

2011000304020093
EXAMINATION OCTOBER 2024 (ATKT EXAM)
BACHELOR OF SCIENCE (COMPUTER SCIENCE)
(FOURTH SEMESTER)
SWITCHING POWER SUPPLY
ELECTRONICS-V

[Time: As Per Schedule]

[Max. Marks: 50]

Instructions:

1. Fill up strictly the following details on your answer book
 - a. Name of the Examination: **BACHELOR OF SCIENCE (COMPUTER SCIENCE) (FOURTH SEMESTER)**
 - b. Name of the Subject: **SWITCHING POWER SUPPLY ELECTRONICS-V**
 - c. Subject Code No: **2011000304020093**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

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Student's Signature

Q.1 Write very short answers.

8

1. Draw the circuit symbol of DIAC.
2. Draw the characteristics of TRIAC.
3. What is a step-up converter.
4. Explain signal to noise ratio.

Q.2

- A. Explain the construction and working of SCR. **7**
- B. Draw the circuit representing two transistor analogy for SCR and explain its operation. **7**

OR

- A. Compare SMPS and linear power supply. State the advantages of SMPS **7**
- B. What is forward type converter? How is the selection of transformer made for this type of converter? **7**

Q.3

- A. What is a switch? Discuss the switch in detail. **7**
- B. Explain the construction and working of type C chopper. **7**

OR

A. Discuss the IC SG 3524 block diagram. 7

B. Give the principle of Inverter. Explain McMurray inverter in detail. 7

Q.4 Write short notes (ANY TWO) 14

1. MOSFET Switch
2. Battery charger
3. Fly back converter.
4. TRIAC
