

2019

Part – II

CHEMISTRY

(Honours)

Paper – V(A)

(Organic)

(Practical)

Full Marks – 50

Time : 6 Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers in  
their own words as far as practicable.*

- A. Identification of supplied single solid organic compound marked 'O' accordingly.
- (a) Physical characteristics. 1
  - (b) Solubility test with preliminary conclusion  
(H<sub>2</sub>O, 5% HCl ; 5% NaOH, 5% NaHCO<sub>3</sub>,  
Conc H<sub>2</sub>SO<sub>4</sub>) 3
  - (c) Detection of special elements (N, S and Cl)  
in the given solid sample. 2+2+2

(d) Detection of the following functional groups in the given solid sample.

Carboxylic acid; phenolic –OH; Carboxyl (Keto and aldehyde), unsaturation, aromatic nitro; aromatic amino, amido.  $8 \times 2 = 16$

(e) Confirmation of functional groups by confirmatory tests. 2

(f) Determination of melting point of the organic sample. 3

(g) Prepare and submit one appropriate solid derivative of the supplied sample with short description of the method. 2+1

(h) Determination of melting point of the derivative. 2

(i) Literature Survey. 3

(j) Naming of the organic compound with structure. 1

B. Laboratory Note Book. 5

C. Viva-Voce. 5

N.B. : It is mandatory to record all the observations. Record the melting point and signed by the examiner. 5