



परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society
अर्धवार्षिक परीक्षा - प्रश्न पत्र

Half Yearly Examination Practice Paper (2025-26)

कक्षा/Class: VIII

अवधि/Duration: 3 Hours

विषय/Subject: Science

अधिकतम अंक/Maximum Marks : 80

विद्यार्थी का नाम/Name of the student: _____

अनुक्रमांक/Roll No. _____ कक्षा/अनुभाग Class /Sec.: _____ दिनांक/Date: _____

General Instructions:.

1. This question paper consists of five sections A, B, C, D and E.
2. Section A consists of 16 MCQs and 4 Assertion and Reason type questions of 1 mark each.
3. Section B consists of 9 questions carrying 2 marks each (very short answer type questions).
4. Section C consists of 8 questions carrying 3 marks each (short answer type questions).
5. Section D consists of 2 case- based questions carrying 4 marks each with sub-parts.
6. Section E consists of 2 questions carrying 5 marks each (long answer type questions).
7. All questions are compulsory. Draw diagrams wherever necessary.

Section – A

Choose the correct answer from the given options.

(1X16= 16)

1. Which of the following is not an example of microalgae?
a) Spirulina b) Rhizopus c) Chlorella d) Diatoms
2. When two charged balloons rubbed with wool are brought close, they:
a) Attract each other b) Repel each other c) No reaction d) Lose charge
3. If we release a magnet held in our hand, it falls to the ground. The force responsible for this is:
a) Muscular force b) magnetic force c) electrostatic force d) gravitational force
4. What does “food miles” refer to?
a) Distance travelled by food from producer to consumer b) Nutritional value of food
c) Number of meals consumed in a day d) Amount of food waste
5. The fungus that is commonly used in bakery and beverage industries is
a) Penicillium b) Yeast c) Agaricus d) Rhizopus

6. A Voltaic cell produces electricity by:

- a) Magnetic effect b) Heating effect c) Chemical reactions d) Mechanical pressure

7. Which of the following is a contact force?

- a) Gravitational force b) Muscular force c) Magnetic force d) Electrostatic force

8. Which of the following is a renewable resource?

- a) Coal b) Petroleum c) Natural gas d) Wind energy

9. Phases of the moon occur because

- (a) we can see only that part of the moon which reflects light towards us.
(b) our distance from the moon keeps changing.
(c) the shadow of the Earth covers only a part of moon's surface.
(d) the thickness of the moon's atmosphere is not constant.

10. Scientific thinking begins best with:

- a) Memorizing facts b) Drawing diagrams c) Asking "Why?" and "How?" d) none of these

11. Nichrome wire heats up more than copper under the same current because:

- a) It insulates better b) It is cheaper
c) It has higher resistance and thus generates more heat d) It conducts electricity faster

12. Which constellation is also called the Hunter?

- a) Orion b) Sirius c) Ursa Major d) Leo major

13. Which of the following regulates all activities of a cell?

- a) Nucleus b) Cell membrane c) Chloroplast d) Lysosome

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

- (a) component (b) circuit (c) element (d) spring

15. The temperature at which a liquid boils and changes into a gas at a constant atmospheric pressure is called:

- (a) Melting point (b) Freezing point (c) Boiling point (d) Sublimation point

16. Which of the following is not a ductile material?

- (a) Silver (b) Copper (c) Sulphur (d) Aluminium

ASSERTION AND REASON TYPE QUESTIONS

(1X4 = 4)

Choose the correct answer from options given below for the statements.

- (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

17. Assertion (A): We rely on microscopes to observe microorganisms.

Reason (R): Microbes are too small to be seen with the naked eye.

18.Assertion (A): Magnetic force is a contact force.

Reason (R): Magnetic force can act without physical contact.

19. Assertion (A): The bulb glows when the electric current passes through it.

Reason (R): Due to the heating effect of current, the filament of the bulb gets heated to a high temperature and it starts glowing.

20.Assertion (A): Everything around us is made of tiny particles.

Reason (R): Particles of a solid can move freely.

Section - B

Very Short Answer Type Questions .

(2X9 = 18)

21.You want to wear your favourite shirt to a party, but the problem is that it is still wet after a wash. What steps would you take to dry it faster?

22.Give two examples of situations in which applied force causes a change in the shape of an object.

23.List two changes in the body that take place at puberty.

24.Why is good hygiene important during adolescence?

25.Draw a well labelled diagram of Voltaic cell.

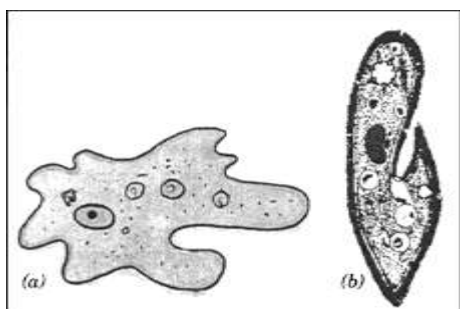
26.What does the image of the root and kite (the design of page numbers of text book) symbolise?

27.Name the type of forces involved in the following.

a) A horse pulling a cart b) A coin falling to the ground on slipping from hand

28. Name the following microbes.

a) _____ b) _____



29.Why is spirulina considered a superfood?

Section - C

Short Answer Type Questions.

(3X8 = 24)

30.What are millets? What benefits do millets provide us?

31.On what factors does the heat produced in a wire depend?

32.Draw a plant cell and label any four parts.

33.Write any three differences between the physical properties of metals and non metals.

34. Differentiate between Galaxy and constellation.

35. Describe the steps involved in scientific investigation.

36. What are the uses of electromagnets?

37. Name the forces acting on a plastic bucket containing water held above ground level in your hand. Discuss why the forces acting on the bucket do not bring a change in its state of motion.

Section - D

Case Based Questions

Read the following paragraphs and answer the questions

(1X4 = 4)

38. The body of all living organisms are made up of tiny building blocks called cells. A single cell contains various components that help organisms perform various functions. The bodies of all plants and animals are made up of many cells. Therefore, they are called multicellular (many-celled) organisms. In multicellular organisms, cells carry out specialised functions individually but also cooperate with each other to increase the chance of survival. Some microorganisms, such as bacteria and protozoa, are made up of just one cell. These are called unicellular organisms.

a). How are organisms classified on the basis of number of cells?

b). List two examples of unicellular organisms.

c). Who discovered the cell?

d). Write one difference between a plant cell and an animal cell.

39. After testing the blood sample of a person, a doctor found low red blood cells. He prescribed a particular mineral supplement to the person. He also advised him to include certain food item in his diet.

(1X4= 4)

(i) Which deficiency disease is he suffering from?

(ii) Which mineral may be lacking in his diet?

(iii) Give two food items that he should include in his diet.

(iv) What are deficiency diseases?

Section - E

Long Answer Type Questions.

(5X2= 10)

40. What are the uses of microorganisms? (Explain any five uses)

41. What are the differences between solids, liquids and gases in terms of their shape, volume and the arrangement of particles?