

W-3255

M.Sc. (Fourth Semester) Examination, June-2020

PHYSICS

Paper - 404-(A)

Integrated Electronics

Time : Three Hours

Maximum Marks : 85

Minimum Pass Marks : 29

Note : Attempt **All** Questions. All questions carry equal marks.

- Q.1. a) Discuss in detail the Czochralski method of crystal growth with neat diagram.
b) Write a note on plasma oxidation.

- Q.2. a) Discuss in detail the process of optical lithography.
b) Write a note on wet chemical etching.

- Q.3. a) Explain in detail with neat diagram the physical vapour deposition technique.
b) Write a brief note on thick film circuits.

- Q.4. Explain error function. Discuss in detail the Gaussian profile method.

- Q.5. a) Explain in detail the fabrication of monolithic diodes in various configuration.
b) Write the monolithic circuit layout design rules.

