



NC-02010303

Seat No. _____

M. Pharm. (Sem. I) Examination

January – 2017

Advance Pharmacognosy

(Core - I)

Time : **3** Hours]

[Total Marks : **80**

- Instructions :**
- (1) Answer and tie both the section separately.
 - (2) Figures to the right indicate marks.
 - (3) Answer any three from each section except 1 and 5 are compulsory.
 - (4) Draw neat and clean diagram when required.

SECTION - I

- 1** Answer any seven out of given ten questions : **14**
- (1) Define glycoside and its general properties.
 - (2) Define alkaloid and its general properties.
 - (3) What are the disadvantages of cultivated plant ?
 - (4) How can you authenticate a plant material ? Why it is necessary?
 - (5) Define stomatal index and stomatal number with its significance.
 - (6) Enlist antipyretic in vivo animal models.
 - (7) What is Lycopodium spore method ?
 - (8) What are the advantages and disadvantages of UV detection method in TLC ?
 - (9) What are the drawbacks of silica gel as an adsorbent in Thin Layer Chromatography ?
 - (10) Define mutation and polyploidy.

- 2 Answer the following :
- (1) What is the microtome ? Discuss the types of microtome and its applications. 7
 - (2) Discuss different diagnostic values for microscopy as per pharmacopoeias. 6
- 3 Answer the following :
- (1) Define Rf value. Discuss factor affecting Rf value and applications of TLC. 7
 - (2) Discuss any two *in vivo* models for screening of Antidiabetic drugs. 6
- 4 Answer the following :
- (1) Write note on isolation of any two alkaloids. 7
 - (2) Discuss general isolation method for glycoside and method for isolation of Cardiac Glycoside and Flavonoid Glycoside. 6

SECTION - II

- 5 Write any two out of three : 14
- (1) Write detail note on plant growth regulator.
 - (2) Discuss bio screening models for anti-inflammatory drug and mention recent herbal plants for it.
 - (3) Discuss principles involve in Thin layer Chromatography. Differentiate TLC and HPTLC.
- 6 Answer the following :
- (1) What are the advantages of herbal pesticides ? Write note on herbal pesticide. 7
 - (2) Discuss hybridization in plants with its applications. 6

- 7 Answer the following :
- (1) Discuss supercritical fluid extraction with advantages and disadvantages. 7
 - (2) Discuss quantitative and qualitative phytochemical analysis methods for phenols and flavanoids. 6
- 8 Answer the following :
- (1) Discuss factor affecting cultivation of plants with examples. 7
 - (2) Write note on various cultivation and collection methods for plant as per WHO guideline. 6
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