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SUBJECT CODE NO: - BNP-2660
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. (NEP) (P-2024) F.Y Sem I

Examination November / December 2025
Electronics Network Analysis and Semiconductor Devices

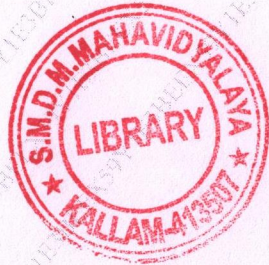
[Time: 1:00 Hours]**[Max. Marks: 30]**

Please check whether you have got the right question paper.

- N. B . i) Question No. I is multiple choice objective type and it is compulsory. It Carries 10 marks.
 ii) Attempt any four questions from Q.2 to Q.7. Each of these question carries 5 marks.
 iii) Figures to the right indicate full marks.

Part- A**Q1 Multiple Choice questions.****10**

- Superposition theorem is valid for _____.
 a) Linear systems b) Non-linear systems
 c) Both a and b d) Neither linear nor non-linear systems
- Active devices can also be used as _____.
 a) Inverters b) Choppers
 c) Converters d) Amplifiers
- How ideal diode responds to forward voltages?
 a) Semiconductor b) Perfect insulator
 c) Perfect conductor d) Insulator
- A Zener diode is typically used for _____.
 a) Rectification b) Voltage regulation
 c) Amplification d) Oscillation
- The bridge rectifier is a _____ converter.
 a) AC to DC b) Dc to AC
 c) Both a and b d) None of the above

**Part- B****Attempt any four questions from Q.2. to Q.7.**

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|---|-----------|
| Q2 Explain Voltage divider theorem? | 05 |
| Q3 Discuss the Thevenin's theorem? | 05 |
| Q4 Explain Reverse Biased P-N Junction diode? | 05 |
| Q5 Discuss the Common Emitter (CE) Configuration? | 05 |
| Q6 Explain Halfwave Rectifier Circuit? | 05 |
| Q7 Explain Transistor series voltage Regulator? | 05 |