Registration no: | | | | | | | | | | |

Total number of pages: 02 **B. Pharma.**

15PH505

5th Semester Regular Examination 2017-18

Pharmacognosy-III

BRANCH: B.Pharma

Time: 3 Hours

Max Marks: 100

Q.CODE: B116

Answer Question No.1 and 2 which are compulsory and any four from the rest.

The figures in the right hand margin indicate marks.

Q1 **Multiple Choice Questions :**

a) Rhein is a **(2 x 10)**
A) Sterol B) Anthraquinone C) Coumarin D) Phenol.

b) Keller-Kiliani test is performed for the detection of ……

c) Anthranilic acid is an intermediate in the biosynthesis of
A) Tryptophan B) Tyrosine C) Phenyl alanine D) Ornithine

d) Under UV radiation gentian extract shows …….. fluorescence.

e) *Cassia obovata* is commonly known as
A) PaltheSenna B) Mecca Senna C) Egyptian Senna D) Dog Senna

f) *Glycyrrhiza* belongs to the family of
Liliaceae B) Leguminosae C) Solanaceae D) Pinacee

g) Strophanthus glycosides + 80 % H_2SO_4
A) Violet B) Crimson red C) Emerald green D) Cream

h) Bitter wood obtained from dried stem wood of ……

i) BAP is a
Gibberalin B) Synthetic auxin C) Natural auxin D) Cytokinin

j) *Panaxquinquefolium* represents
American B) Chinese C) Korean D) Japanese variety of ginseng.

Q2 **Answer the following questions :** **(2 x 10)**

a) Distinguish between Cardenoloides and Bufadienolides.

b) Give examples of two cytotoxic compounds obtained from marine source.

c) Write down the biological source of Senega.

d) Define the term 'totipotency'.

e) Write down the biological sources of Trypsin and Pepsin.

f) How would you detect anthraquinone glycoside in a crude specimen?

g) Write down the biological source, chemical constituents and uses of Red Squill.

h) Give examples of two probiotics.

i) Write down the uses of Psoralea.

j) What down the name of the precursors involved in the biosynthesis of Tropane alkaloids?

Q3 **a)** Define and classify plant tissue culture. **(5)**

b) Write an account on the nutritional requirements for the in vitro growth of plant tissue. **(6)**

c) Write down the applications of plant tissue culture in the production of bioactive plant metabolites. **(4)**

Q4	**a)**	Define and classify glycosides with suitable examples.	**(5)**
	b)	Write down the biological source, microscopic features, chemical constituents and uses of Indian Senna.	**(10)**
Q5	**a)**	Describe schematically the 'Sta-Otto' method of isolation of glycosides.	**(5)**
	b)	Write down the biological sources, chemical constituents and uses of Chirata and Rhubard.	**(10)**
Q6	**a)**	Write down the microscopic features of aloe leaf.	**(5)**
	b)	Describe the methods of cultivation and collection of Digitalis and Dioscorea.	**(10)**
Q7	**a)**	Describe the biosynthetic pathways for the bio-production of indole alkaloids and steroidal aglycones.	**(5 x2 =10)**
	b)	Describe schematically the biosynthesis of different amino acids via. shikimic acid pathway.	**(5)**
Q8	**a)**	Write down the biological sources, method of preparation, physical properties and uses of papain and diastase.	**(10)**
	b)	Write note of poisonous plants of India.	**(5)**
Q9	**a)**	Give an account on marine drugs with special emphasis on antimicrobial agents and marine toxins.	**(10)**
	b)	Write short note on nutraceuticals.	**(5)**