

Roll No. ....

94146

B. Sc. (Hons.) Chemistry 6th Semester  
Examination – May, 2024

ORGANIC CHEMISTRY-II

Paper : CH(H)-606

Time : Three hours ] [ Maximum Marks : 40

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 examination.

Note : Attempt five questions in all, selecting one question from each Section. Question No. 1 is compulsory. All questions carry equal marks.

1. (a) Define special neoprene rule.  $1 \times 8 = 8$   
(b) Name the reagent used during Herzig-Meyer method.  
(c) Convert benzene into BHC.  
(d) What are provitamins ?  
(e) What are monoterpenoids ?  
(f) Which hormone is called happy hormone ?  
(g) What is full form of DDT ?  
(h) Define essential oils.

94146-300 -(P-3)(Q-9)(24)

P. T. O.

SECTION – A

2. How can you elucidate the structure of Geraniol. 8  
3. Write short note on following : 8  
(a) Synthesis of citral  
(b) Isomerism in citral

SECTION – B

4. (a) Explain the nature of N atom in cocaine. 2  
(b) What happens when : 3  
(i) Nicotine reacts with  $\text{NaOH}/\text{CaO}$   
(ii) Isopropylidene group undergo ozonolysis  
(iii) Cocaine undergoes hydrolysis with water  
(c) How can you detect the presence of  $\text{N}-\text{CH}_3$  group in Nicotine ? 1  
(d) Write a short note on Hofmann exhaustive methylation. 2  
5. Describe the extraction and physiological properties of nicotine. 8

SECTION – C

6. Write the preparation reacts and uses of : 8  
(i) BHC  
(ii) Parathion

94146- (P-3)(Q-9)(24) (2)

7. (a) Define & explain : 4
- (i) Organic pesticides
  - (ii) Botanical pesticides
- (b) Write notes on :
- (i) Pyrethroids
  - (ii) Rotenone

**SECTION - D**

8. Explain the occurrence, structure and deficiency diseases of : 4 + 4
- (i) Vitamin B
  - (ii) Vitamin K
9. (a) Describe & draw the structure of : 6
- (i) Pyridoxine
  - (ii) Biotin ,
  - (iii) Vitamin G
- (b) Differentiate between vitamins and hormones. 2
-