



JB-3094
Second Year B. Sc. (Sem. III) Examination
March/April – 2013
Electronics : Paper - V
(Linear Power Electronics)

Time : Hours]

[Total Marks : 50

Instructions :

(1)

<p>नीचे दृष्टावेव निशानीवाणी विगतो उत्तरवडी पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : S. Y. B. SC. (SEM. 3)</p> <p>Name of the Subject : ELECTRONICS : PAPER - 5</p> <p>Subject Code No. : 3 0 9 4 Section No. (1, 2,.....): Nil</p>	<p>Seat No. : [][][][][][][]</p> <p>Student's Signature</p>
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- (2) Draw neat and labelled diagrams wherever necessary.
- (3) Assume and denote any data not provided.
- (4) All symbols have their usual meaning.

- 1 Answer in brief : 14
- (i) What is need for regulation ?
 - (ii) Draw a half wave pulsating DC.
 - (iii) Give the limitations of a zener diode shunt regulator.
 - (iv) Draw a labelled diagram of LM7805 IC.

- 2 (a) Which filter is better to remove filter and why ? 4
- (b) Discuss the full wave bridge rectifier and explain the working of C filter. 8

OR

- 2 (a) Briefly explain the working of a emitter follower transistor regulator. 6
- (b) Explain the block diagram of a 3 terminal voltage regulator. 6

- 3 (a) Show the working of an adjustable 3 terminal regulator. 6
- (b) Differentiate between Ni-Cd cells and Lead Acid cells. 6

OR

- 3 (a) Discuss the working of the solar cell as a charging device. 6
- (b) Discuss the working of Lead Acid cell. 6
- 4 Write short notes : (any two) 12
- (i) L Section filter
 - (ii) Zener regulator
 - (iii) Rechargeable cells
 - (iv) Various battery charging methods.
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