

SECTION - D

8. Draw and discuss the crystal structure of antiferite and corundum. 8, 8
9. Give preparation and properties of 2 : 18 and 2 : 17 Heteropolyacids of group II and describe their structure. 16

Roll No.

72051

M. Sc. Chemistry 1st Semester
Examination – December, 2015

INORGANIC CHEMISTRY

Paper : Ch-401

Time : Three Hours] [Maximum Marks : 80

Before answering the question, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt five questions in all, selecting one question from each Section. Question no. 1 is compulsory.

1. Explain in brief the following : $2 \times 8 = 16$

- (a) Limitations of VSEPR theory.
- (b) Definition of $d\pi-p\pi$ bond with suitable example.
- (c) Acid catalyzed equation reaction.
- (d) Difference between Inert and Labile complexes.

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UNIT - IV

8. (a) Explain any one : 12
 (i) Impatt diode.
 (ii) Trapatt diode. 4
 (b) Explain Gunn effect. 16
9. Discuss Magnetron in detail.

76612-1300-(P-4)(Q-9)(15) (4)

Roll No.

76612

M.Sc. Physics 3rd Semester (New) w.e.f. December, 2013 Examination-December, 2015 SOLID STATE ELECTRONICS (EL-2)

Paper : XII

Time : 3 hours Max. Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Attempt **five** questions in all. Question No. 1 is **compulsory**. Select one question from each unit, to do the remaining four.

1. Write notes on the following :

- (a) Intrinsic & Extrinsic Materials. 4
 (b) Photo Conductivity. 4
 (c) Physical Vapor Deposition. 4
 (d) Hot electrons. 4

76612-1300-(P-4)(Q-9)(15) (1) [Turn Over