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UG/5th Sem/CHEM(H)/Pr/19

2019

B.Sc. (Honours)

5th Semester Examination

CHEMISTRY

Paper - C12-P

Organic Chemistry - V

Full Marks : 20

Time : 3 Hours

The figures in the margin indicate full marks.

*Candidates are required to give their answers
in their own words as far as practicable.*

1. (i) Separate the mixture of two amino acids by TLC technique.

Record :

(a) Prepare TLC plate. (5)

(b) Separation technique on TLC plate. (10)

Or,

[Turn Over]

(2)

(ii) (a) Correlate the marked absorption peaks in the supplied IR-spectrum of a known organic compound to its characteristic structural feature. (1×5)

(b) (i) Indicate how many different types of protons are present in the given organic compound and mark them by a, b, c, etc.

(ii) Arrange them according to their chemical shift (δ - ppm).

(iii) Locate each type of proton to signal of protons with appropriate chemical shift or range of chemical shift in the supplied 'H'-NMR spectrum of the compound.

(iv) Explain the nature of splitting of signal(s) [if present].

(v) Find out the number of protons in each signal. (5×2)

2. Viva-voce (3)

3. Laboratory Note Book (2)
