



PRAVARA INSTITUTE OF MEDICAL SCIENCES (DEEMED TO BE UNIVERSITY)

Loni, Tal. Rahata, Dist. Ahmednagar 413736

NAAC Re-accredited with 'A' Grade

SYLLABUS

UG Programme- Anesthesiology

Phase II (Second MBBS) & Phase III Part 1

(Competency Based Undergraduate Curriculum will be implemented from August 2019, i.e.

MBBS batch admitted for first year in 2019)

Large Group Teaching (Demonstrations for 3rd Prof Part 1)

Sr.No.	TITLE OF TOPIC	NUMBER	COMPETENCY DESCRIPTION	MODE	HOUR	INTEGRATION (Proposed)
1	Introduction to Anaesthesiology Pre-anaesthesia check-up	AS 1.1 AS 1.2 AS 1.4 SU11.2 AS 3.1 AS 3.2 AS 3.3 AS 3.4 AS 3.5 SU11.1	Evolution of Anaesthesiology as a modern speciality Roles of Anaesthesiologist Anaesthesiology as a career Enumerate the principles of general, regional, and local Anaesthesia. Preoperative Evaluation Medication History Clinical Examination Testing Readiness For General Surgery Principles of Preoperative assessment	LGT	1	Surgery (horizontal)
2	Premedication and Anaesthetic medications	AS4.1 PY 3.4 PY 3.5	Describe and discuss the pharmacology of drugs used in induction and maintenance of general anaesthesia (including intravenous and inhalation induction agents, opiate and non-opiate analgesics, depolarising and non depolarising muscle relaxants, anticholinesterases) Describe the structure of neuro-muscular junction and transmission of impulses. Action of neuro-muscular blocking agents	LGT	1	Pharmacology (vertical) Physiology (vertical)

3	Conduct of anaesthesia and monitoring	AS 4.3 AS 4.4 AS 4.5	Observe and describe the principles and the practical aspects of induction and maintenance of anaesthesia. Observe and describe the principles and the steps/ techniques in maintenance of vital organ functions in patients undergoing surgical procedures Observe and describe the principles and the steps/ techniques in monitoring patients during anaesthesia	LGT	1	
4	Peripheral nerve blocks	AS 5.6 AS 5.3 AS5.4	Observe and describe the principles and steps/ techniques involved in common blocks used in surgery (including brachial plexus) Observe and describe the principles and steps/ techniques involved in peripheral nerve blocks Observe and describe the pharmacology and correct use of commonly used drugs and adjuvant agents in regional anaesthesia	LGT	1	
5	Regional anaesthesia	AS 5.1 AS 5.5 AS5.2	Enumerate the indications for and describe the principles of regional anaesthesia (including spinal, epidural and combined) Observe and describe the principles and steps/ techniques involved in caudal epidural in adults and children Describe the correlative anatomy of the brachial plexus, subarachnoid and epidural spaces	LGT	1	
6	Emergencies in anaesthesia and PACU	AS 6.1	Describe the principles of monitoring and resuscitation in the recovery room	LGT	1	

		AS 6.3	Describe the common complications encountered by patients in the recovery room, their recognition and principles of management			
		AS6.2	Observe and enumerate the contents of the crash cart and describe the equipment used in the recovery room			
7	Mechanical ventilation ICU care	AS 7.4	Observe and describe the basic setup process of a ventilator	LGT	1	
		AS 7.5	Observe and describe the principles of monitoring in an ICU			
8	Daycare anesthesia NORA	AS 4.6	Observe and describe the principles and the steps/ techniques involved in day care anesthesia	LGT	1	
		AS 4.7	Observe and describe the principles and the steps/ techniques involved in anesthesia outside the operating room			
SELF DIRECTED LEARNING SESSION (SDL Session)						
9	Legal and ethical issues in Anaesthesia Documentation and Consent	FM2.19	Investigation of anesthetic, operative deaths: Describe and discuss special protocols for conduction of autopsy and for collection, preservation and dispatch of related material evidences		2	FMT (vertical)

Small Group Tutorials (Demonstrations for 3rdprof part 1)

Sr. No.	TITLE OF TOPIC	NUMBER	COMPETENCY DESCRIPTION	MODE	HOUR	INTEGRATION (Proposed)
1	Pain physiology	AS 8.2 PY10.3	Elicit and determine the level, quality and quantity of pain and its tolerance in patient or surrogate Describe and discuss somatic sensations & sensory tracts	SGT	1	Physiology (vertical)
2	Pain pharmacology	AS 8.3 PH 1.16.4 PH1.19.4	Describe the pharmacology and use of drugs in the management of pain NSAIDs Opioid agonists	SGT	1	Pharmacology (vertical)
3	Pain management and labor analgesia	AS 8.4 AS8.5	Describe the principles of pain management in palliative care Describe the principles of pain management in the terminally ill.	SGT	1	
4	Fluid therapy	AS 9.3	Describe the principles of fluid therapy in the preoperative period	SGT	1	
5	Safety in operation theatre	AS10.1 AS10.2 AS10.3 AS10.4	Enumerate the hazards of incorrect patient positioning Enumerate the hazards encountered in the perioperative period and steps/techniques taken to prevent them Describe the role of communication in patient safety Define and describe common medical and medication errors in anesthesia.	SGT	1	
6	Local anaesthetics	PH1.17	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of local anesthetics.	SGT	1	Pharmacology (vertical)
7	Airway management BLS ACLS transport	SU 11.1 SU 11.3	Describe principles of Preoperative assessment Demonstrate maintenance of an airway in amannequin or equivalent	SGT	1	Skill lab Surgery (Horizontal)

		SU 17.2	Demonstrate the steps in Basic Life Support. Transport of injured patient in a simulated Environment			
8	Emergencies in Anesthesia Related to Surgical field	SU17.10 OR1.1	Demonstrate Airway maintenance and recognize and management of tension pneumothorax, hemothorax and flail chest in simulated environment Describe and discuss the Principles of Pre hospital care and Casualty management of a trauma victim including principles of triage	SGT	1	Surgery Orthopaedics (Horizontal)
9	Chronic Pain management	SU 11.5	Describe principles of providing post-operative pain relief and management of chronic pain	SGT	1	Horizontal Surgery
10	Blood and blood products	AS 9.4	Enumerate blood products and describe the use of blood products in the preoperative period	SGT	1	Vertical Haematology

CLINICAL POSTING OF ANESTHESIOLOGY FOR MBBS STUDENTS
First 10 of 15 days posting for anesthesia-dentistry

Day	CLINICAL WORK AND COMPETENCY COVERED
1	<p>AS3.2 Elicit, present and document an appropriate history including medication history in a patient undergoing Surgery as it pertains to a preoperative anaesthetic evaluation</p> <p>AS3.3 Demonstrate and document an appropriate clinical examination in a patient undergoing General Surgery</p> <p>AS3.4 Choose and interpret appropriate testing for surgical patient</p> <p>AS3.5 Determine the readiness for General Surgery in a patient</p>
2	<p>AS3.6 Choose and write a prescription for appropriate premedication</p> <p>AS4.3 Observe and describe the principles and the practical aspects of induction and maintenance</p>
3	<p>AS6.2 Observe and enumerate the contents of the crash cart and describe the equipment used in the recovery room</p>
4	<p>AS7.1 Visit, enumerate, describe the functions of an ICU</p> <p>AS7.2 Enumerate and describe the criteria for admission and discharge of a patient to an ICU</p>
5	<p>AS7.3 Observe and describe the management of an unconscious patient</p>
6	<p>AS2.1 Enumerate the indications, describe the steps and demonstrate in a simulated environment, Basic Life Support in adults, children and neonates</p>
7	<p>AS2.2 Enumerate the indications, describe the steps and demonstrate in a simulated environment, Advanced Life Support in adults and children.</p>
8	<p>AS9.1AS9.2 Establish intravenous access and central venous access in a simulated environment</p> <p>PY11.14 Demonstrate Basic Life Support in a simulated environment</p> <p>OR13.2 Participate as a member in team for Resuscitation of Polytrauma victim</p>
9	Logbook completion
10	Clinical assessment



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