
CBSE Sample Paper -02 (unsolved)
SUMMATIVE ASSESSMENT – II
SCIENCE (Theory)
Class – IX

Time allowed: 3 hours

Maximum Marks: 90

General Instructions:

- a) All questions are compulsory.
- b) The question paper comprises of two sections, A and B. You are to attempt both the sections.
- c) Questions 1 to 3 in section A are one mark questions. These are to be answered in one word or in one sentence.
- d) Questions 4 to 7 in section A are two marks questions. These are to be answered in about 30 words each.
- e) Questions 8 to 19 in section A are three marks questions. These are to be answered in about 50 words each.
- f) Questions 20 to 24 in section A are five marks questions. These are to be answered in about 70 words each.
- g) Questions 25 to 42 in section B are multiple choice questions based on practical skills. Each question is a one mark question. You are to select one most appropriate response out of the four provided to you

Section A

- 1. Write the representation of a nitrogen atom with mass number 14 and atomic number 7.
 - 2. What is the role of 'International code of Binomial Nomenclature'?
 - 3. How is ultrasound used in cleaning?
 - 4. State the characteristics of nucleus of an atom.
 - 5. Give the importance of taxonomy.
 - 6. An echo is returned in 3s. what is the distance of the reflecting surface from the source? (speed of sound = 342m/s)
 - 7. **Meena and priya went to grandmother's home during summer vacations. Their grandmother used to give them coconut water, sugarcane juice, barley water, lemon water. When they asked the reason for drinking these drinks grandmother answered "Our body contains 70% of water. Every cell in our body needs water order to function. Our body can suffer through dehydration during summer. To combat dehydration these drinks are helpful.**
 - a. **Name some fruits which provide maximum amount of water.**
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- b. What does dehydration mean?**
 - c. Name elements present in water.**
 - d. How will you make others aware of dehydration problems?**
 - e. Why water is essential for body?**
 8. Give postulates of Dalton's atomic theory.
 9. Name some flight adaptations in birds.
 10. Describe characteristics of Pteridophyta.
 11. What are the advantages of classifying organisms?
 12. Differentiate between annelids and arthropods.
 13. What is ultrasound? What is frequency? Give its uses.
 14. Describe a simple activity to prove that objects of density less than that of the liquids float on it.
 15. A bag of cotton weighs 15 kg and occupies a volume of 5 m³. Find its density.
 16. A. State the SI units of Thrust and Pressure.
B. In which situation we exert more pressure on ground when we stand on one foot or on both the feet? Justify your answer.
 17. A person produced a sound with siren near a cliff and echoes were heard after 5 seconds. Find the distance of siren from cliff if velocity of sound waves produced is 220 m/s?
 18. Ocean waves of time period 0.02s have a speed of 10m/s. Calculate the wavelength of these waves. Find the distance between the adjacent crest and trough.
 19. Write characteristic features of Phylum Platyhelminthes.
 20. A. What are postulates of Bohr's model of an atom?
B. Draw a sketch of Bohr's model of an atom with four shells?
 21. A. What is reverberation? How is it reduced?
B. How does a sound wave propagate?
 22. A. A battery lights a bulb. Describe the energy changes involved in the process.
B. Calculate the amount of work needed to stop a car of 250 kg, moving at a speed of 18 km/hr.
 23. A. Name the devices based on Archimedes principle.
B. How will you verify Archimedes principle experimentally.
 24. Give an example in each case where work done by a force is:- a. positive b. negative c. zero
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Section B

25. Why did Rutherford select a gold foil in his α -ray scattering experiment?
26. Name some features of Spirogyra.
27. A tuning fork makes 254 vibrations per second in air. Calculate when the speed of sound is 300 m/s, the wavelength of the note emitted.
28. From the following equation, give the co-efficient of O_2 in accordance with law of conservation,
 $C_5H_{12} + O_2 \rightarrow 5CO_2 + 6H_2O$
- | | |
|------|------|
| a. 2 | c. 4 |
| b. 6 | d. 8 |
29. SI unit of mass is:-
- | | |
|-------|---------|
| a. kg | b. g wt |
| c. mg | d. kgwt |
30. Needle like leaves are present in
- | | |
|---------|------------|
| a. Fern | c. Pinus |
| b. Moss | d. Mustard |
31. A group of sporangia in ferns is called as
- | | |
|---------------|---------------|
| a. Sorus | c. Archegonia |
| b. Sporophyll | d. Placenta |
32. Setae are found on which body segments in earthworm?
- | | |
|------------------|----------------------|
| a. First segment | c. Cliteller segment |
| b. last segment | d. All body parts |
33. Earthworm mainly feeds on:
- | | |
|-------------------|------------------------|
| a. Plant products | c. Soil rich in humans |
| b. Microbes | d. Insects |
34. One kgwt equals:
- | | |
|----------|----------|
| a. 49 N | c. 9.8 N |
| b. 980 N | d. 4.9 N |
35. What is the weight of one kg mass on earth ?
- | | |
|----------|----------|
| a. 980 N | c. 9.8 N |
| b. 1.6 N | d. 8.9 N |
36. Mass of body is defined as:-
- | |
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| a. Force acting on a body divided by velocity produced in the body. |
| b. The quantity of matter contained in the body. |
| c. The force with which a body is attracted towards the centre of earth. |
| d. None of the above. |
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