

# **RAN-0920**

### SYB Sc Semester - IV Examination

March / April - 2019

**Electronics Paper - V** 

(Switching Power Supply)

(New Course)

[ Total Marks: 50

## સૂચના : / Instructions

નીચે દર્શાવેલ 🖝 નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fill up strictly the details of  signs on your answer book	Seat No.:
Name of the Examination:	
S Y B Sc Semester - IV	
Name of the Subject :	
<b>☞</b> Electronics Paper - V	
Subject Code No.: 0 9 2 0	Student's Signature

### **Instruction:**

- (1) Q. 1 is compulsory.
- (2) Figures at extreme right indicate full marks.
- (3) Draw figures / diagrams to support your answer.
- (4) Assume data, if required.

### Q. 1 Write very short answers:

08

- A) Draw the TRIAC characteristics.
- B) What is a rectifier?
- C) Enlist the applications of
- D) State drawbacks of SMPS.

Q. 2

A) Explain the construction and working of

07

B) Explain the construction & working of DIAC.

07

OR

**RAN-0920** ] [1] [P.T.O.]

Q. 2			
	A)	Explain how limitations of Linear Power Supply are overcome in SMPS	07
	B)	Explain the construction and working of B type chopper.	07
Q. 3			
	A)	Differentiate different types of UPS. Explain any one of it in detail.	07
	B)	Explain the importance of phase synchronization in UPS	07
		OR	
Q. 3			
	A)	State the Inverter principle. Explain McMurray inverter in detail.	07
	B)	State the principle of Chopper and differentiate them.	07
Q. 4		Write Short notes: (ANY TWO)	14
	A)	McMurray Bedford Inverter	
	B)	IC SG 3524 block diagram	
	C)	Battery Charger	
	D)	Continuous duty UPS	

RAN-0920 ] [2]