

ATOMIC ENERGY CENTRAL SCHOOL-2, MUMBAI

PT- 3 (2023-24)

CLASS: VII
SUBJECT: SCIENCE

MARKS: 40
TIME:90 Minutes

General Instructions:

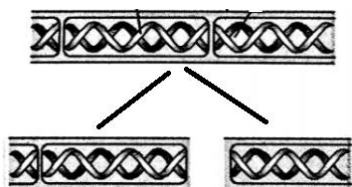
1. This question paper comprises of four parts – Section A to D. There are 27 questions and all questions are compulsory.
2. **Section A** : QNo.1 to 15 are multiple choice type questions (MCQ) carrying one mark which includes Assertion and Reason type and case study type questions.
3. **Section B** : Question No 16 to 19 are Short Answer Type – 1 (SA -1) questions , carrying 2 marks each.
4. **Section C** : Question No. 20 to 23 are Short Answer Type – II (SA- II) questions, carrying 3 marks each.
5. **Section D** : Question No. 24 is Long Answer Type (LA) questions, carrying 5 marks.
6. Draw neat and labelled diagrams wherever necessary.

SECTION A

Choose the correct answer.

(1 x 15 = 15M)

1. Which of the following constitute a pistil?
A) stigma, anther and ovary. B) stigma, stamen and ovary.
C) pollen sac, style and ovule. D) stigma, style and ovary
2. The type of reproduction shown in the diagram given below is called_____



- A) binary fission (B) fragmentation (C) sporulation (D) budding
3. Which physical quantity was measured by using sundials?
A) temperature B) time C) speed of an object D) weight of an object
 4. Who discovered magnetic effect of electric current?
A) H.C. Oersted (B) Michael Faraday (C) Ohm (D) Alexander Flemming
 5. After fertilization ovary gets converted into
A) stamen B) seed C) fruit D) pistil

Directions: Question number 6 to 8 consists of two statements- Assertion and Reason. Answer the questions by selecting an appropriate option from below:

- (A) Both assertion and reason are true and reason is the correct explanation of assertion .
- (B) Both assertion and reason are true but reason is not the correct explanation of assertion .
- (C) Assertion is true but reason is false.
- (D) Assertion is false but reason is true.

6. **Assertion:** Damaged fluorescent tubes or CFLs need to be disposed safely.

Reason: Fluorescent tubes and CFLs contain mercury vapour, toxic in nature.

7. **Assertion:** Pollination takes place in plants with the help of wind, water and insects.

Reason: Pollination is the process of transfer of pollen grains from the anther of one flower to the petal of the same or another flower.

8. **Assertion :** Periodic motion of a pendulum has been used to make clocks and watches.

Reason : Pendulum of a given length does not take the same time to complete one oscillation.

9. The coil of wire contained in a heater is known as

- (A) component
- (B) circuit
- (C) element
- (D) spring

10. The motion of an object in a straight line with a constant speed represents a _____.

- (A)circular motion
- (B)uniform motion
- (C)non-uniform motion
- (D)periodic motion

11. To make a battery of two cells

- A) the negative terminal of one cell is connected to the negative terminal of the other cell
- B) the negative terminal of one cell is connected to the positive terminal of the other cell
- C) the positive terminal of one cell is connected to the positive terminal of the other cell
- D) None of these

12. The magnetic field around a current carrying coil

- A) Lasts for three hours
- B) Lasts as long as current flows through it
- C) Lasts till its half-life period
- D) Is permanent.

Observe the given figure and answer Q no 13 to 15.

- 13. Identify the plant.
- 14. Name the type of asexual reproduction.
- 15. From where are the new plants developing?



SECTION B (2 x 4 = 8M)

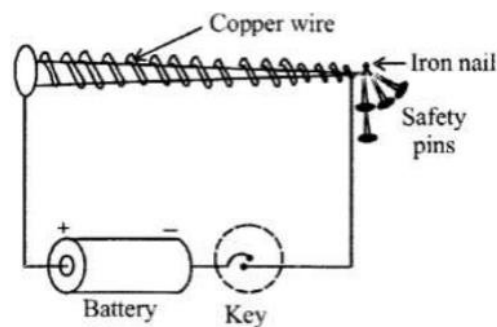
16. List two advantages of vegetative propagation.
17. What is an electric fuse? What is its importance?
18. The distance between two stations is 240 km. A train takes 4 hours to cover this distance. Calculate the speed of the train.
19. Which is the male reproductive part of a flower? Draw and label its parts.

SECTION C (3 x 4 = 12M)

20. The odometer of a car reads 24830 km at 1:25 p.m. and 25005 km at 3:15 p.m. Calculate the speed of the car in km/h and in m/s.
21. Classify the following motion as straight line, circular or oscillatory motion.
 - a). motion of a child in a merry go round
 - b). motion of a pendulum
 - c). motion of a train on a straight bridge
22. Mention the benefits of seed dispersal.
23. Draw a labelled diagram showing the circuit of an electric bell.

SECTION D (1 x 5 = 5M)

24. Neha wound a long-insulated piece of copper wire around an iron nail in the form of a coil. Free ends of the wire are connected to a battery through a switch as shown in the diagram. Some pins are placed near the ends of the nail.



- a) What happens to the pins when the switch is in ON position ?
 - b) What happens to the pins when the switch is in OFF position?
 - c) What is the name given to such type of coils?
 - d) Write two uses of these type of coils.
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