Ref. No.: Ex/PG/PHAR/T/127B/2018

M. PHARMACY FIRST YEAR SECOND SEMESTER - 2018

Subject: PHARMACOGNOSY - II

Time: 03 Hours

Full Marks: 100

Group -A

Use Separate Answer scripts for each Group, answer any five questions, taking at least two from each group, each question carry equal marks

- 1. Write in details about the various factors effects which effect the production of secondary metabolites in medicinal and aromatic plants? Discuss, how the stress can impact on medicinal plants for the biosynthesis of active compounds in plants?
- 2. Explain, how the microscope can be exploited for the standardization of crude drugs of natural origin? Discuss about plant propagations.
- 3. What is pest? How the pest can be controlled in the field to protect the crops including medicinal plants? Give general idea about natural and synthetic pesticides. What is ideal insecticide?
- 4. Write notes on: a)Plant growth regulator b) Sea as source of anticancer drugs
  - c) Pharmaceutical aids from natural origin d) Natural colours

Ref. No.: Ex/PG/PHAR/T/127B/2018

## M. PHARMACY FIRST YEAR SECOND SEMESTER EXAM 2018

Subject: PHARMACOGNOSY - II

Time: Three Hours

GROUP - B

Full Marks: 100

## Answer any five questions taking at least two from each group

**5**. Write down the method of gel electrophoresis for resolving proteins mixture and explain the immunoblot technique for studying the expressions of signal proteins.

20

Write an explanatory note on *in vitro* culture of animal cells. How will you detect cell viability? Define the terms passaging and splitting in *in vitro* culture.

20

7. How will you evaluate the anti-diabetic activity of a test material in vivo? Special emphasis must be given on mechanistic pharmacology.

12 + 8 = 20

- **g**. Write explanatory notes on (any 2)
  - a) Phases of clinical trials
  - b) OECD guidelines
  - c) CPCSEA
  - d) Cell signaling in diabetic microvascular complications

 $10 \times 2 = 20$