Final Year B. Pharm. Sem - VII (CBCS - 2015 Course): Winter - 2018

SUBJECT: PHARMACEUTICAL ANALYSIS-V

Day: Saturday
Date: 24/11/2018

Time : 2.00 P.M. To 5.00 P.M.
Max. Marks: 60

W-2018-4101

N.B.

1) **Q. No. 1 and Q. No. 5** are **COMPULSORY**. Out of the remaining attempt any two questions from each section
2) Figures to the right indicate **FULL** marks.
3) Answers to both the sections should be written in **SEPARATE** answer book.

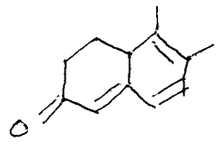
SECTION -I

Q.1 Answer the following (**ANY FIVE**) **(10)**

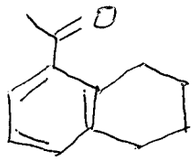
a) Define 'prisms'
b) What do you mean by red shift and blue shift?
c) List out various sources of light in absorption spectroscopy
d) Why β-carotene has maximum absorption in visible region?
e) Explain absorption spectra
f) Explain the relation between wavelength and energy

Q.2 Calculate the λmax for the following compounds. Justify your answer **(10)**

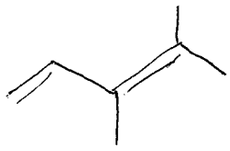
a)



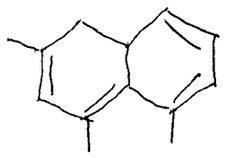
b)



c)



d)



Q.3 Explain the quantitative methods of analysis by applying UV-Vis spectroscopy **(10)**

Q.4 Write short Note on (**ANY TWO**) **(10)**

a) Characteristics of EMR
b) Solvent selection in UV-Vis spectroscopy
c) Spectrophotometric titrations

SECTION -II

Q.5 Answer the following (**ANY FIVE**) **(10)**

a) Clarify the term double bond IR region
b) Explain the concept of Fermi resonance
c) Define spectroflurometry and chemiluminescence
d) Enlist factors affecting fluorescence intensity
e) Describe effect of concentration on fluorescence intensity
f) What in principle of RAMAN spectroscopy?

Q.6 Compare nephlometry and turbidometry. Describe principle and instrumentation of Turbidomety. **(10)**

Q.7 Describe principle, instrumentation, application and advantages of phosphorimetry **(10)**

Q.8 Write short notes on (**ANY TWO**) **(10)**

a) Comparative aspects of flurometry and phosphorimetry
b) Flurometry applications
c) Types of vibrations in molecule

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