B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL

TERM-1 EXAM (2026-27)

SET-2

SCIENCE

Class: VII **Time: 3hours**

Date:07/09/26 **Max Marks: 80**

Admission no: **Roll No:**

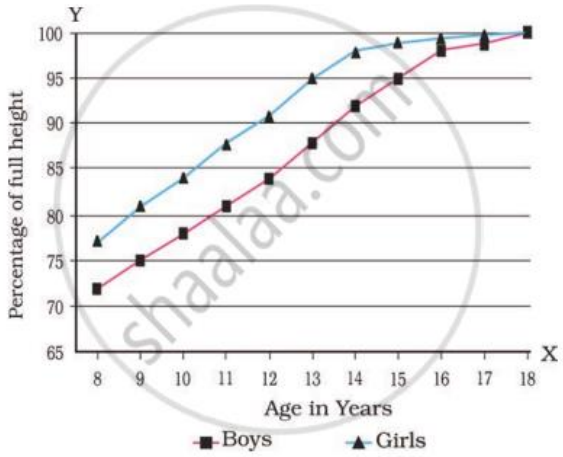
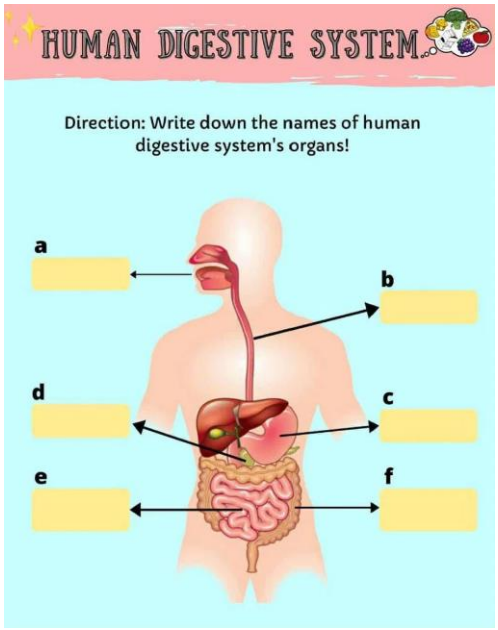
General Instructions:

(i) This question paper consists of 39 questions in 3 sections. Section A is Biology, Section B is Chemistry and Section C is Physics.

(ii) All questions are compulsory. However, an internal choice is provided in some questions.

(iii) Student is expected to attempt only one of these questions.

Q No.	SECTION- A BIOLOGY	MARKS
1.	During adolescence, cognitive abilities such as abstract thinking and problem- solving develop due to _____. a) increased brain development b) increased height c) increased social interactions d) increased muscle mass	**1**
2.	Puberty involves _____. a) only physical changes b) physical and emotional changes c) emotional and mental changes d) physical, emotional and mental changes	**1**
3.	Which of the following is NOT a secondary sexual characteristic in males? a) Growth of facial hair b) Broadening of shoulders c) Widening of hips d) Deepening of voice	**1**
4.	Through which of the following air enter the lungs? a) Tracheae b) Bronchi c) Bronchioles d) Alveoli	**1**
5.	Where does absorption takes place in humans? a) Small intestine b) Large intestine c) Liver d) Mouth	**1**
6.	Which of the following structures store bile juice temporarily? a) Gall bladder b) Pancreas c) Oesophagus d) Liver	**1**
7.	Which of these terms refers to the cycle of one inhalation and exhalation? a) Breathing rate b) Respiration c) Pulse d) Breath	**1**
	Assertion (A): Scientific knowledge changes over time as new discoveries are made. Reason (R): Scientists accept new evidence and revise earlier explanations when required. a) Both A and R are true, and R is the correct explanation of A. b) Both A and R are true, but R is not the correct explanation of A.	

	c) A is true, but R is false. d) A is false, but R is true.	
8.	**Assertion (A):** Adolescence is the period between childhood and adulthood. **Reason (R):** During adolescence, rapid physical and emotional changes occur.	**1**
9.	**Assertion (A):** Digestion begins in the mouth. **Reason (R):** Saliva contains enzymes that start the digestion of starch.	**1**
10.	Why do adolescents sometimes get acne and pimples?	**2**
11.	Observe the graph given in Fig. and answer the following questions: a) What can you conclude about the rate of growth in height in girls and boys? b) At what age do boys and girls reach their maximum height?  	**2**
12.	Define the following terms: ● Defecation ● Rumination	**2**
13.	Label the organs marked in the figure below.  	**3**

	OR Rohit was performing an experiment to prove that exhaled air contains caron dioxide. his teacher suggested that he use lime water to get the required result. Why do you think his teacher suggested this?	
14.	Explain how government programmes such as RKSK, MHS, and Jan Aushadhi Suvidha Sanitary Napkin Initiative help adolescents.	**3**
15.	Read the passage carefully and answer the questions that follow. Riya is 13 years old. Recently, she has noticed that she is growing taller, her voice sounds slightly different, and she feels more emotional than before. Her teacher explained that these changes are a normal part of adolescence. **Questions** a) Which stage of life is Riya experiencing? b) Name one physical change that Riya noticed. c) Why does Riya experience emotional changes during adolescence? **OR** d) Mention any two healthy habits Riya should follow during adolescence.	**4**
16.	List the various secretions of the stomach and briefly describe their roles in digestion. **OR** Explain the mechanism of breathing in a fish with the help of a flowchart.	**5**
	SECTION – B CHEMISTRY	
17.	Which of the following is the best example of scientific knowledge changing over time? a) The Earth is flat. b) Scientists improved the model of the atom after new discoveries. c) All experiments always give the same result. d) Science never changes.	**1**
18.	During an experiment, two students get different results. What should they do first? a) Ignore the results. b) Repeat the experiment carefully. c) Change the conclusion immediately. d) Stop the experiment.	**1**
19.	Which of the following substances would turn red litmus paper blue? a) Vinegar b) Lemon juice c) Baking soda solution d) Tamarind juice	**1**

20.	Which of the following substances is most likely to be acidic? a) Soap solution b) Lime water c) Orange juice d) Distilled water	**1**
21.	Which property of metals makes them suitable for making cooking utensils? a) They are brittle. b) They are poor conductors of heat. c) They conduct heat well. d) They are non-metals.	**1**
22.	Which of the following is a non-metal? a) Copper b) Aluminium c) Sulphur d) Iron	**1**
23.	Which of the following materials is used in pencil leads? a) Iron b) Graphite c) Copper d) Aluminium	**1**
24.	**Assertion (A):** Metals are generally good conductors of heat. **Reason (R):** Metals are commonly used for making cooking utensils. a) Both A and R are true, and R is the correct explanation of A. b) Both A and R are true, but R is not the correct explanation of A. c) A is true, but R is false. d) A is false, but R is true.	**1**
25.	Explain the importance of repeating experiments in science. Give any two reasons.	**2**
26.	Differentiate between acids and bases on the basis of any three points. Give one example of each.	**3**
27.	Explain any three properties of metals that make them useful in daily life. Give one use for each property. **OR** Ravi dropped an iron spoon and a plastic spoon into a fire by mistake. Predict what may happen to each and explain your answer based on the properties of the materials	**3**

28.	Read the passage carefully and answer the questions that follow. A teacher gave four substances to students—vinegar, soap solution, distilled water, and baking soda solution. They tested each substance using red and blue litmus paper. Vinegar turned blue litmus red. Soap solution and baking soda solution turned red litmus blue. Distilled water showed no change. a) Which substance is acidic? b) Name one basic substance from the passage. c) Which substance is neutral? d) What colour change is shown by a base with red litmus paper?	**4**
29.	Compare metals and non-metals on the basis of the following properties. Give one example of each. 1. Appearance (Lustre) 2. Conductivity of heat and electricity 3. Malleability 4. Ductility 5. Sonority	**5**
	SECTION – C PHYSICS	
30.	Which mode of heat transfer does not require a material medium? (a) Conduction (b) Radiation (c) Convection (d) Evaporation	**1**
31.	Which of the following is an insulator of electricity? (a) Wooden piece (b) Iron nail (c) Aluminium wire (d) Silver foil	**1**
32.	**Assertion (A):** A lamp is said to be fused when it does not glow because its filament is broken. **Reason (R):** A broken filament breaks the electric circuit inside the lamp, preventing the flow of electric current. (a) Both A and R are true, and R is the correct explanation of A. (b) Both A and R are true, but R is not the correct explanation of A. (c) A is true, but R is false (d) A is false, b ut R is true.	**1**
33.	Draw and label the diagram of a LED. Explain its working	**2**
34.	Why do we generally wear light-coloured clothes in summer and dark-coloured clothes in winter?	**2**
35.	What are Conductors? Why are the base of cooking utensils made of conductors?	**3**
36.	Explain how a torch works. What are the main components inside a torch and how are they connected?	**3**
37.	Describe the construction and working of a simple electric circuit using a cell, lamp, switch, and connecting wires. Draw a labelled circuit diagram.	**3**
38.	Electric circuit: It is an arrangement made of electrical devices or components. It is connected to a source of electricity with wires that provide a continuous path for electric current to flow. The electric current flows from the positive terminal of a cell to its negative terminal. An electric circuit can be divided into the following categories:•Closed circuit: A circuit that provides an uninterrupted path for electric	**4**

	current to flow from the positive terminal to the negative terminal of a cell•Open circuit: A circuit with a gap that breaks the continuous path of electric current. a. What is meant by a closed circuit? b. What is an open circuit? State its effect on the flow of electric current. c. Name the two types of electric circuits and write one feature of each. **or** d. Explain why a bulb does not glow in an open circuit.	
39.	Explain the process of conduction with the help of a neat labelled diagram. Describe how particles transfer heat energy in solids **or** Describe the process of heat transfer by convection. Explain how Land breeze is caused due to convection currents.	**5**

************ALL THE BEST************