

**KENDRIYA VIDYALAYA SANGATHAN  
CHANDIGARH REGION  
CLASS VII  
SCIENCE**

**TIME ALLOWED:-2:30 Hours**

**MAX MARKS:-60**

**GENERAL INSTRUCTIONS:**

- (1) The question paper comprises of two sections A and B . You have to attempt all the two sections.
- (2) All questions are compulsory.
- (3) Question number 1 to 5 are very short answer type questions. Each question carries 1 mark.
- (4) Question number 6 to 12 are short answer type questions. Each question carries 2 marks.
- (5) Question number 13 to 19 are also short answer type questions. Each question carries 3 marks.
- (6) Question number 20 and 22 are long answer type questions. Each question carries 5 marks.
- (7) Question number 23to 27 are Multiple Choice Questions. Each question carries 1 mark.

**SECTION A**

- |  |   |
|--|---|
| Q1. Burning of coal is which type of change, Physical or chemical?                                       | 1 |
| Q2. How is soil formed?  | 1 |
| Q3. Name the reproductive part of the plant?   | 1 |
| Q4. Draw the symbols to represent cell and battery?  | 1 |
| Q5. Give two examples of decomposers.  | 1 |
| Q6. How is clayey soil useful for crops?   | 2 |
| Q7. Name the main respiratory organs in human being and fish.  | 2 |
| Q8. What is virtual image? Give one situation where virtual image is formed?                             | 2 |
| Q9. Sketch the cross section of soil and label the various layers.                                       | 2 |
| Q10. Explain the function of bar screens in a waste water treatment plant.                               | 2 |
| Q11. State two differences between concave and convex lens.  | 2 |
| Q 12 Do you think an electromagnet can be used for separating plastic bags from a garbage heap? Explain. | 2 |

- Q13. (a) When carbon dioxide is passed lime water it turns milky due to formation of \_\_\_\_\_. 3  
 (b) The chemical name of baking soda is \_\_\_\_\_.  
 (c) Changes in which new substance is formed are called \_\_\_\_\_ changes.
- Q14. List one similarity and two differences of aerobic and anaerobic respiration. 3
- Q15. Draw the diagram of human excretory system and label its various parts. 3
- Q16. Draw the circuit diagram to represent an electric circuit. Name any two effects of electric current. 3
- Q 17. Explain how soil pollution can be prevented. ( any three points) 3
- Q18. (a) What is reflection of light? 3  
 (b) Give one use each of concave and convex mirror.
- Q19. Explain the role of forest in maintaining the balance between oxygen and carbon dioxide in the atmosphere. 3
- Q20. Answer the following 5  
 (a) The organ which pumps the blood is \_\_\_\_\_.  
 (b) The fluid part of the blood is \_\_\_\_\_.  
 (c) \_\_\_\_\_ cells help in clotting of blood.  
 (d) Red colour of the blood is due to presence of \_\_\_\_\_.  
 (e) Human heart has \_\_\_\_\_ chambers.
- Q21. (a) What is the difference between sexual and asexual reproduction? 5  
 (b) Write down any three methods of asexual reproduction?
- Q22. (a) What is sludge? Explain how it is treated? 5  
 (b) Name two chemicals used to disinfect water

### SECTION B

- Q23. Digestion of food is a 1  
 (a) Physical change  
 (b) Chemical change  
 (c) Both  
 (d) None

- Q24. During heavy exercise, we get cramps in legs due to accumulation of 1
- (a) Carbon dioxide
  - (b) Alcohol
  - (c) Water
  - (d) Lactic acid
- Q25. Mature ovary forms the 1
- (a) Fruit
  - (b) Seed
  - (c) pistil
  - (d) Stamen
- Q26. Current flows through the circuit when the circuit is in the \_\_\_\_\_ condition. 1
- (a) Broken
  - (b) Incomplete
  - (c) Closed
  - (d) Open
- Q27. Which of the following is not a plant product 1
- (a) Plywood
  - (b) Gum
  - (c) Resin
  - (d) Kerosene

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MARKING SCHEME  
CLASS VII  
SCIENCE  
Code:- 7SATHGP07STG025**

1. Chemical change	1
2. Soil is formed by weathering of rocks.	1
3. Flower	1
4. Draw the symbols of cell and battery	1
5. bacteria, fungi	1
6. Clayey soil has small sized particles, more water holding capacity, large amount of humus.	2
7. Human being - lungs fish-gills	1+1
8. The image which cannot be obtained on the screen. When we stand in front of dressing table mirror it is an virtual image.	1+1
9. Correct diagram Any two correct labels	1 $\frac{1}{2} + \frac{1}{2}$
10. Use to remove large objects like rags, cans, plastic packets, napkins from wastewater treatment plant.	2
11. Concave lens is thinner in the middle and thicker at the ends and it diverges the light ray falling on it. Convex lens is thicker in the middle and thinner at the ends and it converges the light rays falling on it. Or any other two correct differences	1+1
12. Correct answer	2
13. (a)calcium carbonate	1
(b)Sodium hydrogen carbonate	1
(c) Chemical	1
14. Similarities –both produces energy Differences-aerobic respiration produces more energy & it takes place in the presence of oxygen. Anaerobic respiration produces less energy & it take place in the absence of oxygen.	1 2
15. NCERT Book on page no.127	3
16. Draw the circuit diagram two effects are heating effect and magnetic effect.	2 $\frac{1}{2} + \frac{1}{2}$
17. Any three correct points	3
18. Correct definition Concave mirror use by the dentists to see the enlarged image of teeth. Convex mirror use as rear view mirror of the vehicles. Or any other correct use of each	1 1+1

19. Forest produce oxygen by the process of photosynthesis & it is used by animals for respiration. 3
20. (a)heart(b)plasma(c)platelets(d)haemoglobin(e)4 1+1+1+1+1
21. (a)Reproduction in which two parents involved called sexual reproduction. In which single parent is involved called asexual reproduction. 2
- (b) methods of reproduction –budding, fragmentation and vegetative propagation. 3
22. (a)Correct definition of sludge 1
- Correct treatment 2
- (b)Ozone and Chlorine or any two correct chemicals 2

#### SECTION - B

23. b 1
- 24 d 1
- 25 a 1
- 26 c 1
- 27 d 1