



DII-003-036203

Seat No. _____

M. Sc. Pharma. Organic Chemistry (Sem. II)
(CBCS) Examination

May / June – 2015

POC - 203 : Organic Synthesis - A
Disconnection Approach

Faculty Code : 003

Subject Code : 036203

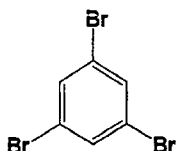
Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

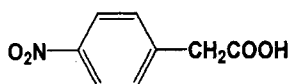
- Instructions:** 1. All Questions are compulsory & carries equal 14 marks
2. Draw suitable diagram / Scheme wherever necessary.

Q.1 Answer any **seven** of the following ten questions. [14 Marks]

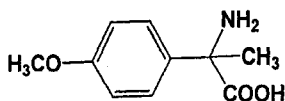
1. What is Retrosynthesis ? Explain with example.
2. Define: (i) Synthone (ii) Synthetic equivalent
3. What is FGR ? Explain the disconnection analysis the following TM using FGI.



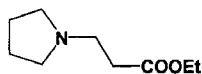
4. How will you disconnect compound having 1,6-diketone groups? Explain with one example.
5. Using FGI strategy, explain the disconnection analysis for the following TM.



6. Using two group disconnection strategy, explain the retro-synthesis of the following TM:



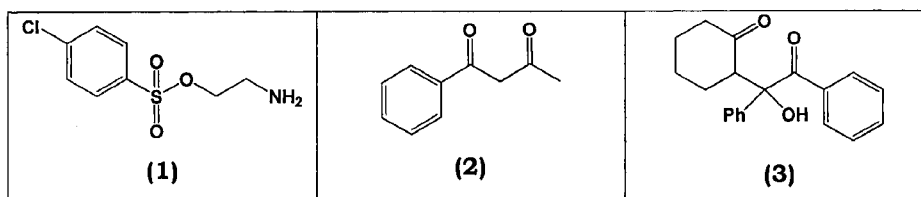
7. Give the retro-synthesis of the following TM using C-X disconnection strategy.



8. What is protecting group? Give characteristics of good protecting group.
 9. Give FGI chart for -COOH function group.
 10. Explain disconnection strategy for Cinnamic acid.

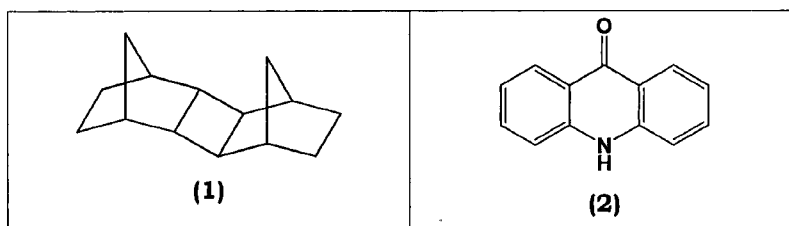
Q.2 Answer any **two** of the following three questions. [14 Marks]

Explain the disconnection analysis & proposed synthesis of **any two** TM from the followings three question.



Q.3 Answer the following questions. [14 Marks]

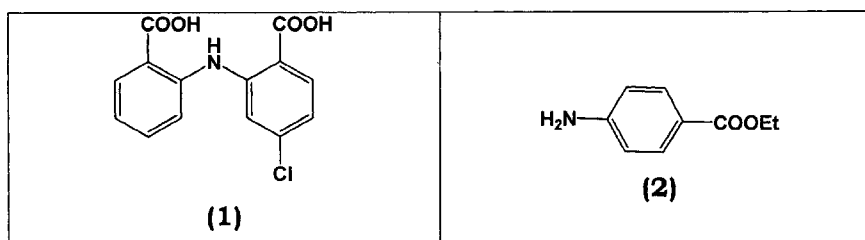
Explain the disconnection analysis and proposed synthesis of the following TM.



OR

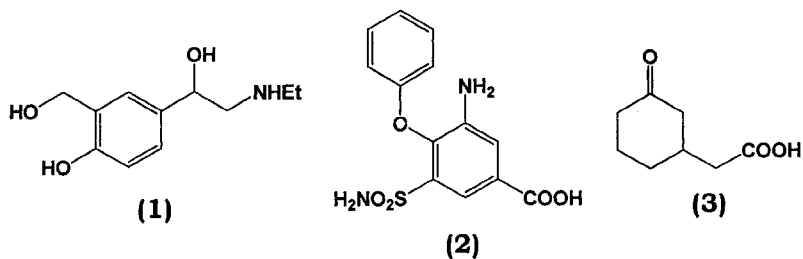
Q.3 Answer the following questions. [14 Marks]

Explain the disconnection analysis and proposed synthesis of the following TM:



Q.4 Answer any **two** of the following three questions. [14 Marks]

Explain the disconnection analysis & proposed synthesis of **any two** target molecules from the following.



Q.5 Answer any **two** of the following four questions. [14 Marks]

Give the disconnection strategy and synthesis of **any two** from following the following.

