

Model Question Paper Year 2025-26

Class: XII

Subject: Plumbing

Time: 2 Hrs. 30 Minutes

Max. Marks: 60

Name of the student: -----

Roll No: -----

General Instructions:

1. Please read the instructions carefully.
2. Marks allotted are mentioned against each section/question.
3. All questions must be attempted in the correct order.
4. This Question Paper consists of **34 questions** in **four sections – Section A, Section B, Section C & Section D.**
5. **Section A** has **Objective Answer Type Questions**
Section B contains **Very Short Answer Type Questions**
Section C contains **Short Answer Type Questions**
Section D contains **Essay Type Questions**
6. Out of the given 34 questions, a candidate has to answer **30 questions** in the allotted time of **150 minutes.**
7. All questions of a particular section must be attempted in the correct order.

1. SECTION A—OBJECTIVE TYPE QUESTIONS(15MARKS):

- i. This section has 15 questions.
- ii. There is no negative marking.
- iii. Do as per the instructions given.
- iv. Marks allotted are mentioned against each question/part.

2. SECTION B—VERY SHORT ANSWER TYPE QUESTIONS(12MARKS):

- i. This section contains 08 questions of 2 marks each.
- ii. A candidate has to do 06 questions.
- iii. Do as per the instructions given.
- iv. Marks allotted are mentioned against each question/part.

3. SECTION C—SHORT ANSWER TYPE QUESTIONS (18 MARKS):

- i. This section contains 08 questions of 3 marks each.
- ii. A candidate has to do 06 questions.
- iii. Do as per the instructions given.
- iv. Marks allotted are mentioned against each question/part.

4. SECTION D—ESSAY TYPE QUESTIONS (15 MARKS):

- i. This section contains 03 questions of 5 marks each.

- ii.** A candidate has to do 03 questions.
- iii.** Do as per the instructions given.
- iv.** Marks allotted are mentioned against each question/part.

SECTION A- (OBJECTIVE TYPE QUESTIONS)

Answer the following questions

(1x15=15marks)

Q.1	What is the primary function of flow sensors in a plumbing system? a) To measure water temperature. c) To detect water pressure changes. b) To measure the rate of water flow. d) To identify water quality issues	1
Q.2	In cold-welding joint preparation for CPVC pipes, what is applied first? a) Solvent cement c) Primer b) Water sealant d) Epoxy resin	1
Q.3	What type of device is a solenoid valve primarily described as? a) A purely mechanical device b) A pneumatic device. c) An electromechanical device. d) A hydraulic device.	1
Q.4	What is the primary function of a battery box? a) To generate electricity. c) To provide a protective container for batteries. b) To regulate battery voltage. d) To measure battery life.	1
Q.5	Which type of battery is commonly used in wireless leak detectors and smart water meters according to the text? a) Lithium-ion Batteries c) Nickel-Cadmium Batteries b) Alkaline Batteries d) Lead-Acid Batteries	1
Q.6	Elevated Surface Reservoirs (ESR) are constructed at a height of more than: a) 3 meters c) 15 meters b) 10 meters d) 30 meters	1
Q.7	_____ fittings use a push and lock mechanism for easy installation without soldering or threading.	1
Q.8	Occupational Health and Safety (OHS) practices help in identifying _____ and preventing workplace accidents.	1
Q.9	The _____ is a document that records daily activities, incidents, and safety topics on a construction site.	1
Q.10	Give the two example of a hand tools?	1
Q.11	In which type of supply CPVC pipe is used?	1
Q.12	Which type of tool is specifically designed for cutting pipe materials like PVC, CPVC, or steel?	1
Q.13	Assertion (A): Standard Operating Procedures (SOPs) contribute to operational efficiency, quality control, and workplace safety. Reason (R): SOPs promote accountability by clearly defining roles and responsibilities within a process. Options: 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.	1
Q.14	Assertion (A): For good teamwork, it is essential to always agree with your team members to avoid conflicts. Reason (R): Transparency and healthy interaction must be promoted among team members. Options: 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.	1
Q.15	Assertion (A): Maintaining good relationships with colleagues can improve job satisfaction and reduce workplace stress. Reason (R): Positive interpersonal relationships create a supportive and cooperative atmosphere, making the work environment more pleasant. Options:	1

	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.	
--	--	--

SECTION B-(Very Short Answer Type Questions)

Answer any 6 out of the given 8 questions in 20–30 words each (2x6=12marks)

Q.16	What is the primary function of a sensor?	2
Q.17	How advance pipe fitting is used in residential unit.	2
Q.18	Explain the importance of SOP in plumbing work.	2
Q.19	What is a fire sprinkler and its types?	2
Q.20	What do you mean by Team Management and their importance?	2
Q.21	What is the main purpose and utility of Daily Log Reports?	2
Q.22	What is the main job of a battery box?	2
Q.23	How can a solenoid valve help in a water leak?	2

SECTION C-(Short Answer Type Questions)

Answer any 6 out of the given 8 questions in 30–50words each(3x6=18marks)

Q.24	Explain general health and safety rules in pipe fitting?	3
Q.25	List the safety precautions to be taken by cutting the pipe?	3
Q.26	What is a sensor and write its application in plumbing?	3
Q.27	What are the benefits of using advanced pipe fittings in residential units?	3
Q.28	How does a time-controlled sensor faucet regulate water flow?	3
Q.29	How does an infrared sensor faucet detect the presence of an object?	3
Q.30	Why are good communication skills essential for an advanced plumbing technician when interacting with clients?	3
Q.31	What is the purpose of a Standard Operating Procedure (SOP) in plumbing work?	3

SECTION D-(Essay Type Questions)

Answer the following questions in 50–80words each(3x5=15marks)

Q.32	Describe the installation and repair process of sensor-based faucet.	5
Q.33	What are the advantages and limitations of a solar water heater?	5
Q.34	Explain the application of OHS practices in plumbing work.	5