PM SHREE KENDRIYA VIDYALAYA SITAPUR FIRST SHIFT PERIODIC TEST 2 CLASS 7 SCIENCE (2023-24)

Max. Marks:40

Time: 90 Minutes

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General Instructions:

i) All questions are compulsory.

ii) The question paper has five sections and 18 questions.

iii) Section–A has 7 questions of 1 mark each; Section–B has 5 questions of 2 marks each; Section –C has 2 questions of 3 marks each; Section–D has 1 question of 5 marks and Section–E has 3 questions of 4 marks each.

SECTION A

| 1 | Which statement is true for the reflection of light? | 1 |
|---|---|---|
| | (a) The angle of incidence and reflection are equal. | |
| | (b) The reflected light is less bright than the incident light. | |
| | (c) The sum of the angle of incidence and reflection is always greater than 90°. | |
| | (d) The beams of the incident light, after reflection, diverge at unequal angles. | |
| 2 | The S.I. unit of Speed is | 1 |
| | (a) Km/hr | |
| | (b) Km/min | |
| | (c) m/hr | |
| | (d) m/s | |

3 Identify the organism and mode of reproduction.



- Two students were asked to grow different plants. Student A used the stem of a rose 1 plant and buried it into the soil to make a new plant. Student B used to the seed of a cucumber plant and buried it in the soil to grow a new one. After few weeks, the growth of a rose plant and a cucumber plant was observed. What mode of reproduction took place in the plants chosen by student A and student B?
 (a)Student A- Sexual reproduction; Student B- Asexual reproduction
 (b)Student A- Asexual reproduction; Student B- Asexual reproduction
 (d)Student A- Asexual reproduction; Student B- Asexual reproduction
- 5 A student notices the swing of a pendulum as shown in the image. She notices that 1 the bob of the pendulum starts from position A to C and then back to A in 2 seconds. What is the time period of the pendulum?



(a)0.5 second

- (b)1 second
- (c)2 seconds
- (d)4 seconds
- 6 The table shows the features possessed by seeds of four different plants.

| Plant | Feature |
|-----------|----------------------------------|
| Drumstick | Winged seeds |
| Xanthium | Spiny seeds with hooks |
| Coconut | Seed with the fibrous outer coat |
| Aak | Hairy seeds |

Seeds of which plant have features to disperse better in water than seeds of other plants?

(a)Seeds of aak plant

(b)Seeds of coconut plant

(c)Seeds of drumstick plant

(d)Seeds of xanthium plant

- 7 Image formed by a convex spherical mirror is:
 - (a) virtual
 - (**b**) real
 - (c) enlarged
 - (d) inverted

SECTION B

| 8 | What is unisexual flower? Give one example. | 2 | | | |
|-----------|--|---|--|--|--|
| 9 | a. A real image cannot be obtained on a screen. (T/F) | 2 | | | |
| | b. The fusion of male and female gametes is termed as zygote. (T/F) | | | | |
| 10 | If Bhoojo covers a certain distance in 1 hour and Paheli covers the same distance in 2 | 2 | | | |
| | hours, who travels in higher speed? Give the expression for Speed. | | | | |
| 11 | Write any two differences between Uniform motion and Non-uniform motion. | 2 | | | |
| 12 | (a) What is a virtual image? | 2 | | | |
| | (b) Which type of mirror can form a real image? | | | | |
| SECTION C | | | | | |
| 13 | Given below as a figure is the distance-time graph of the motion of | 3 | | | |
| | (a) What will be the position of the object at 20 s? | | | | |

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(b) What will be the distance travelled by the object in 12 s?

(c) What is the average speed of the object?



14 State the characteristics of the image formed by a plane mirror.

SECTION D

- 15 a. Explain what you understand by sexual reproduction.
 - b. Describe the various ways by which seeds are dispersed. OR
 - a. Define Straight line motion, circular and periodic motion.
 - b. Give any two examples of periodic motion.

SECTION E

16 i)Following figure depicts a common type of asexual reproduction, in which new4 plants are produced from body parts like roots, stems and leaves. Name this method of reproduction.



ii)What is pollination?iii)Write any two differences between self and cross pollination.

17 A student with his father plans to visit his grandmother during a vacation. They used 4 a motorcycle for the ride. Before starting the trip, the student took a picture of the odometer marked as initial in the image. After reaching his grandmother's home he took another picture of the odometer marked as final.



(a) What is the distance between the student and his grandmother's house?

(b) A car covers a total of 300 kilometres in 6 hours. What is the average speed of the car?

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- (c) Draw and label the parts of a simple pendulum
- 18
- a. Sketch the reproductive parts of a flower.b. What is lateral inversion done by a mirror? Where is its main use?
