

U.G. 3rd Semester Examination - 2020

CHEMISTRY

[HONOURS]

Generic Elective Course (GE)

Course Code : CHEM-H-GE-P-1

[PRACTICAL]

Full Marks : 20

Time : 2 Hours

The figures in the right-hand margin indicate marks.

1. Answer any **ten** questions from the following:

2×10=20

- i) What is buffer solution? Define pH.
- ii) Why benzaldehyde fails to give positive Fehling test?
- iii) Why glucose does not give 2, 4-DNP test?
- iv) Phenols are weakly acidic and do not give effervescence with NaHCO_3 ; Is this statement correct?
- v) What is the basis of chlorine water test?
- vi) Why is the heating in the esterification reactions performed on boiling water bath?

- vii) Define solubility and solubility product.
- viii) Write down the principle for the study of the solubility of benzoic acid in water.
- ix) What do you mean by enthalpy of neutralization?
- x) Write down the identification process for resorcinol.
- xi) How one can prepare an acidic buffer solution?
- xii) How can you differentiate benzoic acid and salicylic acid?
- xiii) Why nitrobenzene and aniline are immiscible with water?
- xiv) How can you differentiate aniline and dimethylaniline?
