

### **DK-M-2011117** Seat No. \_\_\_\_\_

# M. Pharm. (Sem. II) (CBCS) Examination April / May - 2015

## Modern Pharmaceutical Analysis (Core Subject - IV) (Speci. Paper - III) (Quality Assurance)

Time: 3 Hours [Total Marks: 80

**Instructions**: (1) Answer and tie up both the sections separately.

- (2) Figure to the right indicates marks.
- (3) Answer the three (03) questions from each section.
- (4) Question one (1) and question Five (05) are compulsory.
- (5) Draw neat and clean diagrams as required.

#### **SECTION - I**

- What do you mean by modern pharmaceutical analysis? 14
  Enlist the different analytical technique used in pharmaceutical sciences with its application.
- 2 (a) What do you mean by quality control and In-process quality control? Discuss the significance of in-process quality control for safety and efficacy of drug product.
  - (b) Give the objective and importance of dissolution study **5** for a solid dosage form.
- 3 (a) What is Genetic engineering? Discuss the principle of 8 tryptic mapping method.
  - (b) Explain in detail amino acid sequence analysis. 5
- 4 (a) Write a history, role and content of ICH guideline. 8
  - (b) Write an informative note different extraction technique 5 used in bio-analytical method development.

#### SECTION - II

5 How will you develop a new analytical method? Give its 14 basic steps. What are the different parameters to be included for validation of analytical methods? Discuss briefly. Enlist the different analytical techniques used in 8 6 (a) preformulation study and give application of each method. (b) Discuss quality control test for tablet dosage form. 5 7 Enlist the different IPQC test for parenteral dosage 8 form and discuss any three in detail (b) Write a note on: Importance of calibration in 5 pharmaceutical sciences. 8 How will you select the proper dissolution media? 8 (a) Discuss various conditions used in dissolution study. Write a short note on: In-vivo and In-vitro (b) 5 Co-relation (IVIVC).