

W-3255(A)

M.Sc. (Fourth Semester) Examination, (Second Chance) 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) With the help of neat diagram, discuss the Float zone crystal growing method.
b) Discuss in detail the liquid phase epitaxy.
- Q.2. a) Explain in detail the electron beam lithography. Write its advantages over X-ray lithography.
b) Write short notes on
i) Photo mask
ii) Photo resist
- Q.3. Discuss in detail the design and construction of high vacuum coating unit. Also draw a neat diagram of its setup.
- Q.4. Write notes on :
i) Ion implantation
ii) Fabrication of integrated circuit.
- Q.5. Write detail notes on :
i) Large and medium scale integration.
ii) Monolithic FET and MOSFET processing.

