

## SYLLABUS FSM- ISDA

### 1) Basic Neurophysiology of Sleep

### 2) Basic Pulmonary physiology

### 3) Basics of Breathing integrated

#### **NEUROLOGY**

- i. Anatomy of Brain
- ii. Neurophysiology of Sleep
- iii. Sleep generators/controls Mechanisms
- iv. Therapeutics
- v. Sleep in various neurological diseases

#### **PULMONOLOGY (Sleep in various pulmonary diseases)**

- i. Anatomy of Breathing
- ii. Lung Physiology
- iii. Lung Pathophysiology
- iv. Ventilation
- v. Acid Base
- vi. Modification of Breathing Mechanisms by mechanical / External Source

#### **CARDIOLOGY**

- A. Basic Cardiac Cycle
- B. Effect of impairment on Breathing
- C. Sleep in Cardiac diseases

### 4) Basic Neurotechnology

- a) Mechanical Electrical Science
  1. Electrical Interface – Analog / Digital
  2. Amplifiers
  3. DC Connections
  4. Electrodes
  5. Nasal thermal pressure sensor electrodes
  6. Electrical artifact elimination
- b) Basic Electrophysiology
  1. Basic EEG wave form Recognition

2. Basic Respiratory wave form evaluation
  3. Basic PSG application
  4. Scoring Techniques
  5. Scoring guidelines Old & New
  6. Pit falls & Problems
- c) Multiple Sleep Latency Test (MSLT) & MWT
- d) Actigraphy
- e) Treatment Modalities
1. CPAP
  2. BIPAP
  3. Advanced PAP
  4. PAT (Peripheral arterial tonography)
  5. Bright management therapy

### **Clinical Sleep Medicine**

1. Classifications of sleep disorders
2. Approach to a patient with sleep disorder
3. Sleep disordered breathing
  - a. Epidemiology, pathophysiology, clinical presentation, diagnosis and management
  - b. Consequences of sleep disordered breathing.
  - c. Positive airway pressure therapy
  - d. Sleep disordered breathing in special situations e.g
    - i. Pediatric
    - ii. Elderly
    - iii. Pregnancy
4. Disordered of initiation and maintenance of sleep (insomnias)
  - Epidemiology, pathophysiology, clinical presentation, diagnosis and management
  - Pharmacological treatment of insomnia
  - Non pharmacological treatment – Sleep hygiene and cognitive behaviors therapy
5. Narcolepsy and other disorders of excessive daytime somnolence

6. Movement disorders during sleep
7. Parasomnias
8. Circadian Rhythm Disorders
9. Sleep in Psychiatric disorders
10. Sleep deprivations and its consequences
11. Drugs and sleep
12. Sleep disorders in children
13. Sleep in women
14. Sleep disorders in elderly
15. Sleep and medical jurisprudence