sun to the earth, take place mainly through the process of _____.
4. What is the cause of heat generation in this situations:
(a) We apply brakes on our fast moving car.
5. Eye specialist use ophthalmoscope, which is fitted with _____ mirror.
6. Which are said to be lungs of the earth & why?

SECTION: B (2 × 6 = 12)

7. 'All alkalies are bases but all bases are not alkalies'. Justify this statement.
8. (a) Calcium hydroxide reacts with nitric acid.
(b) Hydrochloric acid reacts with sodium hydroxide.
9. What are land & sea breeze?
10. Explain clearly the difference between a real image and a virtual image. Give one example of a virtual image.
11. The distance, between the object and its image, in a plane mirror is 6m. If the object moves 1 m towards the mirror, then the (new) distance between the object and its image will be –
12. Write four applications of electromagnets.

SECTION: C (3 × 6 = 18)

13. State the difference between neutral, acidic and basic salts. Give one example of each.
14. Explain & give two examples each of mineral acids & organic acids.
15. State the mode/different modes, of heat transfer, in the following situations.
(a) Cooking vegetables in a pan.
(b) Melting of a chocolate bar, in the school bag, on a hot day.
(c) Cooking food in a microwave oven.

- 16.** Draw a ray diagram to show the formation of an image when the object is placed between the C and F points of a concave mirror.
- 17.** Explain layers of the forest.
- 18.** Explain functioning of Fuses & MCBS.

SECTION: D (4 × 6 = 24)

- 19.** Name the acids present in Tamarind, Vinegar, Red ants, Sour milk. Also name the salts of Acetic Acid, nitric acid, sulphuric acid & sulphurous acid.
- 20.** Explain transfer of heat and its methods.
- 21.** What is deforestation? Write its consequence.
- 22.** Describe any four trees from the following:
Teak, Neem, Eucalyptus, Deodar, Sal, Amaltas, Ashoka.
- 23.** Describe the working of electric bell with diagram.
- 24.** (a) Give the meaning of the terms 'short circuiting' and 'overloading' in an electric circuit?
(b) The same amount of current flows through the connecting wires and the bulb filament. However, it is only the filament that glows. Why?