

Course Title: ANESTHESIA TECHNIQUES-I AND CLINICAL PRACTICE

Study Hours: 60+160

Paper : 1

Term : 3rd

Marks

Theory: 120

Practical: 30

Time: 3Hrs

STUDY HOURS

Course contents

(THEORY+PRACTICAL)

A. SPEICALANATOMY

30+40

A 1. Respiratory system

A1.1 Mouth

A1.2 Nose

A1.3 Pharynx

Nasopharynx

Oropharynx

A1.4 Larynx

A1.4.1 Cartilages

A1.4.2 Ligaments

A1.4.3 Muscles

External

Internal

A1.5 Blood supply

A1.6 Nerve supply

A1.7 Trachea & Bronchial tree

A1.7.1 Division

A1.7.2 Blood supply

A1.7.3 Nerve supply

A1.8 Mediastinum

A1.8.1 Parts

A1.8.2 Contents

A1.9 Lungs

A1.9.1 Structures/ lobes

A1.9.2 Blood supply

A1.9.3 Nerve supply

A 2. Cardiovascular system

A2.1 Heart

Valves

Conducting system

A2.2 X-ray marking of heart borders

A 3. Nervous system

A3.1 Brain & spinal cord

A3.2 Vertebral column

- A3.3 Cranial nerves
- A3.4 Spinal nerves
- A3.5 Autonomic nervous system (Brief Introduction)
 - Sympathetic N.S
 - Parasympathetic N.S

B. SPECIAL PHYSIOLOGY

20+30

B 1. Respiratory system

- B1.1 Control of respiration
- B1.2 Mechanics of respiration
 - B1.2.1 Tidal volume
 - B1.2.2 Residual volume
 - B1.2.3 Vital capacity
 - B1.2.4 Dead space Anatomical and physiological
- B1.3 Respiratory reflexes
 - Cough reflex
 - Laryngospasm
- B1.4 Gas exchange & transport

B 2. Cardiovascular system

- B2.1. Heart rate regulation
- B2.2 Coronary circulation
- B2.3 Cardiac cycle
- B2.4 Cardiac output & regulating factors
- B2.5 Arterial blood pressure & regulating factors
- B2.6 ECG

B 3. Nervous system

- B3.1 Brain stem functions
- B3.2 Cerebrospinal fluid (CSF)
- B3.3 Cerebral circulation
- B3.4 Synapse
- B3.5 Neuromuscular junction

C. ZONES OF INTEREST TO ANESTHETIST (Briefly)

10+10

- C1 Diaphragm
- C2. Intercostals space
- C3. Ante-Cubital fossa
- 4. C4. Thoracic inlet

E. Practical

80

- E1. Introduction to Anesthesia Department
- E2. Introduction to Electro – Medical Equipment used in Anesthesia
- E3. Maintenance of Electro-Medical Equipment

- E4. Operating of Electro-Medical Equipment
- E5. Disinfections of Equipment
- E6. Introduction to Anesthesia
- E7. Scrubbing and its methods
- E8. Safety and precaution
- E9. Patient preparation before operation
- E10. Stages of Anesthesia
- E11. Patient management during Anesthesia
- E12. Postoperative care and management
- E13. Mix drugs & label
- E14. Keep record of cases & any complications

Recommended Books:

1. A practice of Anesthesia Wylie And Churchill Davidson's
2. Hazards And Complications of Anesthesia by T.H Taylor
3. Practical Anesthesia for Surgical Emergency by Peter W. Jackson
4. Anatomy and Physiology for Nurses by Evelyn C.Pearce
5. Clinical Anesthesiology by Morgon Publisher MC Graw Health 3rd Edition in 2005
6. Pharmacology by Shameem

Reference Books:

1. Pharmacology and Medical Physiology in Anesthesia by Robert K
2. Text of Anesthesia by Alan R. Atkin by Churchill
3. Clinical Anatomy for medical students by Richard Smell

Course Title: Anesthesia TECHNIQUES-II AND CLINICAL PRACTICE

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Course contents
(THEORY+PRACTICAL)

A. PHARMACALOGY

60+80

A1. NARCOTIC ANALGESICS: (Classification mode of action, indication and adverse effects)

- A1.1 Morphine
- A1.2 Pethidine
- A1.3 Fentanyl
- A1.4 Remifentanyl
- A1.5 Pentazocine
- A1.6 Buprenorphine
- A1.7 Nalbuphine
- A1.8 Naloxone
- A1.9 Tramadol

A2. Non-Narcotic Analgesics(Classification mode of action, indication and adverse affects)

- A2.1 Diclofenic
- A2.2 Aspirin
- A2.3 Piroxicam
- A2.4 Ketorolac
- A2.5 Celecoxib
- A2.6 Meloxicam

A3 ANEASTHETICS: (Classification mode of action, indication and adverse affects)

A3.1 Local Anesthetics

- A3.1.1 Xylocaine
- A3.1.2 Bupivacaine
- A3.1.3 Rupivacaine

A3.2 GENERAL ANEASTHETICS

- A3.2.1 Inhalational anesthetics:
- A3.2.2 Halothane
- A3.2.3 Isofurone
- A3.2.4 Enflurane
- A3.2.5 Sevofurane
- A3.2.6 Nitrous oxide (N₂ O)

A3.3 Intravenous anesthetics:

- A3.3.1 Thiopental sodium
- A3.3.2 Propofol
- A3.3.3 Etomidate
- A3.3.4 Ketamine

A4 MUSCLE RELAXANTS:

(Classification mode of action, indication and adverse affects)

B. Practical

80

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- B4. Operating of Electro-Medical Equipment
- B5. Disinfections of Equipment
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