



**JBO-4**

Seat No. \_\_\_\_\_

**M. P. M. (Sem. V) (W.E.F. 2017) Examination**

**January - 2020**

**Pharmacognosy & Phytochemistry - II**

Time : 3 Hours ]

[ Total Marks : 75

- Instructions :** (1) Figures to the right indicate marks.  
(2) Draw neat and clean diagrams as required.

**1 Answer following questions : 20**

- (1) Comment on "Fennel contains less volatile oil than coriander fruits."
- (2) Give B.S and uses of Devil's Dung.
- (3) Draw well labelled diagram of T.S of Cinnamon bark.
- (4) Differentiate Decoction and Maceration.
- (5) Give identification test for Atropine.
- (6) Differentiate Siam benzoin and Sumatra Benzoin.
- (7) Give application of IR spectroscopy for herbal drug analysis.
- (8) Differentiate radioisotopes and stable isotopes.
- (9) Give the utilization of vincristine phytoconstituents.
- (10) Write B.S and C.C of antihypertensive alkaloidal drug.

**2 Answer the following questions : (any two) 20**

- (1) Write short note on Radiotracer technique for investigation of biogenetic studies.
- (2) Write pharmacognostical note on Digitalis and Opium.
- (3) Discuss isolation, identification and analysis of Caffeine.

**3** Answer the following questions : (any **seven**)

**35**

- (1) Write in detail about hot percolation method of extraction.
- (2) Differentiate TLC and HPTLC.
- (3) Discuss in detail about industrial production and utilization of sennoside.
- (4) Write general metabolic pathways used to biosynthesis of Indole alkaloids.
- (5) Write B.S, C.C, morphology, chemical tests and uses of Aloe.
- (6) Define metabolic pathways. Write in detail about general metabolic pathway to biosynthesis of Fatty acids.
- (7) Define Resins. Write a detail note on ginger.
- (8) Write in detail about paper chromatography for herbal drug analysis.
- (9) Discuss in detail about amino acid pathway.

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