10 MARKS

1.a) What are general anaesthetics? Classify them with suitable examples.
b) Explain the mechanism of action of general anaesthetic agents. Write the
synthesis of halothane.
2.Explain in detail the structural activity relationship of morphine and related
compounds.
3.a) Discuss the structural activity relationship of non narcotic anti inflammatory agents.
b) Outline the synthesis of Mefenamic acid and its uses.
4,. Explain the mechanism of action of general anaesthetics and outline the synthesis of ketamine hydrochloride and halothane
5.Classify anti-inflammatory agents with examples for each class. Explain the
structural activity relationship and mode of action of anthranilic acid derivatives.
6.Classify NSAIDS. Write the structure, uses and synthesis of Ibuprofen.
7. Define and classify narcotic analgesics. Elaborate the synthesis of methadone HCI.
8.Describe the SAR of morphine analogues. Write the synthesis of fentanyl Citrate.
9.a) Classify General anesthetics with examples.
b) Explain the Mechanism of action of General anesthetic agents and write the
synthesis of Halothane.

5 MARKS

1. Give synthesis and uses of Ibuprofen.
2.Write a note on narcotic analgesics.

3. Enumerate the facts about anti-inflammatory agents. Write the structure and uses
of : i) Mefenamic acid ii) Diclofenac.
4.Explain the mechanism of nonsteroidal anti-inflammatory agents and outline the
synthesis of Ibuprofen
5.What are the general anaesthetics? Classify general anaesthetics with examples.
6.What are narcotic analgesics? Classify narcotic analgesics and outline the synthesis of
fentanyl citrate.
7.Define general anaesthetics with a mention on their mechanism of action. Write the structure and uses of i) Methohexital Sodium ii) Ketamine Hcl.
8. What are NSAIDs? Write the synthesis of Ibuprofen.
9.Outline the synthesis of methadone hydrochloride and its uses.
10.Write a note on ultra short acting barbiturates and outline the synthesis of
Methohexital sodium.
11.Write a note on inhalation anaesthetics with their structure and medicinal uses.
12.a) What happens when dihydromorphinone is substituted with C-14 hydroxyl group. Sketch the resulting structure and its medicinal uses.
b) Sketch the structure of diphenoxylate and its uses.
13.What happens when branched, cyclic and unsaturated chain substituted at C-5 of
barbiturates. Sketch the structure of any two drug and its uses.
14. The benzodiazepine which has polar groups by itself is converted into non polar
compound by rapid loss of water and decarboxylation results in long half life. Sketch the structure of the resulting compound and its uses.
15.Classify general anaesthetics. Outline the synthesis of halothane.

16. Describe the synthesis and medicinal uses of (a) Fentanyl citrate (b) Methadone hydrochloride.
17. Write a note on structural activity relationship of 3,5-pyrazolidine dione derivatives used as anti-inflammatory agents.
18. Sketch the synthetic route for Mefenamic acid.
19.Write the synthesis and medicinal uses of (a) Methohexital sodium (b) Ketamine hydrochloride.
20. Discuss the structural activity relationship and mechanism of action of morphine
21.Define dissociative anaesthetic? Write the name, structure synthesis of any one.
22.Explain the structure, Mechanism of action and uses of Codeine.
23.Write a brief note on narcotic antagonists
24.Explain in detail about dissociative anaesthesia.
25. Synthesis of mefanamic acid.
26.Structure and mechanism of action of pentazocine.
27. Write short notes on acetaminophen.
28. Structures of a) Triclofos sodium b) paraldehyde c) Sodium salicylate
d) Droperidol e) Sulpieride.
29.Explain the mechanism of action of Narcotic antagonists and sketch the structure of Nalorphine and Naloxone.
30. Outline the synthesis of Ibuprofen and mention its uses.
31. Write a note on Ultrashortacting barbiturates and outline the Synthesis of
methohexital sodium.
32.Write the structure and use of a) Phentolamine b) Pilocarpine c) Ephedrine
d) Paraldehyde e) Aspirin.
33.Write the structure and use of a) Enflurane b) Sodium salicylate c) Dobutamine
d) Triclofos e) Clonazepam.

2 MARKS

1. Write the structure, numbering and uses of codeine.
2. Sketch the structure of naloxone and mention its uses
3. Sketch the structure of naproxen and piroxicam and its uses.
4.Dissociative anaesthetics.
5..Synthesis of aspirin from benzoic acid.
6.Write the structure and uses of (a) Phenacetin (b) Sulindac
7.Mention the different stages of anaesthesia.
8.Write the structure and uses of Enflurane.
9. Write the structure and uses of (a) Indomethacin(b) Diclofenac.
10.List out the ideal characteristics of general anaesthetics.
11.Outline the structure and uses of Naproxen.
12.What is dissociative anaesthesia?
13. Write the synthesis of Ibuprofen.
14.Structure of valproic acid and aspirin.
15.Mechanism of action of reserpine.
16.Anti Pyretics.
17.Give the structure of Piroxicam and Acetaminophen.
18.What is preanaesthetic medication?
19. Write the structure and uses of Antipyrine and Phenylbutazone.
20. List out the opioid receptors.
21.Structure and uses of diclofenac sodium.
22.Structure and uses of aspirin.
23.Opioid Receptors.
24.Write the Structure and Use of Antipyrine.
25.Narcotic Antagonists.
26.Give the structure and uses of Indomethacin.
27.Dissociative anesthesia.