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 23 to 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
Q12. 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 ______.
(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.

Q15. Draw the diagram of human excretory system and label its various parts.

Q16. Draw the circuit diagram to represent an electric circuit. Name any two effects of electric current.

Q 17. Explain how soil pollution can be prevented. (any three points)

Q18. (a) What is reflection of light?
(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.

Q20. Answer the following
(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?
(b) Write down any three methods of asexual reproduction?

Q22. (a) What is sludge? Explain how it is treated?
(b) Name two chemicals used to disinfect water

SECTION B
Q23. Digestion of food is a
(a) Physical change
(b) Chemical change
(c) Both
(d) None
Q24. During heavy exercise, we get cramps in legs due to accumulation of  
(a) Carbon dioxide  
(b) Alcohol  
(c) Water  
(d) Lactic acid  

Q25. Mature ovary forms the  
(a) Fruit  
(b) Seed  
(c) pistil  
(d) Stamen  

Q26. Current flows through the circuit when the circuit is in the _____ condition.  
(a) Broken  
(b) Incomplete  
(c) Closed  
(d) Open  

Q27. Which of the following is not a plant product  
(a) Plywood  
(b) Gum  
(c) Resin  
(d) Kerosene
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 a virtual image. 1+1
9. Correct diagram 1
   Any two correct labels ½ + ½
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 1
   Differences - aerobic respiration produces more energy & it takes place in the presence of oxygen. Anaerobic respiration produces less energy & it takes place in the absence of oxygen. 2
15. NCERT Book on page no. 127 3
16. Draw the circuit diagram 2
   two effects are heating effect and magnetic effect. ½ + ½
17. Any three correct points 3
18. Correct definition 1
   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
19. Forest produce oxygen by the process of photosynthesis & it is used by animals for respiration.

20. (a) heart (b) plasma (c) platelets (d) haemoglobin (e) 4

21. (a) Reproduction in which two parents involved called sexual reproduction. In which single parent is involved called asexual reproduction.

(b) methods of reproduction – budding, fragmentation and vegetative propagation.

22. (a) Correct definition of sludge

Correct treatment

(b) Ozone and Chlorine or any two correct chemicals

SECTION - B

23. b

24 d

25 a

26 c

27 d