

Total No. of Questions : 4]

SEAT No. :

P3971

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[5246]-106

**M. Pharmacy (Semester - I)**  
**ADVANCED PHARMACOGNOSY**  
**(2013 Pattern) (Credit System)**

*Time : 3 Hours]*

*[Max. Marks : 50*

*Instructions to the candidate :*

- 1) *All questions are compulsory.*
- 2) *Neat diagrams must be drawn whenever necessary.*
- 3) *Figures to the right indicate the full marks.*

**Q1)** Briefly describe biogenetic pathway for flavonoids and flavolignans. [10]

**Q2)** Answer the following (any three) [15]

- a) Explain polyketids pathways for anthraquinones.
- b) Explain difficulties for formulations of herbal formulations and remedies.
- c) Explain modern drug discovery with Taxol.
- d) Describe ethnobotanical approach for drug discovery.

**Q3)** Short Notes (any three) [15]

- a) Withania Alkaloids
- b) Biogenesis of coumarins
- c) Herbal syrups
- d) Nutraceutical powders/ granules

**Q4)** Elaborate rational use of secondary metabolites as medicinal compounds.[10]

OR

Explain in detail HIS with selection strategies, sample preparation and test with recent case studies.

