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| VFSTR - VADLAMUDI | Regd. No. | | | | | | | | | | |
| | Year | Semester | | | Branch | | | Section | | | |
| Staff Name: Dr. P. Srinivasa Rao | I | 1 | | | Non-Bio | | | 26 to 46 | | | |
| Faculty Dept.: Physics | Course: EP | | | Code: 25PY101 | | | Set-2 | | | | |
| Program Name: B. Tech. | Date: 18.12.25 | | | Time: 11:00 to 12.30 AM (Each Course 30 Minutes) | | | M2 Pre - T1 | | | | |

1. Explain the role of depletion region in the p-n junction diode in the conversion of solar energy into electrical energy? Write the expressions for the Fill factor and Efficiency.

(5M)

2. Elucidate the differences between Direct bandgap and Indirect bandgap semiconductors with neat band diagrams.

(5M)