Ref. No.: EX/PHARM/T/425A/2019

# B.Pharmacy Fourth Year Second Semester Examination 2019.

#### Sub: Elective-II (Industrial Pharmacy)

Time: 3 Hours

NEWER DRUGS AND BIOTECHNOLOGICAL APPLICATIONS II

Full Marks: 100

# Answer any Five questions taking at least One from each group.

#### Group- A

- 1.a) Write a note on Medical Devices with examples.
  - b) Point out the Sterility testing procedure of Catheters.

(15+5=20)

- 2.a) What is Resveratrol? Write its chemical name, source and pharmaceutical importance. (2+10=12)
  - b) Define probiotics with example. Explain why Bacillus clausii is superior than other probiotics?

(2+6=8)

- 3.a) Define Surgical Ligature and Suture .
  - b) What is Chromicized catgut?
  - c) Write in short the different sterilization process of catgut.

(4+4+12)

## 4th YEAR 2nd SEMESTER EXAMINATION, 2019

# SUBJECT: ELECTIVE II GROUP - B

1.	(a)	With a neat diagram explain the biological clock cycle of men. Explain two	4+6
		diseases with well established circadian rhythms.	٠
	(b)	What do you understand by the term "Pulsatile Drug Delivery"? Explain such	2+8.
		systems based on Osmosis and change on membrane permeability.	
			4+6
2.	(a) ·	Enlist the various stimuli considered for the release of the drug by pulsatile	
	٠	systems. Elaborate Magnetic field and temperature.	5+5
	(b)	With a suitable diagram write short notes on any two of the following	5x2
		technologies	
	•	I. OROS®	-
	v	II. CONTIN®	
	,	III. DIFFUCAPS®	
		IV. EGALAT®	

### (Answer any five taking at least 1 from each group)

#### GROUP - C

1.	. Write down the methods of isolation of alkaloids, flavonoids and saponins.		
	What are the critical factors to be considered for herbal raw materials? explanatory note on standardization of herbals drugs.	Write an	
3.	Describe schematically the methods of isolation of  a) Isolation of artemisinin & artemisinic acid  b) Isolation of Cinchona alkaloids  c) Nux vomica alkaloids	20	