

16448(D)

- 0 DEC 2018

**B. Pharmacy (Ayur.) 8th Semester Examination**

**Pharmaceutical Analysis (NS)**

**BPA-822**

**Time : 3 Hours**

**Max. Marks : 70**

*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

**Note :** Question no. 1 is compulsory. Attempt any five questions from Question 2 to 7.

1. (i) Briefly describe electromagnetic radiations in term of their range. (2)
- (ii) Discuss various transitions in UV spectroscopy. (2)
- (iii) How correction of spectra is done in fluorimetric analysis? (2)
- (iv) Discuss vibrations in IR spectroscopy. (2)
- (v) Discuss pharmaceutical applications of X-ray diffraction. (2)
- (vi) Briefly explain spin-spin splitting. (2)
- (vii) Define molecular ion peak and metastable ions. (2)
- (viii) What do you understand by atomization? (2)
- (ix) Discuss basic principle behind atomic absorption spectroscopy. (2)
- (x) Discuss optical rotation. (2)

2

16448

2. What do you understand by the term chromophores and auxochromes? Discuss various causes of deviation from Beer's law and their removal. (3+7=10)
3. Discuss factors affecting fluorescence intensity in detail. (10)
4. Discuss about solid sample preparation in IR spectroscopy. What are the analytical shortcomings of IR spectroscopy? (6+4=10)
5. Describe the term "Chemical Shift". What are the various factors affecting chemical shift? (3+7=10)
6. Describe Mc Lafferty Rearrangement in detail. (10)
7. Discuss about optical rotatory dispersion and circular dichroism. (5+5=10)