



परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society
वार्षिक परीक्षा अभ्यास पत्र / Annual Exam Practice Paper (2025-26)

कक्षा /Class: VII विषय /Subject: Science माह/ Month: March अंक/Marks: 80

दिया गया पाठ्यक्रम/Portion covered: _____

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. If an adolescent girl is feeling constantly tired and weak, which nutrient should be increased in her diet to prevent anemia?
 a) Calcium b) Iron c) Carbohydrates d) Vitamin C
2. Which one of the following animal is ruminant?
 a) Salmon b) Crow c) Cobra d) Buffalo
3. Which of the following correctly matches the plant tissue with its function?
 a) Phloem – Transport of water b) Xylem – Transport of gases
 c) Phloem – Transport of food d) Cambium – Storage of food
4. Which of the following are not important for the photosynthesis in plants?
 a) Oxygen b) Carbon dioxide c) Water d) Stomata
5. Which of the following best describes respiration in plants?
 a) Plants use CO₂ and release nothing
 b) Glucose is broken down with oxygen to release energy, CO₂ and water
 c) Plants only use sunlight to produce energy
 d) Plants stop respiration at night
6. Which of the following is **not** required for a shadow to form?
 a) A source of light b) A transparent object
 c) An opaque object d) A screen or surface

7. Why do we experience different seasons on Earth?
- Because of the Earth's rotation speed
 - Because of the tilt of Earth's axis and revolution around the Sun
 - Because the Sun moves closer and farther
 - Because the Moon blocks sunlight
8. Adolescents often face emotional "ups and downs" where they feel very happy one moment and frustrated the next. These are called:
- Growth Spurts
 - Hormonal Imbalances
 - Mood Swings
 - Personality Shifts
9. The bile juice secreted by liver helps in the digestion of
- Fats
 - Proteins
 - Carbohydrates
 - Fibre
10. Which one of the following is the characteristic of the image formed by a plane mirror?
- virtual and erect
 - real and erect
 - virtual and inverted
 - real and inverted
11. Light travels in a straight line. Which of the following observations best supports this?
- Objects appear bigger in water
 - Shadows have straight edges when light is blocked by a straight edge
 - Light makes sounds when reflected
 - Colors mix in a prism
12. A solar eclipse occurs when:
- Earth comes between the Sun and Moon
 - Moon comes between Earth and the Sun
 - Sun comes between Earth and Moon
 - Moon moves away from Earth
13. When light hits a smooth surface and bounces back, this phenomenon is called:
- Diffusion
 - Absorption
 - Reflection
 - Refraction
14. The process of surface water seeping through soil and rocks is called _____
- Infiltration
 - Precipitation
 - Condensation
 - Neutralization
15. Why do sebaceous glands become more active during adolescence?
- To make the skin tougher
 - Due to increased hormonal activity
 - To help the body cool down
 - Because of lack of exercise
16. A car moves with a speed of 72 km/h. How much distance will it cover in 10 minutes?
- 16 km
 - 120 m
 - 60 m
 - 12 km

ASSERTION AND REASON TYPE QUESTIONS

(1X4 = 4)

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

- Both A and R are true and R is the correct explanation of A
- Both A and R are true, but R is not the correct explanation of A
- A is true, but R is false
- A is false, but R is true

17. Assertion (A): Potato contains starch.

Reason (R): Hence it gives a green colour when potato is tested with iodine.

18. Assertion (A): Green patches of leaf obtained from the plant placed in dark do not turn blue-black with iodine.

Reason (R): Large amount of starch is produced in the presence of sunlight.

19. Assertion (A): The Earth completes one revolution around the sun in about 365 days and 6 hours.

Reason (R): The extra 6 hours are added every year to make one leap year.

20. Assertion (A): Conduction of heat takes place only in solids.

Reason (R): In conduction particle moves from one place to another freely.

Section - B

Very Short Answer Type Questions.

(2X9 = 18)

21. Why is "Menstrual Hygiene" important? Mention one myth.

22. Give the word equation for the process of respiration. Which parts of a plant can carry out respiration.

23. Why does warm air rise upwards while cold air moves downwards?

24. What are the two important roles of pancreatic juice in human digestive system?

25. What is periodic motion? Give one example.

26. Why do transparent objects not form a clear shadow?

27. Draw the structure of stomata. How does it help in photosynthesis?

28. What is sea breeze? Explain when it occurs.

29. A cyclist covers a distance of 500 m in 100 seconds. Find the speed in km/h.

Section - C

Short Answer Type Questions.

(3X8 = 24)

30. Explain how a shadow is formed. What are the conditions necessary for the formation of a shadow?

31. What are aquifers? Why is the groundwater getting depleted?

32. List 3 physical changes observed in girl and that of boys.

33. Explain uniform motion and non-uniform motion with one example each.

34. A car travels 150 km in 3 hours.

(a) Calculate the speed of the car in km/h.

(b) Convert this speed into m/s.

(c) How much distance will the car cover in 5 hours at the same speed?

35. Explain the water cycle briefly.

36. Define the following terms for human digestive system

a) Absorption of nutrients

b) Egestion

c) Mechanical digestion

37. What is glucose? Give two roles of glucose. How is it prepared in plants?

Section - D
Case Based Questions

Read the following paragraphs and answer the questions

(1X4 = 4)

38. The Mystery of the Sweet Chapati

Rohan was sitting for lunch and noticed a curious thing. His teacher had mentioned that digestion begins in the mouth, but he didn't quite believe it. To test this, he took a plain piece of chapati and chewed it for nearly a full minute without swallowing. Initially, it tasted like plain wheat, but after about 45 seconds of continuous chewing, he noticed the chapati began to taste slightly sweet. Later that day in science class, his friend Neha performed an experiment using two test tubes: one with plain boiled rice and another with rice that had been chewed for 30 seconds. When she added iodine solution to both, the plain rice turned blue-black, while the chewed rice showed no significant color change.

- a). Why did the chapati start tasting sweet after Rohan chew it for a long time?
- b). In Neha's experiment, why did the plain boiled rice turn blue-black when iodine was added?
- c). Which component of the digestive system is responsible for the "mechanical digestion" mentioned in the case study?
- d). What is the role of the small intestine in the journey of the food Rohan ate?

39. The Growth Spurt and Voice Change

(1X4= 4)

Manoj is a 12-year-old boy in Grade 7. Over the last six months, he has noticed that his old shirts have become too tight and short, and his voice has started to sound hoarse and deep. One morning, he noticed a small bulge on the front of his neck. Worried that it might be a medical issue, he visited a doctor. The doctor explained that these are normal biological changes as he transitions into a new stage of life called adolescence. He also advised Manoj to maintain a balanced diet and regular hygiene during this period of rapid growth.

- a) What is the technical name for the "neck bump" Manoj noticed, which is common in adolescent boys?
- b) Adolescence is a transition period between which two stages of human life?
- c) Manoj's mother suggests he eat green leafy vegetables and pulses. Which specific mineral is essential during this stage to prevent anemia?
- d) Besides physical changes, what is another common type of change adolescents often experience due to hormones?

Section - E

Long Answer Type Questions

(5X2= 10)

40. Why is a "Balanced Diet" critical during adolescence?

41. Draw and label a neat diagram of human digestive system.