

Jamia Hamdard
Department of Chemistry
School of Chemical & Life Sciences
B.Sc. (Hons.) with Research in Chemistry/ Semester III
Paper Code: BCH-MIC 301
Paper Title: Pesticide & Fuel Chemistry

Time: 2.5 hrs

Max. Marks 60

Attempt All questions. All parts of a question must be attempted in continuation. Start the answer of a fresh question on a new page. Cite examples and draw diagrams wherever necessary.

Section A**Attempt all questions**

Q.No	(10X2=20Marks)		
	BTL	CLO	PLO
A.1 What is the general process of petroleum formation?	2	1	2
A.2 What is kerogen, and how does it relate to petroleum formation?	1	3	2
A.3 What is the role of microorganisms in the formation of petroleum?	2	3	1
A.4 What factors should be considered when choosing a pesticide for a specific pest problem?	3	5	2
A.5 What is the full form of TBP, ISI, ASTM?	5	6	2
A.6 What is Fractional distillation?	4	3	3
A.7 What is Octane number?	5	5	1
A.8 What measures can be taken to minimize pesticide contamination in water bodies?	1	6	1
A.9 What is the impact of herbicides on soil health and microbial diversity?	6	5	3
A.10 What are the implications of herbicide-resistant weeds for long-term ecosystem health?			

Section B**Long type Questions (Attempt any two out of four)**

Q.No.	(2x10=20Marks)		
	BTL	CLO	PLO
B.1 What are the different views of origin of Petroleum in nature?	3	1	2
B.2 Explain different methods of oil prospective.	5	5	3
B.3 Explain five modern pesticides formulation.	1	2	2
B.4 Write the synthesis of Ziram, Zineb, Butachlor, HCH and sulfonyl urea	2	3	1

Section CAttempt *four* questions out of six.

Q.No.	(4x5=20 Marks)		
	BTL	CLO	PLO
C.1 What are the primary classifications of pesticides, and how do they target specific pests?	1	5	3
OR			
C.2 What are the differences between synthetic and biopesticides, and when is each preferred?	4	3	2
OR			
C.3 What is the difference between protective and curative fungicides?	5	6	2
C.3 How are herbicides categorized (e.g., pre-emergent, post-emergent, selective, non-selective)?			

OR

How do herbicide-resistant crops interact with herbicide applications?

- C.4 What is the significance of the theory of petroleum originating from marine vs. terrestrial sources? 1 2 1
- OR**
- What is the impact of tectonic activity on the formation and migration of petroleum?
- C.5 What is the difference between oil and natural gas in terms of their formation? 6 6 2
- OR**
- How does heat and pressure influence the transformation of organic matter into petroleum?

.....X.....