

Total No. of Pages: 2

Register Number:

Name of the Candidate:

**5295**

**B.Sc. DEGREE EXAMINATION, 2013**

**(BOTANY)**

**(SECOND YEAR)**

**(GROUP –B: ANCILLARY)**

**(PART-III)**

**660. CHEMISTRY**

(Ancillary)

(Common with B.Sc Zoology)

December]

[Time : 3 Hours

**Maximum : 100 Marks**

**SECTION-A**

**Answer ALL questions**

(10×3=30)

1. Give the properties and uses of starch.
2. Discuss the concept of activation energy.
3. What are alloys? Give example.
4. Differentiate fibre and globular proteins.
5. How  $\text{PbEt}_4$  is prepared? What are its uses?
6. What are the factors influencing the rate of a chemical reaction?
7. Define polymorphism. Give examples.
8. State and explain Huckles rule with example.
9. Explain racemisation and resolution.
10. How silicons are manufactured? What are its uses?

**SECTION-B**

**Answer ALL questions**

(5×5=25)

11. a) How will you prepare aspartic acid and treon? What are its uses?

(OR)

- b) Write notes on racemization and resolution.

12. a) Discuss the merits and demerits of Bessemer process.  
(OR)  
b) Give the preparation, properties and uses of bleaching powder.
13. a) What are the characteristics of catalyst?  
(OR)  
b) Discuss about experimental methods to follow chemical kinetics.
14. a) Differentiate between crystalline and amorphous states of matter.  
(OR)  
b) Write short notes on glass.
15. a) Discuss the properties and uses of sucrose and cellulose.  
(OR)  
b) Discuss the biological functions of peptide hormones and protein hormones.

**SECTION-C**

**Answer any THREE questions**

(3×15=45)

16. a) How silicates are classified? Give examples and explain. (7)  
b) How will you manufacture ceramic materials? Explain its uses. (8)
17. a) Discuss the properties, open chain and ring structure of glucose. (10)  
b) How will you synthesis peptides? (5)
18. a) Explain the extraction of Pb and Zn form its ores. (10)  
b) How will you manufacture steel? (5)
19. a) Derive expressions for a second order reaction. (10)  
b) Write notes on:  
a) Catalytic Poisson.  
b) Catalytic Promotion. (5)
20. a) Discuss the mechanism of halogenation and alkylation of benzene. (10)  
b) What is the cause of optical activity? Discuss the isomerism of tartaric acid? (5)