# FBISE PRACTICAL BASED ASSESMENT (PBA)

**Guidelines/instructions for teachers/paper setters:**

i. There will be two Sections in PBA paper. In Section-A there will be one question having parts in it. Similarly, in Section-B there will be one question having parts in it.

ii. In Section-A, Question No. 1 will be based only on one experiment taken from Part-I of the list of practicals.

iii. In Section-B, Question No. 2 will be based on multiple experiments taken from Part-II of the list of practicals.

iv. Ratio of Part-I practicals is 60% while ratio of Part-II practicals is 40% in the PBA paper.

v. Draw diagram(s) if asked for.

vi. In the new pattern of practicals i.e. Practical Based Assessment (PBA), there will be no marks for practical note books and viva voce. However, students may record procedures, observations, apparatus and calculation etc on any type of plain papers/work sheets / practical folder for their future memory of all aspects of practical performance in order to attempt the PBA Examination amicably.

vii. It may be noted that performance of all the prescribed practicals is mandatory in the laboratories during the whole academic year and only those students will be able to attempt the PBA who will have performed the practicals in the laboratories as per requirement of each practical.

## List of Practicals SSC-I

## Chemistry

| S.No. | Part-I (60% of practical marks ---- 6 Marks) |
|---|---|
| **1.** | Separate the given mixture of alcohol and water by distillation |
| **2.** | Demonstrate that a chemical reaction releases energy in the form of heat |
| **3.** | Prepare 100 $cm^3$ of 0.1 M NaOH/HCl solution from given 1M solution |

| S.No. | Part-II (40% of practical marks ---- 4 Marks) |
|---|---|
| **1.** | Demonstrate that miscible liquids dissolve in each other and immiscible liquid do not |
| **2.** | Demonstrate the conductivity of different given solutions |
| **3.** | Demonstrate that two elements combine to form a binary compound |
| **4.** | Demonstrate sublimation using solid Ammonium Chloride |
| **5.** | Determination of boiling point of given compounds (Ethanol & Acetone) |

# FEDERAL BOARD OF INTERMEDIATE AND SECONDARY EDUCATION ISLAMABAD

## Subject: Chemistry SSC-I
## Paper: Practical Based Assessment (PBA)

Total Marks: 10 Time: 45 minutes

| Roll Number | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 |

Name of Examination: _____

Centre Code: _____

Date: _____

Sig. of Dy. Supdt. _____

**Instructions for students:**

1. Carefully read all the questions and then answer them at the specified spaces.
2. Use black or blue ball point.
3. Marks are mentioned against all questions in the brackets [ ].
4. Students may use the last page for rough work (if required).
5. Answer the questions as per given instructions.

**MODEL PAPER SSC-I CHEMISTRY**

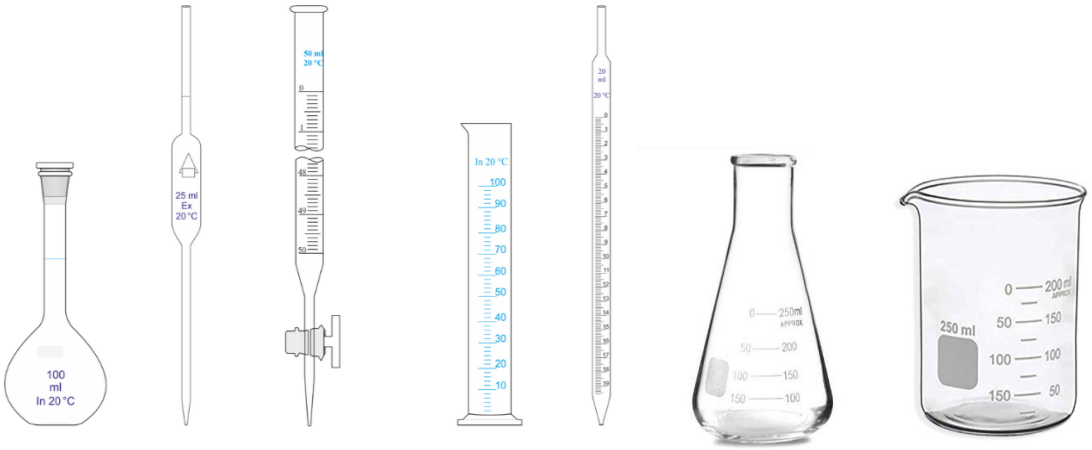
**Note: Attempt all questions and answer the questions within the provided spaces.**

**SECTION-A**

**Q 1:**

Purpose of this experiment is to Prepare 100cm$^3$ of 0.01M NaOH solution from the 10.6 g/dm$^3$ NaOH solution.

i.) Which of the following apparatus can be used in this experiment: **[02]**
Encircle the correct option.




**A** **B** **C** **D** **E** **F** **G**

**Chemical used:**
NaOH solution, Distilled water
**Instructions:**

- You are advised to show full working in all parts of calculations.

**ii.)** Calculations: **[02]**

a) Calculate the molarity $M_1$ of 10.6 g/dm$^3$ NaOH

[Na=23 , O=16 , H=1]

_____

_____

_____

_____

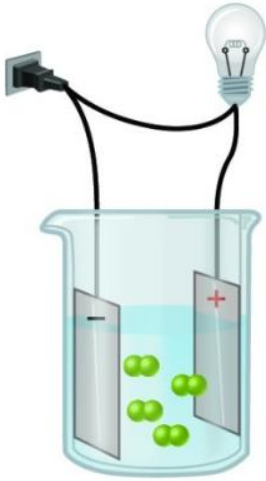
b) Calculate the volume $V_1$ of NaOH used to prepare 100cm$^3$ 0.01M solution **[02]**

$M_1V_1 = M_2V_2$

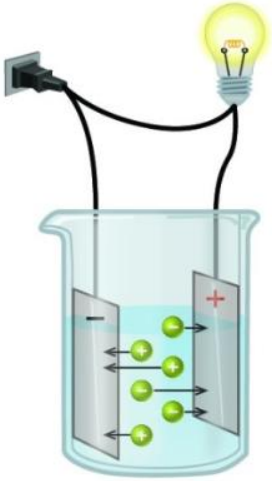
## SECTION-B

**Q 2: Encircle the correct option.**

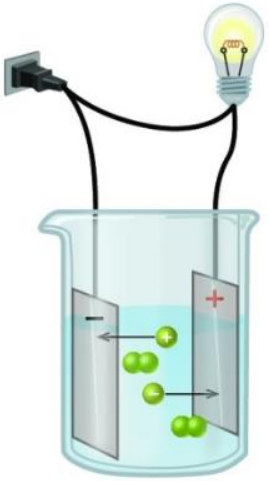
**i.)** Demonstrate the conductivity of different given solutions. Following apparatus is used for this experiment which one of the following is non electrolyte. **[01]**



**A**

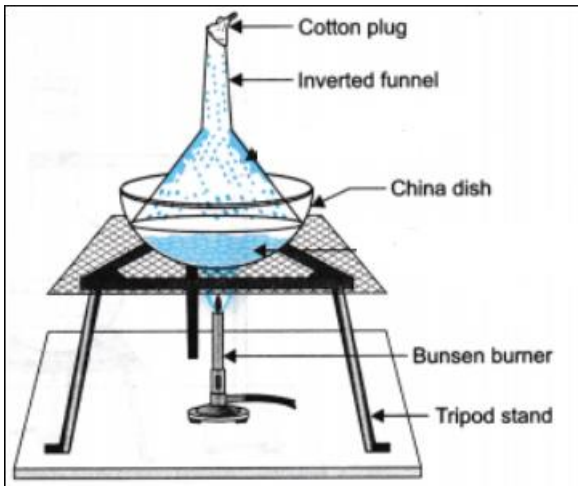


**B**



**C**

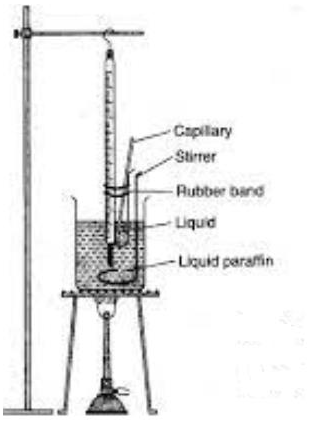
**ii.)**




The given figure demonstrate the sublimation process, which one of the following can be separated by this apparatus. **[01]**

A. NaCl
B. $C_6H_{12}O_6$
C. $NH_4Cl$
D. $K_2SO_4$

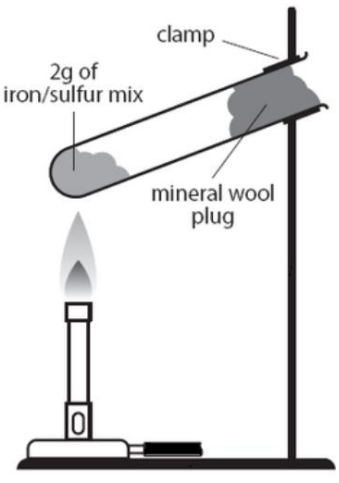
iii.)




This apparatus is used for the determination of : **[01]**

A. Melting point
B. Boiling point
C. Solubility
D. Heat of reaction

iv.)




Demonstrate the formation of a binary compound, for what purpose this apparatus is used **[01]**

A. Formation of $FeS_2$
B. Formation of FeS
C. Decomposition of $Fe_2S$
D. Decomposition of $FeS_3$

# ROUGH WORK