[KV 338] Sub. Code: 2874

M.PHARM. DEGREE EXAMINATION

(Regulations 2006)

Candidates admitted from 2006-2007 onwards

FIRST YEAR

Branch VIII – PHYTOPHARMACY AND PHYTOMEDICINE

Paper III – HERBAL DRUG DEVELOPMENT AND STANDARDISATION

Q.P. Code: 262874

Time: Three hours Maximum: 100 marks

Answer All questions

I. Essay Questions:

 $(3 \times 20 = 60)$

- 1. a) Write an essay on the protocol for fractionation of a root drug for isolation of various secondary metabolites.
 - b) Discuss the principle, merits and demerits of supercritical fluid extraction.
- 2. a) Discuss the principles of development of fingerprint profile of standardized herbal extracts.
 - b) Discuss the OECD guidelines for determination of acute toxicity of plant drugs.
- 3. a) Explain the principle behind the isolation and estimation of catechine from green tea.
 - b) Discuss the isolation and estimation of piperine by HPLC.

II. Write Short Notes:

 $(8 \times 5 = 40)$

- 1. Documentation requirements in quality control of botanicals.
- 2. WHO definitions for herbs, herbal materials, herbal preparations, finished herbal products. Therapeutic activity and active ingredients.
- 3. Herbal shampoos.
- 4. Isolation of bitter lactones from andrographis.
- 5. Recovery of solvents from extracts.
- 6. Merits and demerits of artificial drying.
- 7. Disc diffusion and serial dilution.
- 8. Storage requirements for crude drugs.