Department of Anesthesia, Surgical Intensive Care & Pain Management

Logbook of MS

Personal Data

Name: .....

Department : .....

Mobile Number:.....

E-mail Address: .....

MS Degree:

Date of registration: ...../...../.....

Signature:

Head of the Department

Vice Dean for Research and Postgraduate Study

Aim of the Logbook:

To provide evidence that the candidate attained the desired level of competence required to gain the award. In this book, the candidate will document all academic and clinical skills he/she attained during their training.

Important regulations (for MS candidates):

-**To be legible for the first part MS exam** you have to attend at least 70% of the lectures of each course in the semester as evidenced by the logbook

-**To be legible for the (MCQ online) exam at the end of each of second part semesters** you have to attend at least 70% of the lectures of each course/module in the semester as evidenced by the logbook.

- **To be legible for the final MS exam :**

1- A time interval of 36 months must pass since the **day of registration to the job** for residents and demonstrators and 30 months since the day **of degree registration** for non-residents.

2- You have to spend **a year of daily** clinical/practical training in the department or **two years with three times/week** practical/clinical training.

3-You have to register 4 semesters on Ibn-lhaythm registration page.

4- You have to attend 70% of the lectures of each course in the second part of MS degree.

5- You have to fulfill and perform 70% of the practical skills documented in the logbook.

Bylaws of the MS

Semesters of Anesthesia, ICU & Pain

Semester	Subjects
First	Basics of biophysics and clinical measurements
	Internal medicine
	Anatomy
	Physiology
	Pharmacology
Second	Anesthesia (1) Obstetric anesthesia CVS anesthesia Cardio-thoracic anesthesia Renal anesthesia
	Physiological basics related to anesthesia, ICU & pain
	Pharmacological basics related to anesthesia, ICU & pain
Third	Anesthesia (2) CNS anesthesia GIT anesthesia Orthopedic anesthesia ENT anesthesia
	ICU
Forth	Anesthesia (3) Respiratory anesthesia Ophthalmic anesthesia Endocrine anesthesia Pediatric anesthesia
	Pain management
	Elective course: Radiology

Contents

Section I:

Scientific Lectures

Insert the suitable number of timetables for each of first and second part courses taking into account:

1- The number of lectures of each course and its teaching hours which are determined by its credit hours (1credit =15 teaching hours).
2- The timetables of each course should be copied from its course specification.
3- The timetables must be updated each time the course specification is updated.

Name of the course: Basics of biophysics

Compulsory/Elective: Compulsory First/Second part: First

Credit hours: 2 Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
	Basic physical principles	
	Flow & volume & pressure measurement	
	Laminar & turbulent flow	
	Gas laws	
	Humidity	
	Transducers	
	Biological membranes	
	Measurement of O_2, Co_2, H, anesthetic agents	
	Gas supply system	
	Anesthesia machine	
	Vaporizers	
	Flowmeters	
	Anesthetic circuits	

	Gas scavenging systems	
	ECG	
	Pulse oximetry	
	Capnography	
	Pulmonary artery catheterization	
	Non-invasive blood pressure monitoring	
	Invasive blood pressure monitoring	
	CVP monitoring	
	Temperature monitoring	
	COP & blood flow monitoring	
	Monitoring of CNS	
	Neuromuscular monitoring	
	Physics of patient positioning	
	ECHO physics	
	Cardiac pacing and defibrillation	
	Ultrasound & laser	
	The Operating Room safety	

Name of the course: Internal medicine

Compulsory/Elective: Compulsory First/Second part: First

Credit hours: One Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
	General	
	Cardiovascular diseases	
	Respiratory diseases	
	GIT diseases	
	Liver diseases	
	Kidney diseases	
	Endocrine disorders	
	Blood diseases	
	Benzodiazepines	
	History taking	
	General examination	
	Head & neck examination	
	CVS examination	
	Chest examination	
	Abdominal examination	
	Upper & lower limb examination	

Name of the course: Anatomy

Compulsory/Elective: Compulsory First/Second part: First

Credit hours: One Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
	Embryological principles	
	Anatomy of mouth cavity	
	Anatomy of nasal cavity	
	Anatomy of pharynx	
	Anatomy of larynx	
	Anatomy of chest	
	Anatomy of heart	
	Anatomy of spinal cord	
	Anatomy of meninges	
	Anatomy of cranial nerves	
	Brachial, cervical, lumbosacral plexuses	
	Anatomy of major nerves	
	Anatomy of major blood vessels	
	Anatomy superficial blood vessels	
	Anatomy of major joints	

Name of the course: Physiology

Compulsory/Elective: Compulsory First/Second part: First

Credit hours: One Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
	Pain sensation & pain control system	
	Motor muscle tone & stretch reflex	
	Sensory & motor pathways	
	Cerebral blood flow & circulation	
	Regulation of ABP	
	COP	
	Shock & hemorrhage	
	Resting membrane potential	
	Action potential	
	Neuron transmission	
	Excitation-contraction coupling	
	Regulation of respiration	
	Transportation of O_2 &CO_2	
	H^+ regulation	
	Hypoxia & cyanosis	

Name of the course: Pharmacology

Compulsory/Elective: Compulsory First/Second part: First

Credit hours: One Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
	General Pharmacology 1	
	General Pharmacology 2	
	General Pharmacology 3	
	Autonomic pharmacology 1	
	Autonomic pharmacology 2	
	Autonomic pharmacology 3	
	Autonomic pharmacology 4	
	Drugs acting on CVS 1	
	Drugs acting on CVS 2	
	Drugs acting on CVS 3	
	Drugs acting on CVS 4	
	Drugs acting on CNS 1	
	Drugs acting on CNS 2	
	Drugs acting on CNS 3	
	Drugs acting on CNS 4	

Name of the course: Anesthesia 1

Compulsory/Elective: Compulsory First/Second part: Second

Credit hours: 3 Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
Obstetric anesthesia		
	Changes during pregnancy	
	Anesthesia for normal labor 1	
	Anesthesia for normal labor 2	
	Anesthesia for cesarian section 1	
	Anesthesia for cesarian section 2	
	Preeclampsia: pathophysiology	
	Preeclampsia: management	
	Eclampsia	
	Pre-partum hemorrhage: placenta previa	
	Post-partum hemorrhage: types & management	
	Obstetric patient & CVS diseases 1	
	Obstetric patient & CVS diseases 2	
	Obstetric emergencies 1	
	Obstetric emergencies 2	
	Anesthesia of pregnant for non-obstetric surgery 1	
	Anesthesia of pregnant for non-obstetric surgery 2	
CVS anesthesia & Cardio-thoracic surgery		
	Cardiac cycle	
	Coronary circulation	
	Waveform analysis	
	Anesthetic drugs related for cardiac surgery	

	Pharmacology of anticoagulants & antiplatelet drugs related for cardiac surgery	
	Anesthetic considerations of HTN	
	Anesthetic considerations of IHD	
	Anesthetic considerations of HF	
	Anesthetic considerations of cardiomyopathy	
	Anesthetic management of valvular diseases 1	
	Anesthetic management of valvular diseases 2	
	Anesthesia of congenital heart diseases	
	Anesthetic management of pulmonary HTN	
	Cardiopulmonary bypass machine	
	Anesthetic management for valve replacement	
	Anesthetic management for CABG surgery	
	Anesthesia for congenital heart surgery	
	Anesthetic management for vascular surgeries	
	Anesthetic management for aortic surgery	
	Anesthesia for cardiac tamponade and tumours	
	Mechanical assist devices	
	Echo review	
	Anesthetic principles of thoracic surgery	
	One lung ventilation	
Renal anesthesia		
	Pharmacological considerations for CRF	
	Anesthesia of renal impairment & CRF	
	TURP syndrome	
	Anesthesia during renal transplantation	
	Anesthesia for lithotripsy	

Name of the course: Physiological basics related to anesthesia, ICU & pain **Compulsory/Elective: Compulsory**

First/Second part: Second **Credit hours: One**

Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
	Respiratory physiology 1	
	Respiratory physiology 2	
	CVS physiology 1	
	CVS physiology 2	
	Renal physiology	
	Hepatic physiology	
	Hematology physiology	
	Neurophysiology 1	
	Neurophysiology 2	
	Pediatric physiology 1	
	Pediatric physiology 2	
	Geriatric physiology	
	Obstetric physiology 1	
	Obstetric physiology 2	
	Physiology of IOP	

Name of the course: Pharmacological basics related to anesthesia, ICU & pain **Compulsory/Elective: Compulsory**

First/Second part: Second **Credit hours: One**

Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
	Inhalational anesthetics 1	
	Inhalational anesthetics 2	
	Nonvolatile anesthetic drugs 1	
	Nonvolatile anesthetic drugs 2	
	Neuromuscular blocking agents	
	Adrenergic agonists & antagonists	
	Anticholinergics & cholinesterase inhibitors	
	Benzodiazepines	
	Opioids	
	Non-opioid analgesics	
	Drugs acting on CNS system	
	Drugs acting on CVS system	
	Drugs acting on GIT & respiratory systems	
	Adjuncts to anesthesia	
	Anticoagulants	

Name of the course: Anesthesia 2

Compulsory/Elective: Compulsory First/Second part: Second

Credit hours: 3 Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
Neuro-anesthesia		
	Neuro-anatomy	
	Radiology of CNS	
	Neurophysiology	
	Effect of anesthetic drugs on CNS physiology	
	Blood brain barrier	
	Brain protection	
	CSF physiology	
	Intra-cranial pressure	
	Head trauma	
	Anesthesia of supra-tentorial tumors	
	Anesthesia of infra-tentorial tumors	
	Anesthesia of posterior fossa tumors	
	Anesthesia of cerebral aneurysm	
	Pituitary tumours	
	Anesthesia of spine surgery	
	Anesthesia of carotid end-arterectomy	
	Neuromuscular transmission & monitoring	
	Patient positioning	
	Awake craniotomy	
	Pediatric neuro-anesthesia	
	Anesthetic consideration for psychiatric diseases	

GIT & Bariatric anesthesia		
	Anesthesia for laparoscopy	
	Anesthetic consideration for LCF	
	Anesthesia for hepatic transplant patient	
	Anesthesia for Intestinal obstruction	
	Physiological changes in morbid obesity	
	Anesthetic consideration for bariatric surgery	
Orthopedic anesthesia		
	Spinal anesthesia	
	Epidural & caudal anesthesia	
	Complications of neuro-axial anesthesia	
	Regional anesthesia	
	Anesthesia for myasthenia gravis	
	Anesthesia for other musculoskeletal diseases	
	Malignant hyperthermia	
	Anesthetic considerations for trauma patients	
	Total hip and knee replacement surgery	
ENT anesthesia		
	Post-tonsillectomy bleeding	
	Anesthetic consideration for surgeries on nose	
	Anesthetic consideration for ear surgeries	
	Anesthetic consideration for laryngeal surgeries	
	Anesthesia for surgeries on upper air way	
	Hypotensive anesthesia	
	Maxillofacial & dental anesthesia	
	Anesthetic consideration for Laser surgery	
	Special equipments for ENT surgeries	

Name of the course: ICU

Compulsory/Elective: Compulsory First/Second part: Second

Credit hours: 3 Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
	ICU design	
	Infection control	
	Cardiopulmonary resuscitation	
	Central venous catheterization	
	Mechanical ventilation 1	
	Mechanical ventilation 2	
	Mechanical ventilation 3	
	Mechanical ventilation 4	
	Enteral and parenteral nutrition 1	
	Enteral and parenteral nutrition 2	
	Enteral and parenteral nutrition 3	
	Acid–base balance 1	
	Acid–base balance 2	
	Acid–base balance 3	
	Fluid & electrolyte disturbances 1	
	Fluid & electrolyte disturbances 2	
	Fluid & electrolyte disturbances 3	
	Arrhythmia 1	
	Arrhythmia 2	
	Arrhythmia 3	

	Acute coronary syndrome 1	
	Acute coronary syndrome 2	
	Pulmonary embolism 1	
	Pulmonary embolism 2	
	ARDS 1	
	ARDS 2	
	Aspiration pneumonitis	
	Sepsis & septic shock: pathophysiology 1	
	Sepsis & septic shock: pathophysiology 2	
	Sepsis & septic shock: management 1	
	Sepsis & septic shock: management 2	
	Management of burn 1	
	Management of burn 2	
	Intracranial hypertension	
	Coagulation cascade	
	Thromboelastography 1	
	Thromboelastography 2	
	Fluid & blood components 1	
	Fluid & blood components 2	
	Diabetic comas	
	Management of trauma patients 1	
	Management of trauma patients 2	
	Delirium	
	Post-operative complications 1	
	Post-operative complications 2	

Name of the course: Anesthesia 3

Compulsory/Elective: Compulsory First/Second part: Second

Credit hours: 3 Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
Respiratory anesthesia		
	Flow volume loop	
	Interpretation of PFTs	
	Difficult airway: assessment	
	Difficult airway: management	
	Airway management techniques	
	Airway emergencies	
	Obstructive lung diseases	
	Anesthesia of asthmatic patients	
	Anesthesia of COPD patients	
	Obstructive lung diseases	
	Anesthesia of OSAS patients	
	Post-operative pulmonary complications	
Ophthalmic anesthesia		
	Anatomy of the eye	
	Techniques of local ocular anesthesia	
	Effect of anesthesia on IOP	
	Oculo-cardiac reflex	
	Anesthetic considerations for different eye surgeries	
	Rupture globe	

Endocrine anesthesia		
	Diabetic patients: pathophysiology	
	DM: anesthetic considerations	
	DM: peri-operative management	
	Hyperthyroidism: pathophysiology	
	Hyperthyroidism: anesthetic management	
	Hypothyroidism: pathophysiology	
	Hypothyroidism: anesthetic management	
	Hyperparathyroidism	
	Hypoparathyroidism	
	Adreno-cortical crisis	
	Anesthesia for pheochromocytoma	
	Other endocrinal disorders	
	Hematological & coagulation disorders 1	
	Hematological & coagulation disorders 2	
	Peri-operative anesthetic problems	

Pediatric anesthesia		
	Physiological changes in pediatrics	
	Considerations for pediatric surgery	
	Congenital diaphragmatic hernia	
	Trachea-esophageal fistula	
	Pyloric stenosis	
	Anesthesia for cleft lip & palate	
	Neonatal anesthesia	
	Day case surgery	
	Sedation	
	Pediatric emergencies	
	Upper airway endoscopy	
	Upper GIT endoscopy	

Name of the course: Pain

Compulsory/Elective: Compulsory First/Second part: Second

Credit hours: 3 Semester: (spring/fall/summer) year.....

Date	Title of the lecture	Lecturer's signature
	Definitions	
	Pain pathway	
	Pain physiology	
	Pain measurement	
	Acute post-operative pain 1	
	Acute post-operative pain 2	
	Stress response	
	Chronic pain 1	
	Chronic pain 2	
	Pharmacological interventions	
	Anatomy of vertebral column, Epidural space & dermatomal distribution	
	Degenerative changes in back pain	
	How to examine the back	
	Clinical presentation of LBP	
	Medical & interventional treatment of LBP 1	
	Medical & interventional treatment of LBP 2	
	Failed back surgery syndrome	
	Cancer pain 1	
	Cancer pain 2	
	Types of neuropathic pain	

	Trigeminal neuralgia	
	Glossopharyngeal neuralgia	
	Post-herpetic neuralgia	
	Diabetic neuralgia	
	Complex regional pain syndrome	
	Myofascial pain	
	Entrapment syndromes	
	Sympathetic blocks	
	Stellate ganglion block	
	Celiac plexus block	
	Splanchnic nerve block	
	Hypogastric plexus block	
	Ganglion impar block	
	Paravertebral block	
	Neurolytic blocks & radiofrequency ablation	
	Somatic blocks 1	
	Somatic blocks 2	
	Brachial plexus block	
	Bier block	
	Peripheral nerve blocks 1	
	Peripheral nerve blocks 2	
	Peripheral nerve blocks 3	
	Headache 1	
	Headache 2	
	Palliative care medicine	

Name of the course: Radiology related to anesthesia

Compulsory/Elective: Elective **First/Second part: Second**

Credit hours: 1 **Semester: (spring/fall/summer) year.....**

Date	Title of the lecture	Lecturer's signature
	Principles of X-ray	
	Principles of CT scan	
	Principles of MRI	
	Principles of U/S	
	Chest X-ray 1	
	Chest X-ray 2	
	CT chest 1	
	CT chest 2	
	Brain CT 1	
	Brain CT 2	
	Cervical, thoracic & lumbar X-ray 1	
	Cervical, thoracic & lumbar X-ray 2	
	CT abdomen	
	FAST 1	
	FAST 2	

Section II:

Procedures

List of requirements

Name of the procedure	Total number required	Observer	Assistant	Independent
Oral endotracheal intubation	80	10	10	60
Nasal endotracheal intubation	20	5	5	10
Supraglottic airway devices	40	5	10	25
Fiberoptic intubation	10	4	3	3
Difficult venous cannulation	50	5	5	40
Central vein catheterization	30	5	5	20
Pulmonary art. catheterization	5	5		
Arterial cannulation	10	2	2	6
Spinal anesthesia	80	10	10	60
Epidural anesthesia	30	5	5	20
Caudal anesthesia	10	2	3	5
Paravertebral anesthesia	5	1	2	2
U/S brachial plexus block	20	5	5	10
U/S regional nerve blocks	30	10	10	10

Procedures Log

Level of participation:

Observer

Assistant

Independent

Procedure 1: **Oral endotracheal intubation**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 2: **Nasal endotracheal intubation**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 3: **Supraglottic airway devices**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 4: **Fiberoptic intubation**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 5: **Difficult venous cannulation**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 6: **Central vein catheterization**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 7: **Pulmonary artery catheterization**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 8: **Arterial cannulation**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 9: **Spinal anesthesia**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 10: **Epidural anesthesia**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 11: **Caudal anesthesia**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 12: **Parvertebral anesthesia**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 13: **U/S brachial plexus block**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Procedure 14: **U/S regional nerve blocks**			
Level of participation	**Date**	**Location**	**Signature of supervisor**

Section III:

Clinical Rotation

Clinical Rotation

Rotation	Date		Hospital	Trainee`s signature	Trainer`s signature
	From	To			

Section IV:

Seminars

List of requirements:

1- Seminar attendance: 10 times

2- Seminar performance: 3 times

1- Attendance

Topic	Date	Supervisor signature

2- Performance

Topic	Date	Supervisor signature

Section V:

Scientific Activities (Conferences/Workshops)

List of requirements:

Conferences			
Total number required	**Attendance**	**Organization**	**Presentation**
3	3		
Workshops			
Total number required	**Attendance**	**Organization**	**Presentation**
3	3		

Activity (Conference/Workshop)	Role	Date	Supervisor's signature

Role:

-Attendant

-Organizer

-Presenter