



B. Sc. OPERATION THEATRE AND ANESTHESIA TECHNOLOGY–2023 BATCH
INTERNAL EXAMINATION 1

Year: SECOND YEAR

Date of the exam: 29/03/2025

Subject Name: Paper III – PRINCIPLES OF ANESTHESIA-1

Time: 3 hours

Subject Code: 1138

Maximum: 100 marks

Answer all the questions

I. Elaborate on

10 x 3 = 30

1. Safety features of Anesthesia Machine
2. Write a note on Manifold. Discuss it's advantages and safety features
3. Draw all the mapleson circuits and discuss about each type

II. Write notes on

5 x 8 = 40

1. William T G Morton
2. Define Anesthesia and classify it using flowchart
3. Methods to preserve humidity
4. John Snow
5. Sodalime
6. Cylinder color coding system
7. Pin index system
8. Vaporizers - characteristics and safety features

III. Short answers on

3 x 10 = 30

1. Emergency Oxygen flush
2. Filling ratio
3. Bain circuit
4. APL valve
5. Safety features of Rotameter
6. Cylinder valve
7. Components of Breathing system
8. Pressure regulators
9. Traids of anesthesia
10. i. **AIIMS PG 2003:** Pin index system is a safety feature adopted in anesthesia machines to prevent:
a. Incorrect attachment of anesthesia machines b. Incorrect cylinder attachment
c. Incorrect pipeline connection d. Incorrect gas usage
ii. **NEET PG 2018:** Which of the following is the first public demonstration of general anesthesia?
a. John Snow administering chloroform to Queen Victoria b. Horace Wells using N₂O for dental extraction
c. William T G Morton using ether at MGH d. Crawford Long using ether for tumor removal
iii. **JIPMER PG 2019:** Sodalime is used in anesthesia circuits primarily to:
a. Humidify inspired gases b. Absorb carbon dioxide
c. Filter bacteria d. Regulate oxygen flow