



GCC-2109 Seat No. \_\_\_\_\_

**M. Sc. (Sem. IV) Examination**

April/May - 2017

**CHN - 702 (O) : Organic Chemistry :  
Paper - II**

Time : 3 Hours]

[Total Marks : 70

**Instructions :**

- (1) All questions carry equal marks.
- (2) Answers of all questions must be written in same answer book.

1 Answer any two : 14

- (1) Mention the important chemicals obtained by industrial methods from  $C_1$  and  $C_2$  fraction. Discuss their uses in detail.
- (2) Classify synthetic fibers. Give an account for manufacture of Terylene.
- (3) Explain the process of refining of crude oil.

2 (a) Answer any one : 4

- (1) What is varnish ? Classify varnishes and discuss its manufacture.
- (2) What is paints ? Classify of paints and note on fire retardate paints.

(b) Answer any two : 10

- (1) What are explosives ? Give their characteristics and classification.

- (2) What is propellants ? Explain rocket and missile propellants.
- (3) Give synthesis and uses of the following any two :
- (1) TNP
  - (2) PETN
  - (3) Tetryl.
- 3 (a) Answer any one : 4
- (1) Explain cyclization reaction in polymer with illustrations.
  - (2) Write a note on cross-linking in polymer.
- (b) Answer any two : 10
- (1) What is polyethylene polymer ? Write note on LDPE and HDPE polymer with their uses.
  - (2) Classify resins. Write a note on silicon resin.
  - (3) What is Acrylic polymer ? Discuss any two.
- 4 (a) Answer any one : 4
- (1) Give the steps and tips for stain removal.
  - (2) Discuss the small scale manufacture of writing ink.
- (b) Answer any two : 10
- (1) Discuss the small scale manufacture of Agarbatties and phenyl disinfectant.
  - (2) Describe soap manufacturing process.
  - (3) Give the manufacturing process of shoe polish.

- (1) Give the synthesis of secarin.
  - (2) Give a composition of coal.
  - (3) Mention the difference between varnish and paint.
  - (4) Give a synthesis and uses of HMX.
  - (5) Explain substitution polymer reaction.
  - (6) Give the use of Napthalene balls.
  - (7) Distinguish between ionic and non ionic detergents.
  - (8) How prepared dimethyl terphthalate ?
  - (9) What is emulsion paints ?
  - (10) What do you meant by LPG, CNG and PNG ?
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