Menoufiya University
Faculty of Engineering, Shebin El-Kom
Basic Engineering Science Department
Second Semester Examination 2013-2014

جامعة المتوفية 14

Subject: Physics of Thin Films

Code: BES639

Year: Postgraduate (Engineering physics)

Time Allowed: 3 hours Total Marks: 100 marks

Answer the following questions:

- Q1) what is the different between homoepitaxy and heteroepitaxy?
- Q2) what is the different between direct and indirect bandgap and what is the method to calculate it?
- Q3) Give a short brief on;

Date of Exam: 8/6/2014

- Molecular beam epitaxy technique
- X-Ray diffraction
- Raman spectroscopy
- Q4) what is the principle operation and the categories of sputtering technique?