



HDV-003-1103006

Seat No. _____

M. Sc. (Sem. III) (CBCS) Examination

November / December – 2017

C (OP) - 302 : Organopharmaceutical Chemistry
(Organic Synthesis - A Disconnection Approach) (Core)
(New Course)

Faculty Code : 003

Subject Code : 1103006

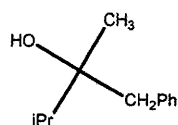
Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

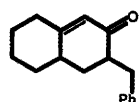
- Instructions :** (1) All questions are compulsory.
(2) All Questions carry equal marks.
(3) Attempt all questions.

1 Answer the followings : (Any **Seven**) 14

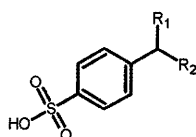
- (a) Giving suitable examples, explain the synthetic equivalent.
(b) Give the disconnection and plan the synthesis of



- (c) Define Synthons by citing proper example.
(d) Do the disconnection and plan the synthesis for following using Mannich reaction:



- (e) Explain the term "Order of events" considering following molecules;

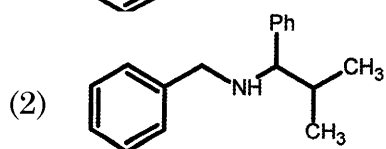
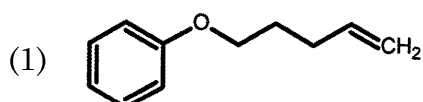


- (f) Explain Illogical disconnection with suitable example.
- (g) Explain: Unpolung reaction with suitable example.
- (h) Do the disconnection and plan the synthesis of Piperonal.
- (i) Define the terms: "Target Molecule" & explain it
- (j) Explain : "FGI" with suitable example.

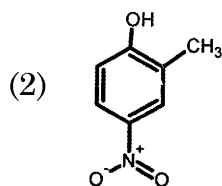
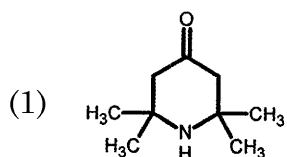
2 Answer the following : (Any **Three**)

14

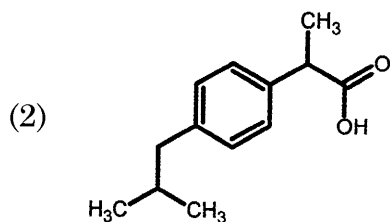
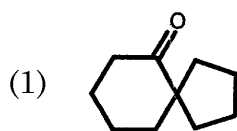
- (a) Do the disconnection and plan the synthesis for the following:



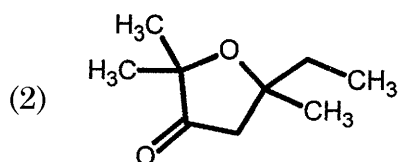
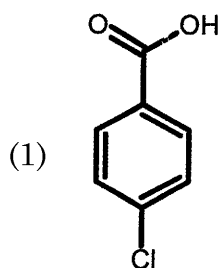
- (b) Synthesis the following molecules using disconnection plan:



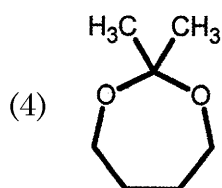
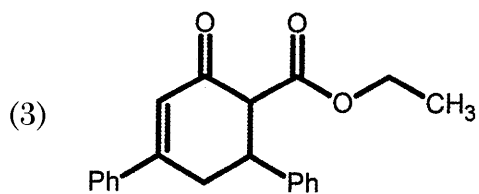
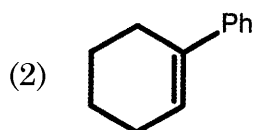
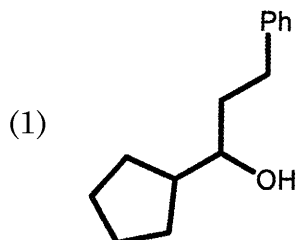
- (c) Do the disconnection and suggest the synthesis of:

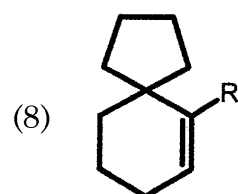
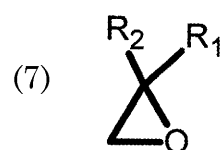
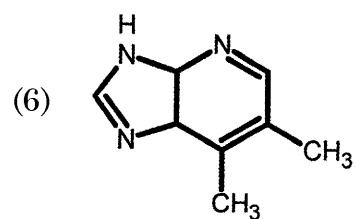
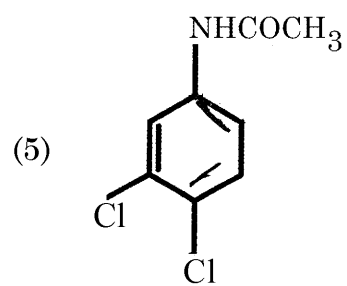


- (d) Explain the retero-synthetic analysis and write the synthesis of following target molecules:



- 3 Disconnect the following Target molecules and plan their synthesis : (Any Six) 14

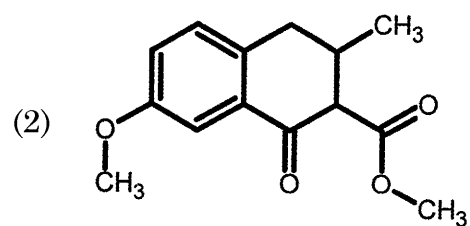
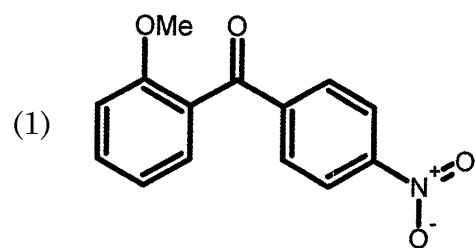




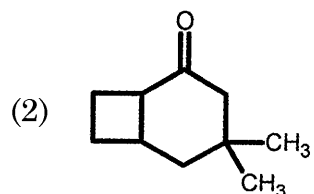
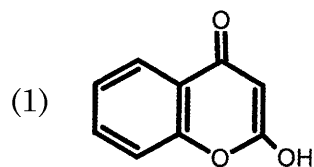
4 Answer the following : (Any **Three**)

14

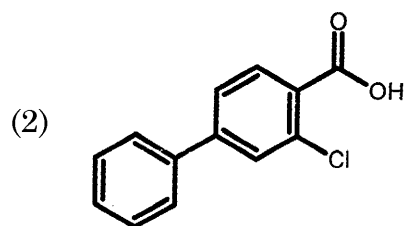
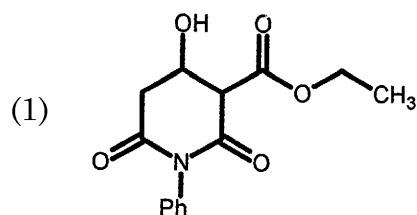
(a) Do the disconnection and plan the synthesis for the following:



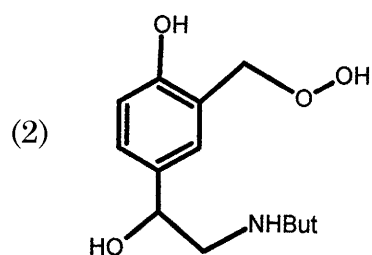
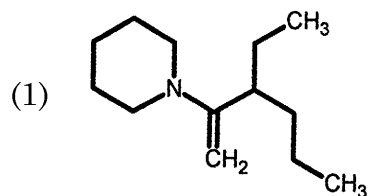
(b) Do the disconnection and plan the synthesis for the following:



(c) Do the disconnection and plan the synthesis for the following:



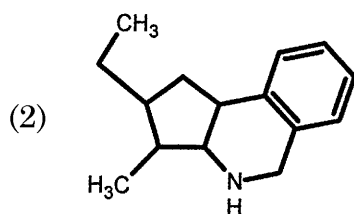
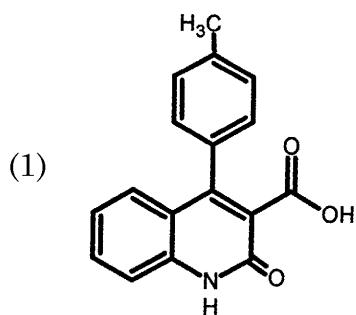
(d) Do the disconnection and plan the synthesis for the following:



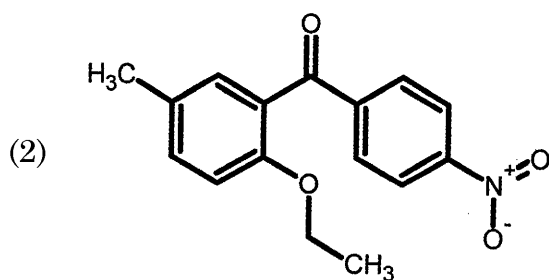
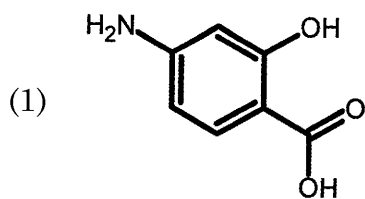
5 Answer the following : (Any Two)

14

(a) Write the retrosynthesis of followings and plan their synthesis:



(b) Give the retrosynthesis of followings and plan their synthesis:



- (c) Explain the retrosynthesis of followings and plan their synthesis :

