KENDRIYA VIDYALAYA SANGATHAN, RAIPUR REGION

SESSION ENDING EXAM (2024-25)

SUBJECT – SCIENCE

CLASS – VII

M.M. – 60 **TIME-** $2\frac{1}{2}$ **hrs**

General Instructions:

i. This question paper consists of 29 questions.
ii. All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
iii. Section A consists of 15 objective type questions carrying 1 mark each.
iv. Section B consists of 5 very short questions carrying 02 marks each. Answer to these questions should be in the range of 30 to 50 words.
v. Section C consists of 4 Short Answer type questions carrying 03 marks each. Answers to these questions should be in the range of 50 to 80 words.
vi. Section D consists of 3 Long Answer Type questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.
vii. Section E consists of 2 source-based/competency-based units of assessment of 04 marks each with sub-parts.

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SECTION – A

The questions given below are multiple choice questions. Choose the correct option from the choices given below and answer the following :

1) The basic unit of time is:

a) Minute b) Hour c) Second d) Millisecond

2) Rohan wants to calculate the speed of his car.Which formula would he use to calculate it?

a) Distance × Time b) Distance + Time

c) Distance / Time d) Time /Distance

3) The correct example of periodic motion is

a) A pendulum of a clock c) A car moving on straight road

b) A athlete running on a straight track d) A stone falling from a height

4) The unit of electric current is

a) Volt b) kilometer c) Watt d) Ampere

5) Sushila wants to check which materials connected to a circuit allow the current to pass through it or not. Among the materials given below, which is good conductor?

a) plastic b) wood c) rubber d) copper

6) What is the purpose of a fuse in an electric circuit?

a) To increase current c) To break the circuit if current is to high

b) To store electricity d) To change path of current

7) Which of the following statement is correct about light?

a) It moves at slow speed c) It always travels in a straight line

b) It never changes its direction d) It always follows a curved path

8) A plane mirror always form a

a) Real image b) Virtual image c) Both virtual and real images d) only inverted image

9) A virtual image larger than the object can be produced by a ……

a)Concave lens b) concave mirror c) convex mirror d) plane mirror

10) Which is known as green lungs of world?

a) Green pigment of the plants c) forests

b) Kitchen gardens d) Children Park

11) Humus make the soil

a) infertile b) fertile c) degraded d) light

12) Micro-organisms act upon the dead plants to produce

a) sand b) mushrooms c) humus d) wood

13) Many diseases are caused due to polluted water, these are called water- borne diseases. Which of the following is not a water- borne disease?

a) Typhoid b)Cholera c) Asthma d) Dysentery

14) Solid matter produced during sewage treatment is

a) slurry b) fertilizer c) sludge d) humus

15) Our government introduced a cleanliness drive, a new mission in year 2016. Name the mission

a)Clean mission b) Swacch Bharat mission c) Safai Bharat Abhiyan d) Swacchata week

SECTION – B

16) .Show the shape of the distance – time graph for the motion in the following cases :

(i) A car moving with a constant speed

(ii) A car parked on the side road

17) Electric current shows certain effects when it flows through circuits.Name any two effects of electric current.

18) State any two differences between concave and convex mirror.

OR

Define real and virtual image .

19) Think of two situations when you saw contaminated water, and write how it can be stopped and taken care so that problem get solved.

20) What role do bacteria play in the septic tanks?

SECTION – C

21) (a) A simple pendulum takes 40 oscillations in 84s. Calculate the time period.

(b) Classify the following as motion along a straight line , circular or oscillatory motion .

(i) motion of your hands while running

(ii) motion of a horse pulling a cart on a straight road.

(iii) motion of a child in a merry go round

(iv) motion of train on a straight bridge.

22) (a) What is an electromagnet? List any two uses of it.

(b) When the circuit is switched on through a wire , a compass needle kept nearby gets deflected from it's north – south position . Explain .

23) Give reason for the following –

a) We cannot see a source of light through a bent tube.

b) A convex lens is used in making magnifying glasses.

OR

(a) State two difference between Concave and Convex lens .

(b) Draw Concave and Convex lens .

24) "There is no waste found in forest". Explain

SECTION – D

25) a) Draw the symbols to represent the following components of electrical circuits – Bulb , switch, battery

b) Write any two precautions you must take while using electric devices .

26) a)Write difference between – (any two)

i)Producers and consumers

ii) Understorey and canopy

b) Explain the role of forest in maintaining the balance between oxygen and carbon dioxide in the atmosphere.

27) What is sewage ? Explain it is harmful to discharge untreated sewage into rivers or seas .

OR

Describe the steps involved in getting clarified water from wastewater .

SECTION - E

Case Based Questions: There are two cases given below.Each case consists of four questions with 1M each answer as directed.

28) CaseI – Galileo Galilei was the first person who studied the properties of pendulums. He experimented with numerous pendulums and found that a pendulum of given length takes the same time to complete one oscillation. This observation later led to the development of pendulum clocks. A simple pendulumshows periodic motion and the principle of this motion of pendulum is used to make a pendulum clock . The first pendulum clock was invented by Dutch scientist, Christian Huygens, in 1656.

1. Nearly all clocks make use of principle of

   a) Straight line motion b) periodic motion c) random motion d) Circular motion

2. Which is a incorrect statement among the following –

   a) Increase or decrease in length of the string will increase or decrease the time period .

   b) The metallic bob is free to swing on the rigid stand .

   c) The pendulum is at rest in its extreme positions.

   d) The pendulum of a given length always takes the same time to complete one oscillation.

3. What is one complete movement of a pendulum from its mean position back to the same point called?

   a) Rotation b) Vibration c) Oscillation d) Revolution

4. Which of the following determines the time period of a pendulum?

a) Material of the bob b) Length of the bob c)Mass of the bob d)Shape of the bob

29) Case II – An image that cannot be obtained on a screen is known as virtual image. The light rays from the object, which do not appear to meat at a point after the reflection from the mirror, form a virtual image. The image formed on a plane is always virtual.

1) Which type of image is formed by plane mirror?

   a) Virtual and erect b) Real and Inverted c) Real and erect d) Virtual and inverted

2) If an object is placed at a distance of 0.5 m in front of plane mirror, the distance between the object and the image formed by the mirror will be

   a) 2m b) 1m c) 0.5 m d) 3m

3) Find the incorrect statement among the following: Image formed in plane mirror is :

   a) Same distance as the object is from mirror
   b) Same size as object
   c) Laterally inverted
   d) Double the distance as the object is from the mirror

4) Write two uses of concave mirror .

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