

Objective type questions.

1. Fill in the blanks.

a) Experiment and observation are two important basics of chemistry.

b) A porcelain dish is used to evaporate solutions/liquids.

c) Test tube is used to hold the test tube while it is hot or being heated.

d) Mortar and pestle is used for grinding and crushing solid substances into a powder.

e) Glass apparatus is made of pyrex or borosil glass.

2. Match the items in Column A with their respective functions in column B.



Column A	Column B
a) Iron stand	i) To boil chemicals
b) Test tube	ii) To keep solutions.
c) Funnel	iii) To stir solutions
d) Beaker	iv) To support apparatus
e) Glass rod	v) To transfer liquids

3. Choose the correct alternative from the options given for each of the following statements.

a) Evaporating dish is made of

ii) porcelain

b) Spirit lamp is made of

iv) all ^{of} the above.

c) The apparatus to measure an accurate volume of a liquid is

iii) Measuring cylinder ✓

d) To pass a gas from one vessel to another you will use.

iii) Delivery tube.

c) To prevent the escape of a gas from a gas jar, you will cover its mouth with

i) Watch glass

4) Write true or false against the following statements and correct the false ones.

a) A glass funnel is used to pour off liquids. True

b) A test tube is used to test liquid chemicals. False
Correct - A test tube is used to boil chemicals.

c) A mortar and pestle is used for evaporation.

Correct - A mortar and pestle is used to crush and grind substances into powder.

d) A glass rod is used to stir solutions. True.

e) A round bottom flask is used to store chemicals.

False

correct - A beaker is used to store chemicals.

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~~Exercise~~
Exercise

1. Mention one use of each of the following equipments.

Ans- a) Spirit lamp - Spirit lamp is used to heat up substances.

b) Test tube - Test tube is used to conduct tests with small quantities of chemicals for heating and boiling purposes.

c) Conical flask - Conical flask is used to hold sufficient quantities of substance in the form of solution.

- d) Evaporating dish - It is used to evaporate liquids.
- e) Wire gauze - It is used to keep glass apparatus (flask, beaker) on it while heating is in process. It is also used for the uniform distribution of heat.
- f) Beaker - Beaker is used for keeping of solutions.
- g) Mortar and pestle - It is used to grind and crush solid substances into a powder.
- h) Measuring cylinder - Measuring cylinder is used to measure the volume of (mainly) liquid substances.
- i) Glass tube - Glass tube is used to transfer fluids or gases from one vessel to another.
- j) Gas jar - Gas jar is used for collecting gases from one vessel to another and holding them in

captivity vacuum.

k) Reagent bottle: Reagent bottle is used for storing chemicals.

2. ~~What are~~ From what materials are the following made up of?

- a) Test tube rack, b) Test tube holder, c) Measuring cylinder, d) Wire gauze, e) Mortar and pestle.

Ans-^{a)} Test tube rack is made up of wood or plastic

b) Test tube holder is made up of a iron clamp at front and wood or plastic handle at another end.

c) Measuring cylinder is made up of glass

d) Wire gauze is made up of meshed iron wire and a thin asbestos sheet that is fixed at its centre

e) Mortar and pestle is made of porcelain.

3. List any five precautions taken care of while performing an experiment in a chemical laboratory.

Ans- Five precautions to be taken in laboratory are:

1. Do not touch or taste any unknown substance.
2. Use only small quantity of chemical to carry out experiment.
3. Do not work alone in the laboratory.
4. Do not throw hot concentrated acids into the sink directly.
5. Always wear an apron in the laboratory to protect your clothes.
6. While heating, keep the mouth of test tube away from your eyes and face.
7. The apparatus should be arranged neatly before beginning an experiment.
8. Do not throw broken glass apparatus or used filter paper in the sink. Throw them in a dustbin.

4. Answer the following questions in brief:

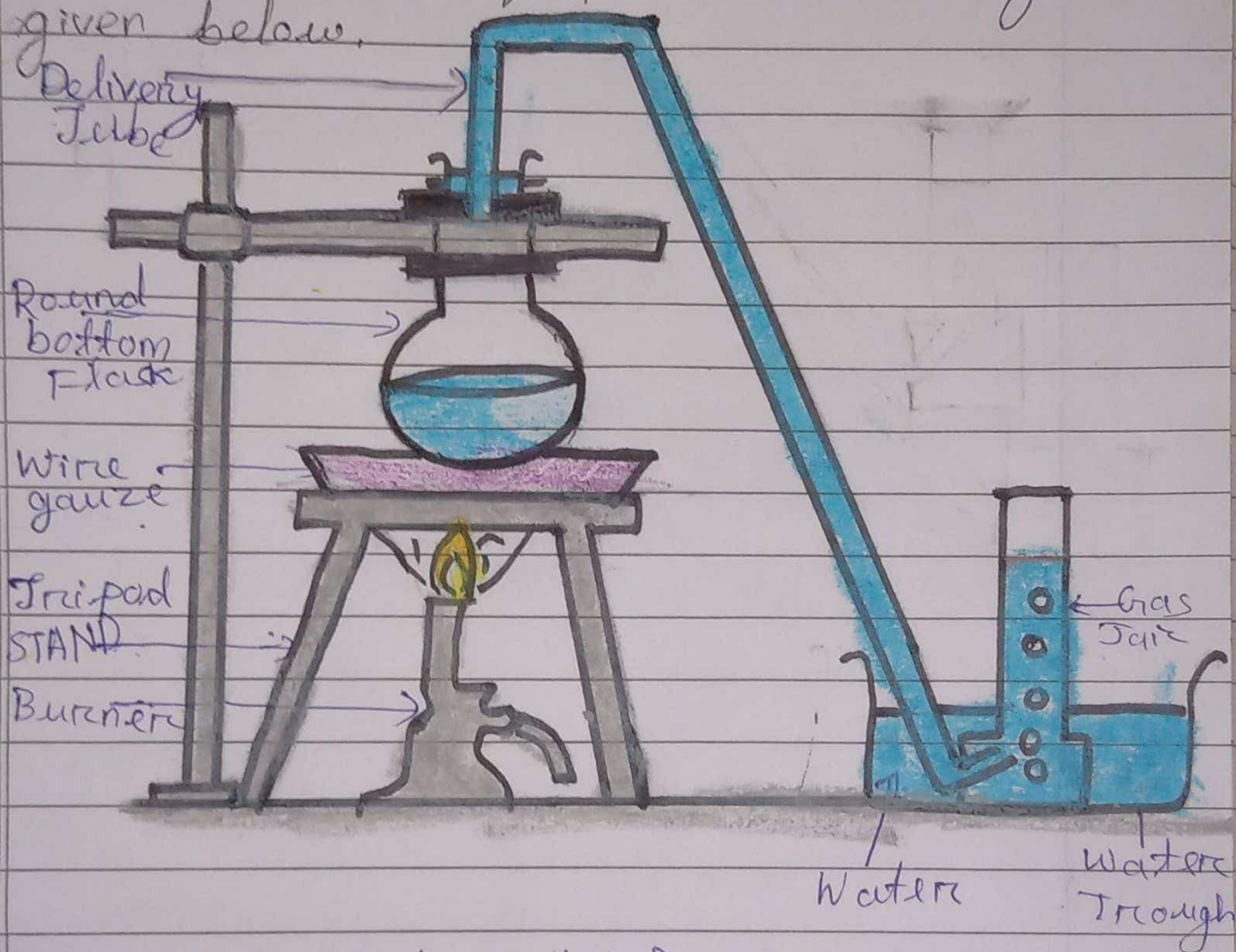
- a) Why is chemistry known as an experimental science?
- b) Why are most apparatus made of glass?

Ans-a) Chemistry is known as experimental science as an experiment is performed under controlled conditions in an activity and we observe a natural or an artificially created phenomenon.

b) Most of the laboratory apparatus is made of glass because:

1. Glass is easy to clean.
2. Glass is a transparent material and we can see through it clearly.
3. It does not react with most of the chemicals used in experiments.
4. Glass withstands high temperatures.
5. Pyrex or borosil glass is a special type of glass which hardly expands on heating. Such glasses do not break even at high temperatures.

Q5 Label the marked equipments in the diagram given below.



1. Glass tube (Delivery tube)
2. Flask (round bottomed)
3. Wire gauze
4. Burner
5. Tripod (stand)
6. Gas jar
7. Water trough
8. Water.

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