



বিদ্যাসাগর বিশ্ববিদ্যালয়

VIDYASAGAR UNIVERSITY

M.Sc. Examinations 2020
Semester IV
Subject: ELECTRONICS
Paper: ELC-401
(Theory)

Full Marks:40

Time:2 HRS

Candidates are required to give their answers in their own words as far as practicable.

Answer any one of the following:

1. Critically analyse the use of solid state devices as source in microwave frequencies.
2. Write short note on IMPATT diode and its recent developments.
3. Write short note on Tunnel Diode and its recent Developments.
4. Write a short note on Transfer Electron Device (TED) and its recent developments.
5. Critically analyse the role of vacuum tubes as a source in microwave frequencies.
6. Write short note on role of Two cavity Klystron as microwave source and its recent developments.
7. Write short note on role of Magnetron as a microwave source and its recent developments.
8. Write short note on role of Single cavity Klystron as a microwave source and its recent developments.
9. With respect to different two port network models critically analyse the role of S parameter model for analysis of circuit behaviour in microwave frequencies.
10. Write short note on applications of power electronic devices in controlling high power.
11. Critically analyse the metallic and dielectric waveguides for flow of power citing examples.
12. Write short note on the applications of the following microwave passive components citing examples. Directional couplers, Isolators, Waveguide Tees, Hybrid rings.