

**BOARD-PATTERN PRACTICE PAPER · CBSE CLASS 9****Is Matter Around Us Pure?**

Science · Chapter 2 · Matches current CBSE blueprint · Each question PYQ-sourced where indicated

DATE _____	TOTAL MARKS 30	DURATION 90 min	MARKING As per board	TARGET ≥ 24/30
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GENERAL INSTRUCTIONS

1. All questions are compulsory. There is no overall choice.
2. Section A: MCQs (1 mark each). Section B: Short Answer-I (2 marks). Section C: Short Answer-II (3 marks). Section D: Long Answer (5 marks).
3. Show all working in numerical problems. Diagrams must be labelled.
4. Use a pencil for diagrams and a pen for descriptive answers.

Section A — MCQ**5 MARKS · 10 MIN**

- Q1.** Which of these has the smallest particle size: solution, colloid, suspension? [PYQ 2019 Delhi] **[1 mark]**
- Q2.** Name the property by which colloid particles scatter light. [PYQ 2020 Delhi] **[1 mark]**
- Q3.** Which is NOT a pure substance: distilled water, gold, air, oxygen? [PYQ 2022 All India] **[1 mark]**
- Q4.** State whether melting of ice is a physical or chemical change. [PYQ 2018 Delhi] **[1 mark]**
- Q5.** Name the technique used to separate cream from milk. [PYQ 2023 Delhi] **[1 mark]**

Section B — Short Answer-I (2 marks)**8 MARKS · 22 MIN**

- Q6.** Calculate the mass percentage of solute when 10 g of NaCl is dissolved in 90 g of water. [PYQ 2020 Delhi] **[2 marks]**
- Q7.** Give one example each of an aerosol, a foam, a gel and an emulsion. [PYQ 2022 Delhi] **[2 marks]**
- Q8.** What is the difference between a saturated and an unsaturated solution? Give one example each. [PYQ 2019 All India] **[2 marks]**
- Q9.** Why is fractional distillation used to separate ethanol from water, and not simple distillation? [PYQ 2023 Delhi] **[2 marks]**

Section C — Short Answer-II (3 marks)**9 MARKS · 28 MIN**

- Q10.** Tabulate the differences between a true solution, a colloid and a suspension on the basis of (a) particle size (b) Tyndall effect (c) filterability. [PYQ 2019 Delhi] **[3 marks]**
- Q11.** Define Tyndall effect. Give two real-life situations in which you can observe it. [PYQ 2018 Delhi] **[3 marks]**
- Q12.** Distinguish between elements and compounds using TWO points. Give one example of each. [PYQ 2022 All India] **[3 marks]**

Section D — Long Answer (5 marks)**8 MARKS · 30 MIN**

- Q13.** Describe with a labelled diagram the process of fractional distillation. State its principle and give two industrial applications. [PYQ 2020 Delhi] **[5 marks]**
- Q14.** How would you obtain pure copper sulfate from a sample contaminated with insoluble sand and soluble impurities? Describe the full process and explain why crystallisation gives a purer product than simple evaporation. (3+0+0 split actually internal: 1 for filtration + 2 for crystallisation steps) [PYQ 2023 Delhi] **[3 marks]**

Marking scheme & model answers — see companion Answer Key PDF · all PYQs traceable to actual CBSE papers · readyforboards.com · +91 70330 05444