

Topic: 01 Anaesthesiology as a specialty										
Number	Competency	Specific Learning Objective (K/S/A-c)	Domain K/S/A/C	Level K/KH/SH/P	Core (Y/N)	Suggested Teaching Learning Method	Suggested Assesment Method	Number Required to Certify P	Vertical Integration	Horizontal Integration
AS.1.1	Describe the evolution of Anaesthesiology as a modern specialty	At the end of session the phase I MBBS students must be able to:-		k	k	N	Lecture	Written/Viva Voce		
		1	at the end of session a phase 3 part I student must be able to describe the anesthesiology as a modern specialty correctly							
AS 1.2	Describe the roles of Anaesthesiology in the medical profession (including as a peri-operative physican, in the intensive care and high dependency units , in the management of acute and chornic pain , inculding labour analgesia, in the resuscitation of acutely	At the end of session the phase I MBBS students must be able to:-		k	k	N	Lecture	Written/Viva Voce		
		1	Session a phase 3 part 1 student must be able to perform resuscitation of acuely in correctly							
AS1.3	Enumerate and describe the principle of ethics as it reates to Anaesthesiology	At the end of session the phase I MBBS students must be able to:-		k	k	N	Lecture	Written/Viva Voce		AETCOM
		1	at the end of session a phase 3 part I student must be able to describe the anesthesiology as a modern specialty correctly							
AS.1.4	Describe the prospects of Anaesthesiology as a career	At the end of session the phase I MBBS students must be able to:-		k	k	N	Lecture	Written/Viva Voce		
		1	at the end of session a phase 3 part I student must be able to describe the anesthesiology as a modern specialty correctly							
Topic: 02 Cardiopulmonary resuscitation										
AS. 2.1	Enumerate the indications, describe the steps and demonstrate in a simulated environment , Basic life support in adults , childern and neonates	At the end of session the phase I MBBS students must be able to:-		K/S	SH	N	DOAP Session	Skill assessment		General Medicine Pediatrics
		1	at the end of session a phase 3 part 1 student must be able to descibe the steps of BLS in adults, Children and neonates							
AS 2.2	Enumerate the indications, describe the steps and demonstrate in a simulated environment, advanced life support in adults and children	At the end of session the phase I MBBS students must be able to:-		S	SH	N	DOAP session	Skill assessment		General Medicine
		1	Enumerate the indications of advanced in adults							
		2	Describe the steps of Advanced life support in adults							
		3	demonstrate the steps of advanced life support in adults in a simulated environment in adults							
		4	Enumerate the indications of advanced life support in children							
		5	Describe the steps of advanced life support in children							
6	Demonstrate the steps of advanced life support in adults in a simulated environment in children									
Topic: 03 Preoperative evaluation and medication										
AS. 3.1	Describe the principles of preoperative evaluation	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture, Small group discussion	Written/Viva Voce		General Surgery , General Medicine
		1	Define preoperative evaluation							
		2	Describe the principles of preoperative evaluation							
AS3.2	Elicit, present and doument an appropriate history including medication history in a undergoing surgery as it pertains to a preoperative anaesthetic evaluation	At the end of session the phase I MBBS students must be able to:-		S	SH	Y	DOAP Session Bedside Clinic	Skill Station		General Surgery , General Medicine
		1	Elicit an appropriate history including medication history in a patient posted for surgery							
		2	present an appropnate history in a patient posted for surgery							
		3	Document an appropriate history inculding medication history in a patient posted for surgery							

AS3.3	Demonstrate and document as appropriate clinical examination in a patient undergoing general surgery	At the end of session the phase I MBBS students must be able to:-		S	SH	Y	DOAP session, bedside clinic			General Surgery, General Medicine
		1	Demonstrate an appropriate clinical examination in a patient undergoing general surgery							
		2	document an appropriate clinical examination in a patient undergoing general surgery							
AS3.4	Choose and interpret appropriate testing for patients undergoing surgery	At the end of session the phase I MBBS students must be able to:-		S	SH	Y	DOAP Session, Bedside clinic	Skill station		General Surgery, General Medicine
		1	List the common investigations done prior to surgery							
		2	choose appropriate testing for patients undergoing Surgery							
		3	interpret appropriate testing for patients undergoing surgery							
AS. 3.5	Determine the readiness for general surgery in a patient based on the preoperative evaluation	At the end of session the phase I MBBS students must be able to:-		S	SH	Y	DOAP session, bedside clinic	Skill station		General Surgery, General Medicine
		1	identify any positive symptom during history taking on the preoperative evaluation							
		2	interpret the investigations for patients undergoing surgery on the preoperative evaluation							
		3	Determine the readiness for general surgery on the basis of history clinical examination and investigations during preoperative evaluation							
AS. 3.6	Choose and write a prescription for appropriate for patients undergoing surgery	At the end of session the phase I MBBS students must be able to:-		S	SH	Y	DOAP session Bedside Clinic	Skill station		Pharmacology
		1	Define premedication							
		2	Enumerate the common drugs used for premedication for patients undergoing surgery							
		3	classify the drugs used for premedication on the basis of mechanism of action							
		4	Choose appropriate premedications for patients undergoing surgery							
Topic: 04 General Anaesthesia										
AS. 4.1	Describe and discuss the pharmacology of drugs used in induction and maintenance of general anaesthesia (intravenous and inhalation agents, opiate and non-opiate analgesics, depolarising and non depolarising muscle relaxants, anticholinesterases)	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture, small group discussion	Written/Viva Voce		Pharmacology
		1	At the end of session a phase III MBBS student must be able to define induction agent							
		2	at the end of session a phase III MBBS student must be able to classify intravenous and inhalational induction agent							
		3	at the end of session a phase III MBBS student must be able to classify opiates and non opiates analgesics							
		4	at the end of session a phase III MBBS student must be able to classify depolarizing and non-depolarising muscle relaxants							
		5	at the end of session a phase III MBBS student must be able to identify intravenous and inhalational induction agent opioids, non-opioids, muscle relaxants and anticholinesterases.							
		6	At the end of session a phase III MBBS student must be able to describe the pharmacology of drugs used for induction and maintenance of general anaesthesia							
AS 4.2	Describe the anatomy of the airway and its implications for general anaesthesia	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture, small group discussion	Written/Viva Voce		Human Anatomy
		1	at the end of session a phase III MBBS student must be able to enumerate different parts of human airway							
		2	at the end of session a phase III MBBS student must be able to describe anatomy of upper and lower airway							
		3	at the end of session a phase III MBBS student must be able to discuss clinical importance of upper and lower airway in general anaesthesia							
AS 4.3	Observe and describe the principles and the practical aspects of induction and maintenance of anaesthesia	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Lecture, Small group discussion, DOAP session	written/Viva voce		Pharmacology
		1	At the end of session a phase III MBBS student must be able to enumerate principles of induction and maintenance of anaesthesia							
		2	At the end of session a phase III MBBS student must be able to describe principles of induction and maintenance of anaesthesia							

AS. 5.5	Observe and describe the principles and steps/techniques involved in caudal epidural in adults and children	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce			
		1	Describe the relative anatomy of caudal space along with diagram								
		2	Discuss the principles of caudal anesthesia in adults								
		3	Discuss the principles of caudal anaesthesia in paediatric age group								
		4	Discuss different adjuvants which are commonly used in caudal anaesthesia								
AS. 5.6	Observe and describe the principles and steps/techniques involved in common blocks used in surgery (including brachial plexus blocks)	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce			General Surgery
		1	Enumerate commonly used blocks for the upper limb								
		2	Discuss commonly used blocks for the upper limb surgeries								
		3	Discuss complications of brachial plexus blocks along with their management								
		4	Enumerate commonly used blocks for the lower limb surgeries								
5	Discuss commonly used blocks for the lower limb surgeries										
Topic: 06 Post-anaesthesia recovery											
AS. 6.1	Describe the principles of monitoring and resuscitation in the recovery room	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce			
		1	Enumerate commonly used monitors which are used in the recovery room								
		2	Enumerate commonly used clinical parameters which are used in recovery room								
		3	Discuss the principle of pulse oximetry								
		4	Discuss the principle of non invasive blood pressure								
		5	Discuss different leads of Ecg								
		6	Demonstrate installation of 12 Lead Ecg								
		7	What is normal urine output								
		8	Discuss different scoring methods for recovery of patients in recovery room								
		9	Define cardio pulmonary resuscitation								
10	Reperform CPR on Mannequin										
AS. 6.2	Observe and enumerate the contents of the crash cart and describe the equipment used in the recovery room	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce			general Surgery
		1	Enumerate the contents of crash cart								
		2	Explain the mechanism of action of commonly used emergency drugs								
		3	Discuss commonly used equipments used in recovery room								
		4	Demonstrate the steps of awake intubation on mannequin								
5	Discuss different ways of securing an airway in unconscious patient										
AS. 6.3	Describe the common complications encountered by patients in the recovery room, their recognition and principles of management	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce			General Surgery
		1	Enlist different complications encountered by patient in recovery room								
		2	discuss pharmacological methods used in the treatment of post operative nausea and vomiting (PONV)								
		3	Enlist risk factors of PONV								
		4	Describe treatment strategies used for post operative shivering								
		5	Identify signs and symptoms of hypotension								
		6	Discuss management of hypotension in postoperative room								
		7	Enumerate different causes for post operative desaturation								
		8	Discuss management of post operative desaturation in recovery room								
9	Discuss various analgesics used for acute post operative pain										
Topic: 07 Intensive care management											
AS 7.1	Visit , enumerate and describe the functions of an intensive care Unit	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce			
		1	Enumerate Functions of intensive care unit								
AS 7.2	Enumerate and describe the criteria for admission and	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Lecture,small group discussion,	Written/Viva voce			General Medicine
		1	Discuss different criterias for admission of patient in ICU								

	discharge of a patient in an ICU	2	Discuss different criterias for discharge of patient from ICU				DOAP session					
AS 7.3	Observe and describe the management of an unconscious patient	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce		Physiology	general Medicine	
		1	Enumerate clinical parameters for diagnising an unconscious patient									
		2	Describe the management of an inconscious patient									
AS 7.4	Observe and describe the basic setuo process of a ventilator	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce		Physiology	General Medicine	
		1	Describe how to put a patient on ventilator with basic setting									
AS 7.5	Observe and describe the principles of monitoring in an ICU	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce			General Medicine	
		1	Discuss the principles of commonly used monitor in ICU									
Topic: 08 Pain and its management												
AS. 8.1	Describe the anatomical correlates and physiologic principles of pain	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce		Human Anatomy, Physiology		
		1	Define pain									
		2	How to classify Pain									
		3	Differentiate acute and chronic pain									
		4	Enumerate different types of fibers carrying pain sensation									
		5	Elicit pain pathway with diagram									
		6	Discuss the systemic consequences of pain									
AS. 8.2	Elicit and determine the level, quality and quantity of pain its tolerance in patient or surrogate	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce		Physiology		
		1	Describe different pain scoring methods in adults									
		2	Discuss different pain scoring methods in paediatric age group									
		3	Dissuss pain theory									
		4	Describe pain trandustion. Tranmisssion and modulation									
		5	Compare and contrast physical tolerance and dependence									
AS 8.3	Describe the pharmacology and use of drugs in the management of pain	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce		Pharmacology		
		1	Discuss WHO step ladder for pain management with diagram									
		2	Describe commonly used drugs in acute pain management									
		3	Discuss commonly used drugs in chronic pain management									
AS 8.4	Describe the principles of pain management in palliative care	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce		Pharmacology	general Medicine	
		1	Discuss the role of pain intensivist in palliative care									
AS 8.5	Observe and describe the principles of monitoring in an ICU	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture,small group discussion, DOAP session	Written/Viva voce		Pharmacology	general Medicine	
		1	Describe role of pain intensivist in terminally il patient									
Topic: 09 Fluids												
AS 9.1	Establish intravenous access in an simulated environment	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Small group discussion , DOAP session	Skill assessment				
		1	Demonstrate intravenous access on dummy patient									
AS 9.2	Establish central venous assess in an simulated environment	At the end of session the phase I MBBS students must be able to:-		S	KH	Y	Small group discussion , DOAP session	Skill assessment				
		1	Demonstrate central venous access on dummy in simulation laboratory									
AS 9.3	Describe the principles of fluid therapy in the preoperative period	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture,Small group discussion.DOAP	Written.Viva voce			General Surgery	
		1	Describe fluid therapy in preoperative period in adults									
		2	Describe fluid therapy in preop period in geriatric age group									

		3	Describe fluid therapy in pre operative period in paediatric age group				session				
AS 9.4	Enumerate blood products and describe the use of blood products in the preoperative period	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture,Small group discussion.DOAP session	Written.Viva voce		Patology	General Surgery
		1	Enlist different blood products								
		2	Duscuss different blood products along with their doses and uses								
		3	describe different methods of platelet extraction								
Topic: 10 Patient safety											
AS. 10.1	Enumerate the hazards of incorrect patient positioning	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture,Small group discussion.DOAP session	Written.Viva voce			
		1	Enumerate complications of incorrect prone patient positioning								
		2	Discuss how to prevent hazards pf prone position								
		3	Enumerate complications oassociated with sitting position under anaesthesia								
		4	Discuss management of different complications which are associated with sitting position								
		5	Discuss physiological changes associated with sitting position								
		6	Discuss physiological chages associated with trendlenberg position								
		7	Discuss physiological changes associated with trendlenberg position								
		8	Discuss management of complicstions which are associated with trendlenberg position								
AS 10.2	Enumerate the hazards encountered in the perioperative period and steos/techniques taken to prevent them	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture,Small group discussion.DOAP session	Written.Viva voce			
		1	Enumerate commonly encountered complications associated during peri and operative period								
		2	Discuss role of anaesthesiologist in preventing commonly encountered complication during peri-operative period								
AS 10.3	Describe the role of communication in patinet safety	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture,Small group discussion.DOAP session	Written.Viva voce		AETCOM	General Surgery
		1	Disuss role of communication in patient safety								
AS 10.4	Define and describe common medical and medication errors in anaesthesia	At the end of session the phase I MBBS students must be able to:-		K	KH	Y	Lecture,Small group discussion.DOAP session	Written.Viva voce		Pharmacology	General Surgery
		1	Discuss look alike and sound alike (LASA) drugs with examples								
		2	Define look alike and sound alike drugs								
		3	Discuss prevention strategies for look alike and sound alike drugs								