

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
<b>Topic: Skeletal Trauma</b>									
OR.1.1	Describe and discuss the Principles of pre hospital care and casualty management of a trauma victim including principles of triage.	K/S/A/C	K	Y	LECTURE WITH VIDEO, SMALL GROUP DISCUSSION	WRITTEN/ VIVA VOICE/OSCE/ SIMULATION			
<b>Learning Objectives</b>									
OBJECTIVE 1	At the end of the session of MBBS Third semester Phase 2 the student must be able to Define PRE Hospital Care.	K	K	Y	LECTURE	VIVA VOICE			
OBJECTIVE 2	At the end of the session of MBBS Third semester Phase 3 the student must be able Describe in details about Principles of Casualty Management of Trauma Victim.	K	K	Y	LECTURE WITH VIDEO	WRITTEN			
OBJECTIVE 3	- At the end of the session of MBBS Third semester Phase 3 the student must be able Define Triage and Mangement of Category 2 Triage trauma victim in Casulaty.	K	K	Y	SMALL GROUP DISCUSSION	VIVA VOICE			
OR.1.2	Describe and discuss the aetiopathogenesis, clinical features, investigations and principles of management of shock.	K/S	K	Y	LECTURE	WRITTEN/VIVA VOICE/OSCE/ SIMULATION			
<b>Learning Objectives</b>									
OBJECTIVE 1	At the end of the session of MBBS Third semester Phase 2 the student must be able to Define Shock.	K	K	Y	LECTURE	VIVA VOICE			
OBJECTIVE 3	At the end of the session of MBBS Third semester Phase 2 the student must be able to Discuss in detail the Classification and Aetiopathogenesis of Shock.	K	K	Y	LECTURE	WRITTEN			
OBJECTIVE 4	At the end of the session of MBBS Third semester Phase 3 the student must be able to Interpret the Shock with the help of Vitals Monitoring.	S	K	Y	LECTURE	VIVA VOICE			
OR. 1.3	Describe and discuss the aetiopathogenesis, Clinical features, investigations and principles of management of soft tissue injuries.	K	K	Y	LECTURE, SMALL GROUP DISCUSSION	WRITTEN/OSCE			
<b>Learning Objectives</b>									

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OBJECTIVE 1	At the end of the session of MBBS Third semester Phase 2 the student must be able to Classify Soft tissue Injuries along with the pattern of injury.	K	K	Y	LECTURE	WRITTEN			
OBJECTIVE 2	At the end of the session of MBBS Third semester Phase 2 the student must be able to Discuss the Aetiopathogenesis and Clinical Features of Dislocation of Shoulder.	K	K	Y	LECTURE	VIVA VOICE			
OBJECTIVE 3	At the end of the session of MBBS Third semester Phase 3 the student must be able to Demonstrate Management of Lower Limb Soft Tissue Injuries.	K	K	Y	SMALL GROUP DISCUSSION	OSCE			
OBJECTIVE 4	At the end of the session of MBBS Third semester Phase 3 the student must be able to Discuss in detail about investigating Modalities and various tests used for Soft Tissue Injuries.	K	K	Y	SMALL GROUP DISCUSSION	VIVA VOICE			
<b>OR.1.4</b>	<b>Describe and discuss the Principles of Management of Soft Tissue Injuries.</b>	<b>K</b>	<b>K</b>	<b>Y</b>	<b>LECTURE , SMALL GROUP DISCUSSION</b>	<b>WRITTEN/ASSESSMENT/VIVA VOICE</b>			
OBJECTIVE 1	At the end of the session of MBBS Third semester Phase 3 the student must be able to tell the initial Pharmacological and Medical treatment to promote healing of Soft Tissue Injuries.	K	K	Y	LECTURE	VIVA VOICE			
OBJECTIVE 2	At the end of the session of MBBS Third semester Phase 3 the student must be able to discuss the Laboratory and Radiological investigating Modalities to diagnose Soft Tissue Injuries.	K	K	Y	LECTURE	VIVA VOICE			
OBJECTIVE 3	At the end of the session of MBBS Third semester Phase 3 the student must be able to discuss in detail Various Surgical options for treating Soft Tissue Injuries.	K	K	Y	SMALL GROUP DISCUSSION	VIVA VOICE			

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OR 1.5	Describe and discuss the aetiopathogenesis , clinical features ,investigations and principles of management of dislocation of major joints, shoulder, knee, hip	K	K	Y	LECTURE, SMALL GROUP DISCUSSION, BED SIDE CLINIC	WRITTEN/ VIVA VOICE/ OSCE/ SIMULATION			
<b>Learning Objectives</b>									
OBJECTIVE 1	At the end of the session of MBBS Third semester Phase 2 the student must be able to Discuss the Aetiopathogenesis and Clinical Features of Dislocation of Shoulder.	K	K	Y	LECTURE	VIVA VOICE			
OBJECTIVE 2	At the end of the session of MBBS Third semester Phase 3 the student must be able to Describe the Classification and Various Imaging Modalities for Dislocation of Shoulder.	K	K	Y	SMALL GROUP DISCUSSION	VIVA VOICE			
OBJECTIVE 3	At the end of the session of MBBS Third semester Phase 3 the student must be able to discuss various Treatment Options used in Management of Shoulder Dislocation.	K	K	Y	BED SIDE CLINIC	VIVA VOICE			
OR 1.6	Participate as a member in the team for closed reduction of Shoulder dislocation/ hip dislocation/ knee dislocation.	K/S/A/C	K	Y	SIMULATION, DOAP SESSION	OSCE/ SIMULATION			
OBJECTIVE 1	At the end of the session of MBBS Third semester Phase 3 the student must be able to Demonstrate Various Techniques and Methods used in Reduction of Hip Dislocation.	K	K	Y	SIMULATION	SIMULATION			
OBJECTIVE 2	At the end of the session of MBBS Third semester Phase 3 the student must be able to Perform under Guidance the Reduction of Hip dislocation.	S	P	Y	SIMULATION	OSCE			
OBJECTIVE 3	At the end of the session of MBBS Third semester Phase 3 the student must be able to discuss in detail the Various Complications that can occur Pre reduction and Post Reduction of Hip Dislocation.	C	KH	Y	DOAP SESSION	OSCE			
<b>Topic: Fractures</b>									

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OR2.1	<b>Describe and discuss the , mechanism of injury, clinical features, investigations and principles of management of fractures of Clavicle</b>	K/S	KH/SH	Y	Lecture, Small Group discussion, bedside clinic	Written/Viva Voce/OSCE		Human Anatomy	
<b>Learning Objectives</b>									
OBJECTIVE 1	At the end of the session Phase II student must be able to describe mechanism of injury of clavicle fracture	K	K	Y	Interactive lecture	MCQ/ Short Note			
OBJECTIVE 2	At the end of the session Phase II student must be able to discuss clinical feature of clavicle fracture	K	K	Y	Interactive lecture	MCQ/ Short Note			
OBJECTIVE 3	At the end of the session Phase II student must be able to document relevant investigation of fracture of clavicle	K	K	Y	Small group discussion/ bed side clinic	Short note/ viva voce			
OBJECTIVE 4	At the end of the session Phase II student must be able to demonstrate management plan of fracture of clavicle	K	KH	Y	Interactive lecture/ Small group discussion/ bed side clinic	Short note/ viva voce/OSCE			
OBJECTIVE 5	At the end of the session Phase II student must be able to perform under supervision management of fracture of clavicle	S	SH	Y	Interactive lecture/ Small group discussion	Short note/ viva voce			
OR 2.2	<b>Describe and discuss the, mechanism of injury, clinical features, investigations and plan management of fractures of proximal humerus</b>	K	K/KH/SH	Y	Lecture, Small group discussion, Bedside clinic	Written/ Viva voce/ OSCE		Human anatomy	
<b>Learning Objectives</b>									
Objective 1	At the end of the session Phase II student must be able to describe mechanism of injury of fracture of proximal humerus	K	K	Y	Lecture/ small group discussion	Short note/ Viva voce			
Objective 2	At the end of the session Phase II student must be able to discuss clinical features of fracture of proximal humerus	K	K	Y	Lecture/ small group discussion	Short note/ Viva voce			
Objective 3	At the end of the session Phase II student must be able to list investigations of fracture of proximal humerus	K	K	Y	Small group discussion/ bed side clinic	Short note/Viva Voce			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
Objective 4	At the end of the session Phase II student must be able to discuss plan management of fracture of proximal humerus	K	KH	Y	Interactive lecture/ Small group discussion/ bed side clinic	Short note/Viva Voce/ OSCE			
Objective 5	At the end of the session Phase II student must be able to perform under supervision management of fracture of proximal humerus	K	SH	Y	Interactive lecture/ Small group discussion	Short note/Viva Voce			
<b>OR 2.3</b>	<b>Select, prescribe and communicate appropriate medications for relief of joint pain</b>	<b>K</b>	<b>KH/SH</b>	<b>Y</b>	<b>Interactive lecture/ Small group discussion/ bed side clinic</b>	<b>Written/ Viva Voce/ OSCE</b>		<b>Human Anatomy</b>	
<b>Learning Objectives</b>									
Objective 1	At the end of the session Phase II student must be able to enumerate appropriate medications for relief of joint pain	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective 2	At the end of the session Phase II student must be able to discuss appropriate medications for relief of joint pain	K	KH	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective 3	At the end of the session Phase II student must be able to interpret and prescribe appropriate medications for relief of joint pain	K	SH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
<b>OR 2.4</b>	<b>Describe and discuss the mechanism of injury, clinical features, Investigation and principles of management of fracture of shaft humerus and intercondylar fracture humerus with emphasis on neurovascular deficit.</b>	<b>K/S</b>	<b>K/KH</b>	<b>Y</b>	<b>Lecture/ small group discussion/ bedside clinic</b>	<b>Written/ Viva Voce/ OSCE</b>		<b>Human anatomy</b>	
<b>Learning Objectives</b>									
Objective 1	At the end of the session Phase II student must be able to describe mechanism of injury of fracture shaft of humerus	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective 2	At the end of the session Phase II student must be able to enumerate clinical features of fracture shaft of humerus	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
Objective 3	At the end of the session Phase II student must be able to enumerate investigations of fracture shaft of humerus	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective 4	At the end of the session Phase II student must be able to identify neurovascular deficit in fracture shaft of humerus	S	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 5	At the end of the session Phase II student must be able to identify intercondylar fracture of humerus	S	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
Objective 6	At the end of the session Phase II student must be able to discuss principles of management of fracture shaft of humerus	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 7	At the end of the session Phase II student must be able to discuss principles of management of intercondylar fracture of humerus	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
<b>OR 2.5</b>	<b>Describe and discuss the aetiopathogenesis, clinical features, mechanism of injury Investigation and principles of management of fracture of both bone forearm and Galeazzi and Monteggia injury</b>	<b>K</b>	<b>K/KH</b>	<b>Y</b>	<b>Lecture/ small group discussion/ bedside clinic</b>	<b>Written/Viva Voce/ OSCE</b>		<b>Human Anatomy</b>	
<b>Learning Objectives</b>									
Objective1	At the end of the session Phase II student must be able to describe the Etiopathogenesis of fracture of both bone forearm	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective2	At the end of the session Phase II student must be able to describe the Etiopathogenesis of Galeazzi injury	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective3	At the end of the session Phase II student must be able to describe the Etiopathogenesis of Monteggia injury	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective4	At the end of the session Phase II student must be able to discuss clinical feature of fractures of both bone forearm	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
Objective 5	At the end of the session Phase II student must be able to discuss clinical feature of Galeazzi injury	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			

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Objective 6	At the end of the session Phase II student must be able to discuss clinical feature of Monteggia injury	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 7	At the end of the session Phase II student must be able to describe mechanism of injury of fracture of both bone forearm	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 8	At the end of the session Phase II student must be able to describe mechanism of injury of Galeazzi fracture	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 9	At the end of the session Phase II student must be able to describe mechanism of injury of Monteggia fracture	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 10	At the end of the session Phase II student must be able to discuss investigations and principles of management of fracture of both bone forearm	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 11	At the end of the session Phase II student must be able to discuss investigations and principles of management of Galeazzi injury	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 12	At the end of the session Phase II student must be able to discuss investigations and principles of management of Monteggia injury	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
<b>OR 2.6</b>	<b>Describe and discuss Etiopathogenesis, mechanism of injury, clinical feature, investigation and principles of management of fracture of distal radius</b>	<b>K</b>	<b>KH</b>	<b>Y</b>	<b>Lecture/ small group discussion/ bedside clinic</b>	<b>Written/Viva Voce/ OSCE</b>		<b>Human Anatomy</b>	
<b>Learning Objectives</b>									
Objective1	At the end of the session Phase II student must be able to describe Etiopathogenesis of fracture of distal radius	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
Objective2	At the end of the session Phase II student must be able to describe mechanism of injury of fracture of distal radius	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
Objective3	At the end of the session Phase II student must be able to describe clinical features of fracture of distal radius	K	H	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			

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Objective4	At the end of the session Phase II student must be able to discuss investigations of fracture of distal radius	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
Objective5	At the end of the session Phase II student must be able to discuss principles of management of fracture of distal radius	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
<b>OR 2.7</b>	<b>Describe and discuss the Etiopathogenesis, mechanism of injury, clinical features, investigations and principles of management of pelvic injury with emphasis on hemodynamic instability</b>	K	K/KH/SH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE		Human Anatomy	
<b>Learning Objectives</b>									
Objective1	At the end of the session Phase II student must be able to describe Etiopathogenesis of pelvic injuries	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective2	At the end of the session Phase II student must be able to describe mechanism of injury of pelvic injuries	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective3	At the end of the session Phase II student must be able to describe clinical feature of pelvic injuries	K	KH	Y	Lecture/ small group discussion	Written/Viva Voce/ OSCE			
Objective4	At the end of the session Phase II student must be able to discuss investigations of pelvic injuries	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 5	At the end of the session Phase II student must be able to interpret hemodynamic instability in pelvic injuries	K	SH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
Objective 6	At the end of the session Phase II student must be able to discuss principles of management of pelvic injuries	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
<b>OR 2.8</b>	<b>Describe and discuss the aetiopathogenesis, mechanism of injury, clinical features, Investigations and principles of management of spine injuries with emphasis on mobilization of the patient.</b>	K	K/KH	Y	Lecture, Small group Discussion, Video assisted lecture	Written/ Viva voce/ OSCE		Pathology, Microbiology	General surgery



No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
<b>Learning Objectives</b>									
Objective 1	At the end of the session Phase II student must be able to describe Etiopathogenesis of spine injuries	K	K	Y	Lecture, Small group Discussion	Written/ Viva voce			
Objective 2	At the end of the session Phase II student must be able to discuss mechanism of injury of spine injuries	K	KH	Y	Lecture, Small group Discussion, Video assisted lecture	Written/ Viva voce/ OSCE			
Objective 3	At the end of the session Phase II student must be able to enumerate clinical features of spine injuries	K	K	Y	Lecture, Small group Discussion, Video assisted lecture	Written/ Viva voce/ OSCE			
Objective 4	At the end of the session Phase II student must be able to discuss principles of management of spine injuries	K	KH	Y	Lecture, Small group Discussion, Video assisted lecture	Written/ Viva voce/ OSCE			
Objective 4	At the end of the session Phase II student must be able to analyse management of spine injuries with emphasis on mobilization of patient	K	KH	Y	Lecture, Small group Discussion, Video assisted lecture	Written/ Viva voce/ OSCE			
<b>OR 2.9</b>	<b>Describe and discuss the mechanism of injury, clinical features, investigations and principles of management of acetabular fracture</b>	<b>K</b>	<b>K/KH</b>	<b>Y</b>	<b>Small group Discussion. DOAP session</b>	<b>Viva voce/ OSCE/ Skills assessment</b>			
<b>Learning Objectives</b>									
Objective 1	At the end of the session Phase II student must be able to describe mechanism of injury of acetabular fracture	K	K	Y	Small group Discussion. DOAP session	Viva voce			
Objective 2	At the end of the session Phase II student must be able to discuss clinical features of acetabular fracture	K	KH	Y	Small group Discussion. DOAP session	Viva voce/ OSCE			
Objective 3	At the end of the session Phase II student must be able to enumerate investigation of acetabular fracture	K	K	Y	Small group Discussion. DOAP session	Viva voce/ OSCE			
Objective 4	At the end of the session Phase II student must be able to analyse principles of management of acetabular fracture	K	KH	Y	Small group Discussion. DOAP session	Viva voce/ OSCE			

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OR 2.10	Describe and discuss the aetiopathogenesis, mechanism of injury, clinical features, investigations and principles of management of fractures of proximal femur	K/S/A/C	K/KH	Y	Lecture, Small Group discussion, bedside clinic	Written/Viva Voce/OSCE		Human Anatomy	
<b>Learning Objectives</b>									
OBJECTIVE 1	At the end of the session Phase II student must be able to describe the anatomy of femur	K	K	Y	Interactive lecture	MCQ/ Short Note			
OBJECTIVE 2	At the end of the session Phase II student must be able to discuss Etiopathogenesis and mechanism of injury	K	K	Y	Interactive lecture	MCQ/ Short Note			
OBJECTIVE 3	At the end of the session Phase III student must be able to enumerate Clinical features of fracture proximal femur	K	K	Y	Small group discussion/ bed side clinic	Short note/ viva voce			
OBJECTIVE 4	At the end of the session Phase III student must be able to choose the investigations required for fracture proximal femur	K	K	Y	Interactive lecture/ Small group discussion/ bed side clinic	Short note/ viva voce/OSCE			
OBJECTIVE 5	At the end of the session Phase III student must be able to discuss principles of management	K	KH	Y	Interactive lecture/ Small group discussion	Short note/ viva voce			
OR2.11	Describe and discuss the aetiopathogenesis, mechanism of injury, clinical features, investigations and principles of management of (a) Fracture patella (b) Fracture distal femur (C) Fracture proximal tibia with special focus on neurovascular injury and compartment syndrome	K	K/KH	Y	Lecture, Small group discussion, Bedside clinic	Written/ Viva voce/ OSCE		Human anatomy	
<b>Learning Objectives</b>									
Objective 1	At the end of the session Phase II student must be able to describe the anatomy of lower limb	K	K	Y	Lecture/ small group discussion	Short note/ Viva voce			
Objective 2	At the end of the session Phase II student must be able to discuss Etiopathogenesis and mechanism of injury	K	K	Y	Lecture/ small group discussion	Short note/ Viva voce			
Objective 3	At the end of the session Phase III student must be able to enumerate Clinical features	K	K	Y	Small group discussion/ bed side clinic	Short note/Viva Voce			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
Objective 4	At the end of the session Phase III student must be able to choose the investigations required	K	K	Y	Interactive lecture/ Small group discussion/ bed side clinic	Short note/Viva Voce/ OSCE			
Objective 5	At the end of the session Phase III student must be able to discuss principles of management	K	KH	Y	Interactive lecture/ Small group discussion	Short note/Viva Voce			
Objective 6	At the end of the session Phase III student must be able to identify and report neurovascular injury and compartment syndrome	K	KH	Y	Interactive lecture/ Small group discussion/ bed side clinic	Short note/Viva Voce/ OSCE			
<b>OR 2.12</b>	<b>Describe and discuss the aetiopathogenesis, clinical features, Investigation and principles of management of Fracture shaft of femur in all age groups and the recognition and management of fat embolism as a complication</b>	<b>K</b>	<b>K/KH</b>	<b>Y</b>	<b>Interactive lecture/ Small group discussion/ bed side clinic</b>	<b>Written/ Viva Voce/ OSCE</b>		<b>Human Anatomy</b>	
<b>Learning Objectives</b>									
Objective 1	At the end of the session Phase II student must be able to describe the anatomy of femur	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective 2	At the end of the session Phase II student must be able to discuss Etiopathogenesis	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective 3	At the end of the session Phase III student must be able to enumerate Clinical features	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 4	At the end of the session Phase III student must be able to choose the investigations required	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/OSCE			
Objective 5	At the end of the session Phase III student must be able to discuss principles of management	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 6	At the end of the session Phase II student must be able to identify and report fat embolism	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/OSCE			
Objective 7	At the end of the session Phase III student must be able to discuss management of fat embolism	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			

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OR 2.13	Describe and discuss the aetiopathogenesis, clinical features, Investigation and principles of management of: (a) Fracture both bones leg (b) Calcaneus (c) Small bones of foot	K	K/KH	Y	Lecture/ small group discussion/ bedside clinic	Written/ Viva Voce/ OSCE		Human anatomy	
<b>Learning Objectives</b>									
Objective 1	At the end of the session Phase II student must be able to describe the anatomy of lower limb	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective 2	At the end of the session Phase II student must be able to describe the anatomy of foot	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective 3	At the end of the session Phase II student must be able to discuss Etiopathogenesis	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective 4	At the end of the session Phase III student must be able to enumerate Clinical features	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 5	At the end of the session Phase III student must be able to choose the investigations required	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
Objective 6	At the end of the session Phase III student must be able to discuss principles of management	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
OR2.14	Describe and discuss the aetiopathogenesis, clinical features, Investigation and principles of management of ankle fractures	K/C/S	K/KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE		Human Anatomy	
<b>Learning Objectives</b>									
Objective1	At the end of the session Phase II student must be able to describe the anatomy of ankle	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective2	At the end of the session Phase II student must be able to discuss Etiopathogenesis	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective3	At the end of the session Phase II student must be able to enumerate Clinical features	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective4	At the end of the session Phase II student must be able to choose the investigations required	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			

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Objective 5	At the end of the session Phase II student must be able to discuss principles of management	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
<b>OR 2.15</b>	<b>Plan and interpret the investigations to diagnose complications of fractures like malunion, non-union, infection, compartmental syndrome</b>	<b>K/S</b>	<b>SH</b>	<b>Y</b>	<b>Lecture/ small group discussion/ bedside clinic</b>	<b>Written/Viva Voce/ OSCE</b>		<b>Human Anatomy</b>	
<b>Learning Objectives</b>									
Objective1	At the end of the session Phase III student must be able to plan and interpret the investigations to diagnose complications of fractures like malunion	K	SH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
Objective2	At the end of the session Phase III student must be able to plan and interpret the investigations to diagnose complications of fractures like non union	K	SH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
Objective3	At the end of the session Phase III student must be able to plan and interpret the investigations to diagnose complications of fractures like infection	K	SH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
Objective4	At the end of the session Phase III student must be able to plan and interpret the investigations to diagnose complications of fractures like compartment syndrome	K	SH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
<b>OR 2.16</b>	<b>Describe and discuss the mechanism of injury, clinical features, investigations and principles of management of open fractures with focus on secondary infection, prevention and management</b>	<b>K</b>	<b>K/KH</b>	<b>Y</b>	<b>Lecture/ small group discussion/ bedside clinic</b>	<b>Written/Viva Voce/ OSCE</b>		<b>Human Anatomy</b>	
<b>Learning Objectives</b>									
Objective1	At the end of the session Phase II student must be able to describe and discuss mechanism of injury in open fractures	K	K	Y	Lecture/ small group discussion	Written/Viva Voce			
Objective2	At the end of the session Phase II student must be able to describe and discuss clinical features of open fractures	K	K	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
Objective3	At the end of the session Phase II student must be able to discuss and choose investigations for open fractures	K	KH	Y	Lecture/ small group discussion	Written/Viva Voce/ OSCE			
Objective4	At the end of the session Phase II student must be able to discuss principles of management	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce			
Objective 5	At the end of the session Phase III student must be able to discuss steps for secondary infection prevention and management of open fractures	K	KH	Y	Lecture/ small group discussion/ bedside clinic	Written/Viva Voce/ OSCE			
<b>Topic: Musculoskeletal Infection</b>									
OR 3.1	<b>Describe and discuss the aetiopathogenesis, clinical features, Investigations and principles of management of Bone and Joint infections</b>	K/S	K/KH/S H	Y	Lecture, Small group Discussion, Video assisted lecture	Written/ Viva voce/ OSCE		Pathology, Microbiology	General surgery
	a) Acute Osteomyelitis								
	b) Subacute osteomyelitis								
	c) Acute Suppurative arthritis								
	d) Septic arthritis & HIV infection								
	e) Spirochaetal infection								
f) Skeletal Tuberculosis									
<b>Learning Objectives</b>									
Objective 1	At the end of the session Phase II student must be able to discuss aetiopathogenesis of various bone and joint infections	K	KH	Y	Lecture, Small group Discussion	Written/ Viva voce			
Objective 2	At the end of the session Phase II student must be able to enumerate clinical features of various bone and joint infections	K	K	Y	Lecture, Small group Discussion, Video assisted lecture	Written/ Viva voce/ OSCE			
Objective 3	At the end of the session Phase III student must be able to choose investigations required for various bone and joint infections	K	K	Y	Lecture, Small group Discussion, Video assisted lecture	Written/ Viva voce/ OSCE			
Objective 4	At the end of the session Phase III student must be able to discuss principles of management for various bone and joint infections	K	K	Y	Lecture, Small group Discussion, Video assisted lecture	Written/ Viva voce/ OSCE			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OR 3.2	Participate as a member in team for aspiration of joints under supervision	K/S/A/C	SH	Y	Small group Discussion. DOAP session	Viva voce/ OSCE/ Skills assessment			
<b>Learning Objectives</b>									
Objective 1	At the end of the session Phase II student must be able to describe sites of aspiration of individual joint	K	SH	Y	Small group Discussion. DOAP session	Viva voce			
Objective 2	At the end of the session Phase II student must be able to choose equipments required for aspiration of individual joint	K	SH	Y	Small group Discussion. DOAP session	Viva voce/ OSCE			
Objective 3	At the end of the session Phase III student must be able to perform under supervision aspiration of individual joint	S	SH	Y	Small group Discussion. DOAP session	Viva voce/ OSCE			
OR 3.3	Participate as a member in team for procedures like drainage of abscess, sequestrectomy/ saucerisation and arthrotomy	K/S/A/C	SH	Y	DOAP session, Video demonstration	Viva voce/ OSCE/ Skills assessment			
<b>Learning Objectives</b>									
Objective1	At the end of the session Phase II student must be able to describe procedures like drainage of abscess, sequestrectomy/ saucerisation and arthrotomy	K	SH	Y	Small group Discussion. DOAP session	Viva voce			
Objective 2	At the end of the session Phase II student must be able to choose equipments required for procedures like drainage of abscess, sequestrectomy/ saucerisation and arthrotomy	K	SH	Y	Small group Discussion. DOAP session	Viva voce/ OSCE			
Objective 3	At the end of the session Phase III student must be able to perform under supervision procedures like drainage of abscess, sequestrectomy/ saucerisation and arthrotomy	S	SH	Y	Small group Discussion. DOAP session	Viva voce/ OSCE			
<b>Topic: Skeletal Tuberculosis</b>									
OR 4.1	Describe and discuss the clinical features, Investigation and principles of management of Tuberculosis affecting major joints (Hip, Knee) including cold abscess and caries spine	K	K /KH	Y	Lecture, Small group discussion, Case Discussion, Bedside Clinic	Written/ Viva voce			
<b>LEARNING OBJECTIVES</b>									

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OBJECTIVE 1	At the end of the session the phase II student must be able to enumerate the most common clinical features of Tuberculosis of Hip, Knee and spine including cold abscess correctly.	K	K	Y	Interactive lecture	Written/ Short note			
OBJECTIVE 2	At the end of the session the phase II student must be able to describe the various stages of Tuberculosis of hip correctly.	K	K	Y	Interactive lecture/ Case Discussion	Written/ Short note			
OBJECTIVE 3	At the end of the session the phase III student must be able to choose the appropriate investigations needed for the diagnosis of Tuberculosis affecting major joints (Hip, Knee) including cold abscess and caries spine correctly.	K	K	Y	Interactive lecture/ Case Discussion	Written/ Short note			
OBJECTIVE 4	At the end of the session the phase III student must be able to discuss the various principles of management of Tuberculosis affecting major joints (Hip, Knee) including cold abscess and caries spine correctly.	K	KH	Y	Interactive lecture/ Case Discussion	Written/ Short note			
OBJECTIVE 5	At the end of the session the phase III student must be able to analyse the clinical features in a given patient, choose various investigations and plan management of Tuberculosis affecting major joints (Hip, Knee) including cold abscess and caries spine correctly.	K	KH	Y	Case Discussion	Viva voce			
<b>Topic: Rheumatoid Arthritis and associated inflammatory Disorders</b>									
OR 5.1	<b>Describe and discuss the aetiopathogenesis, clinical features, investigations and principles of management of various inflammatory disorder of joints</b>	K	K/KH	Y					
<b>LEARNING OBJECTIVES</b>									
OBJECTIVE 1	At the end of the session the phase II student must be able to enumerate various types of the inflammatory disorder of joints correctly.	K	K	Y	Interactive lecture	Written/ Short note			
OBJECTIVE 2	At the end of the session the phase II student must be able to describe the aetiopathogenesis of rheumatoid arthritis correctly.	K	K	Y	Interactive lecture	Written/ Short note			



No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OBJECTIVE 3	At the end of the session the phase II student must be able to describe the clinical features of rheumatoid arthritis correctly.	K	K	Y	Small group discussion	Written/ Short note			
OBJECTIVE 4	At the end of the session the phase II student must be able to discuss the various investigations needed to diagnose Rheumatoid arthritis and various principles of management correctly.	K	K	Y	Interactive lecture/ Case Discussion	Written/ Short note			
OBJECTIVE 5	At the end of the session the phase III student must be able to analyse the clinical features in a given patient, choose various investigations and plan management of rheumatoid arthritis correctly.	K	KH	Y	Case Discussion	Viva voce			
OBJECTIVE 6	At the end of the session the phase III student must be able to describe and discuss the aetiopathogenesis, clinical features, investigations and principles of management of ankylosing spondylitis correctly.	K	KH	Y	Interactive lecture	Written/ Short note			
<b>Topic: Degenerative Disorders</b>									
OR 6.1	<b>Describe and discuss the clinical features, investigations and principles of management of degenerative condition of spine (Cervical Spondylosis, Lumbar Spondylosis, PID)</b>	K	K/KH	Y					
<b>LEARNING OBJECTIVES</b>									
OBJECTIVE 1	At the end of the session the phase II student must be able to describe the normal anatomy of spine including disc structure correctly	K	K	Y	Interactive lecture	MCQ/ Short note			
OBJECTIVE 2	At the end of the session the phase II student must be able to describe and discuss the various degenerative pathological changes occurring in spine correctly.	K	K	Y	Interactive lecture	MCQ/ Short note			
OBJECTIVE 3	At the end of the session the phase III student must be able to enumerate and analyse the clinical features of degenerative condition of spine (Cervical Spondylosis, Lumbar Spondylosis, PID) correctly.	K	KH	Y	Interactive lecture/ Case Discussion	MCQ/ Short note			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OBJECTIVE 4	At the end of the session the phase III student must be able to describe and discuss various investigations needed for the diagnosis of degenerative condition of spine (Cervical Spondylosis, Lumbar Spondylosis, PID) correctly.	K	KH	Y	Interactive lecture/ Case Discussion				
OBJECTIVE 5	At the end of the session the phase III student must be able to describe and discuss the various principles of management of degenerative condition of spine (Cervical Spondylosis, Lumbar Spondylosis, PID) correctly.	K	KH	Y	Interactive lecture/ Case Discussion				
<b>Topic: Metabolic Bone Disorders</b>									
OR 7.1	<b>Describe and discuss the aetiopathogenesis, clinical features, investigation and principles of management of metabolic bone disorders in particular osteoporosis, osteomalacia, rickets, Paget's disease</b>	K	K/KH	Y					
<b>LEARNING OBJECTIVES</b>									
OBJECTIVE 1	At the end of the session the Phase II student must be able to describe the basic structure of bone.	K	K	Y	Interactive lecture	Written/ Short note			
OBJECTIVE 2	At the end of the session the Phase II student must be able to describe the calcium and Vitamin D metabolism correctly.	K	K	Y	Interactive lecture	Written/ Short note			
OBJECTIVE 3	At the end of the session the Phase II student must be able to describe the aetiopathogenesis and classify various metabolic bone disorders.	K	K	Y	Interactive lecture	Written/ Short note			
OBJECTIVE 4	At the end of the session the Phase III student must be able to describe and discuss clinical features, investigation and principles of management of metabolic bone disorders in particular osteoporosis, osteomalacia, rickets, Paget's disease	K	KH	Y	Interactive lecture/ Case Discussion	Written/ Short note			
<b>Topic: Poliomyelitis</b>									

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OR 8.1	Describe and discuss the aetiopathogenesis, clinical features, assessment and principles of management a patient with Post Polio Residual Paralysis	K	K/H	Y					
<b>LEARNING OBJECTIVES</b>									
OBJECTIVE 1	At the end of the session the phase II student must be able to describe and discuss the aetiopathogenesis of Poliomyelitis accurately.	K	K	Y	Interactive lecture	Written/ Short note			
OBJECTIVE 2	At the end of the session the phase III student must be able to enumerate and analyse the clinical features in a patient with Post Polio Residual Paralysis accurately.	K	K H	Y	Interactive lecture/ Case Discussion	Written/ Short note			
OBJECTIVE 3	At the end of the session the phase III student must be able to assess and describe and discuss the principles of management in a patient with Post Polio Residual Paralysis including tendon transfers correctly.	K	KH	Y	Small group discussion	Written/ Short note			
<b>Topic: Cerebral Palsy</b>									
OR 9.1	Describe and discuss the aetiopathogenesis, clinical features, assessment and principles of management of Cerebral palsy patient	K	K/KH	Y					
<b>LEARNING OBJECTIVES</b>									
OBJECTIVE 1	At the end of the session the phase II student must be able to enumerate the most common causes of Cerebral palsy accurately.	K	K	Y	Interactive lecture	Written/ Short note			
OBJECTIVE 2	At the end of the session the phase II student must be able to classify Cerebral palsy accurately.	K	K	Y	Interactive lecture	Written/ Short note			
OBJECTIVE 3	At the end of the session the phase III student must be able to describe and analyse the clinical features in a Cerebral palsy patient correctly.	K	KH	Y	Interactive lecture	Written/ Short note			
OBJECTIVE 4	At the end of the session the phase III student must be able to list and discuss principles of management of Cerebral palsy patient after thorough assessment accurately.	K	KH	Y	Interactive lecture/ Case Discussion	Written/ Short note			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OR10.1	Describe and discuss the etiopathogenesis, clinical features, investigations and principles of management of benign and malignant bone tumours and pathological fractures.	K	K/KH	Y	Lecture, Small group discussion, Video assisted interactive lecture	Written/ Viva voce/OSCE		Pathology	General surgery, Radiotherapy
<b>LEARNING OBJECTIVES</b>									
OBJECTIVE 1	At the end of the session the Phase II student must be able to describe and discuss the aetiopathogenesis of benign and malignant bone tumours correctly.	K	K	Y	Lecture	written/ Viva voce		Pathology	
OBJECTIVE 2	At the end of the session the Phase III student must be able to classify various benign and malignant bone tumours correctly.	K	K	Y	Lecture	written/ viva voce			
OBJECTIVE 3	At the end of the session the Phase II student must be able to list and describe the clinical features of the various benign and malignant bone tumours correctly.	K	K	Y	Lecture/small group discussion	written/ viva voce			general surgery
OBJECTIVE 4	At the end of the session the Phase III student must be able to enumerate and discuss the different haematological, histopathological, biochemical and radiological investigation required to diagnose and manage the different benign and malignant bone tumours correctly.	K	K/KH	Y	Lecture, Small group discussion, Video assisted interactive lecture	Written/ Viva voce/OSCE		Pathology	
OBJECTIVE 5	At the end of the session the Phase III student must be able to describe the principles of management of common benign and malignant bone tumours and their treatment modalities correctly.	K	K/KH	Y	Lecture, Small group discussion, Video assisted interactive lecture	Written/ Viva voce/OSCE			General surgery/ radiotherapy
OBJECTIVE 6	At the end of the session the Phase III student must be able to define the pathological fractures associated with the bone tumours correctly.	K	K	Y	lecture, Small group discussion,	written/ Viva voce			
OBJECTIVE 7	At the end of the Session the Phase III student must be able to describe the clinical features and investigations required to identify the pathological fractures associated with bone tumours and to discuss their principles of management correctly.	K	K	Y	Lecture, Small group discussion,	Written/ Viva voce/OSCE			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OR11.1	<b>Describe and discuss the etiopathogenesis, clinical features, investigations and principles of management peripheral nerve injuries in diseases like foot drop, wrist drop, claw hand, palsies of radial, ulnar, median, lateral popliteal and sciatic nerves.</b>	K	K/KH	Y	Lecture, Small Group discussion, Case discussion	Written/Viva Voce/OSCE		Human Anatomy	General Medicine, General Surgery
OBJECTIVE 1	At the end of the session the Phase II student must be able to describe the peripheral injuries and classification of the nerve injury correctly.	K	K	Y	Lecture,	Written			
OBJECTIVE 2	At the end of the session the Phase III student must be able to describe the aetiopathogenesis and list the clinical features, investigation of peripheral nerve injuries and general principles of management of peripheral injuries correctly.	K	K	Y	Lecture,	Written			
OBJECTIVE 3	At the end of the session the Phase III student must be able to enumerate the various causes of claw hand and describe the pathophysiology of claw hand along with principles of surgical correction correctly.	K	K/KH	Y	Lecture, Small group discussion,	written/ Viva voce		Anatomy	General Surgery
OBJECTIVE 4	At the end of the session the Phase III student must be able to describe the causes of the radial nerve palsy, its presentation correctly.	K	K	Y	Lecture, Small group discussion,	written/ Viva voce			
OBJECTIVE 5	At the end of the session the Phase III student must be able to describe the causes of the foot drop, its aetiopathogenesis and principles of management correctly.	K	K	Y	Lecture, Small group discussion,	written/ Viva voce			General Surgery
OR12.1	<b>Describe and discuss the clinical features, investigations and principles of management of congenital and acquired malformations and deformities of: a. limbs and spine - scoliosis and spina bifida, b.congenital dislocation of hip, torticollis, c. congenital talipes equino varus.</b>	K	K/KH	Y	Lecture, Small Group discussion, Case discussion	Written/Viva Voce/OSCE		Human Anatomy	General Medicine, General Surgery

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OBJECTIVE 1	At the end of the session the Phase III student must be able to describe and discuss the aetiopathogenesis, clinical features, investigations and management of congenital dislocation of hip correctly.	K	K/KH	Y	Lecture, Small Group discussion, Case discussion	Written/Viva Voce/OSCE		Human Anatomy	
OBJECTIVE 2	At the end of the session the Phase III student must be able to define the congenital and acquired torticollis, discuss clinical features, investigation and management of congenital torticollis correctly.	K	K/KH	Y	Lecture, Small Group discussion, Case discussion	Written/Viva Voce/OSCE			
OBJECTIVE 3	At the end of the session the Phase III student must be able to describe the pathoanatomy of CTEV, its clinical features and radiology correctly.	K	K	Y	Lecture, Small Group discussion, Case discussion	Written/Viva Voce/OSCE			
OBJECTIVE 4	At the end of the session the Phase III able to describe the principles of management of CTEV and discuss ponsetti method for management of CTEV alongwith its orthotic management correctly.	K	K/KH	Y	Lecture, Small Group discussion, Case discussion	Written/Viva Voce/OSCE		Human Anatomy	
OBJECTIVE 5	At the end of the session the Phase III student must be able to enumerate various surgical techniques for the management of CTEV correctly.	K	K	Y	Lecture,	Written			
OBJECTIVE 6	At the end of the session the Phase III student must be able to enumerate various congenital and acquired skeletal limb malformations and deformities, discuss their clinical features with broad principles of management correctly.	K	K	Y	Lecture,	Written			
OBJECTIVE 7	At the end of the session the Phase III student must be describes scoliosis of spine and classify correctly.	K	K	Y	Lecture,	Written			
OBJECTIVE 8	At the end of the session the Phase III student must be able to discuss the clinical features, investigations and broad principles of management of scoliosis correctly.	K	K	Y	Lecture,	Written			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OBJECTIVE 9	At the end of the session the Phase III student must be able to describe and classify spinabifida and discuss its clinical features, investigations and principles of management correctly.	K	K	Y	Lecture,	Written			
OR13.1	<p><b>Participate in a team for procedures in patients and demonstrating the ability to perform on mannequins/ simulated patients in the following;</b></p> <p><b>i. Above elbow plaster</b></p> <p><b>ii. Below knee plaster</b></p> <p><b>iii. Above knee plaster</b></p> <p><b>iv. Thomas splint</b></p> <p><b>v. splinting for long bone fractures</b></p> <p><b>vi. strapping for shoulder and clavicle trauma</b></p>	S/A	KH/SH	Y	Small group discussion, case discussion, video assisted lecture, Teaching, Skill lab sessions	OSCE with Simulation based assesment		Human Anatomy	General Medicine, General Surgery
OBJECTIVE 1	At the end of the session the Phase III student must be able to participate in a team for application of Above elbow, Below knee and Above knee plaster in patients and their indications correctly.	S/A	KH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions	OSCE with Simulation based assesment			
OBJECTIVE 2	At the end of the session the Phase III student must be able to demonstrate the application of Above elbow, Below knee and Above knee plasters on mannequins or simulated patients correctly.	S/A	KH/SH	Y	Small group discussion, skill lab sessions	OSCE with Simulation based assesment			
OBJECTIVE 3	At the end of the session the Phase III student must be able to discuss the use of thomas splint and to participate in a team for application of thomas splint in patients correctly.	S/A	KH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions	OSCE with Simulation based assesment			
OBJECTIVE 4	At the end of the session the Phase III student must be able to demonstrate the application of thomas splint on mannequins or simulated patients correctly.	S/A	KH/SH	Y	Small group discussion, skill lab sessions	OSCE with Simulation based assesment			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OBJECTIVE 5	At the end of the session the Phase III student must be able to discuss the principles of splinting of long bone fractures and to participate in a team for splinting the long bone fractures correctly.	S/A	KH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions	OSCE with Simulation based assesment			
OBJECTIVE 6	At the end of the session the Phase III student must be able to demonstrate the splinting techniques in the long bone fractures correctly.	S/A	KH/SH	Y	Small group discussion, skill lab sessions	OSCE with Simulation based assesment			
OBJECTIVE 7	At the end of the session the Phase III student must be able to participate in a team for strapping the shoulder and clavicle trauma patients correctly.	S/A	KH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions	OSCE with Simulation based assesment			
OBJECTIVE 8	At the end of the session the Phase III student must be able to demonstrate the stapping of shoulder and clavicle injuries in mannequins or simulated patients correctly.	S/A	KH/SH	Y	Small group discussion, skill lab sessions	OSCE with Simulation based assesment			

OR13.2	<b>Participate as a member in team for resuscitation of polytrauma victim by doing all of the following :</b>	S/A	KH/SH	Y	Small group discussion, case discussion, video assisted lecture, Teaching, Skill lab sessions	OSCE with Simulation based assesment			Anaesthesiology
	<b>(a) I.V. access central - peripheral</b>								
	<b>(b) bladder catheterisation</b>								
	<b>(C) Endotracheal intubation</b>								
	<b>(d) Splintage</b>								
OBJECTIVE 1	At the end of the session the Phase III student must be able to participate as a member of the team for resuscitation of polytrauma victim in obtaining central and peripheral I.V. access and able to demonstrate its technique on mannequins accurately.	S/A	KH/SH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			Anaesthesiology
OBJECTIVE 2	At the end of the session the Phase III student must be able to participate as a member of the team for resuscitation of polytrauma victim in bladder catheterisation and to demonstrate the technique in mannequins correctly.	S/A	KH/SH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			



No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OBJECTIVE 3	At the end of the session the Phase III student must be able to participate as a member of the team for resuscitation of polytrauma victim in endotracheal intubation and to demonstrate	S/A	KH/SH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			Anesthesiology
OBJECTIVE 4	At the end of the session the Phase III student must be able to demonstrate the application of thomas splint on mannequins or simulated patients correctly.	S/A	KH/SH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			
OBJECTIVE 5	At the end of the session the Phase III student must be able to discuss the principles of splinting of long bone fractures and to participate in a team for splinting the long bone fractures correctly.	S/A	KH/SH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			
OBJECTIVE 6	At the end of the session the Phase III student must be able to demonstrate the splinting techniques in the long bone fractures correctly.	S/A	KH/SH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			
OR14.1	<b>Demonstrate the ability to counsel patients regarding prognosis in patients with various Orthopaedics illnesses like :</b>	K/S/A/C	KH/SH	Y	Small group discussion, case discussion, video assisted lecture, Teaching, Skill lab sessions	OSCE with Simulation based assesment			ATCOM
	(a)fractures and disabilities								
	(b) Fractures and required prolonged bed stay								
	(C) Bone tumours								
(d) Congenital disabilities									
OBJECTIVE 1	At the end of the session the Phase III student must be able to discuss the list of disabilities which may developed in a untreated, partially treated and treated fracture correctly.	K/S/A/C	KH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OBJECTIVE 2	At the end of the session the Phase III student must be able to demonstrate the skills to counsel the patients regarding the prognosis of a fracture which may cause disability to the patient correctly	K/S/A/C	KH/SH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			
OBJECTIVE 3	At the end of the session the Phase III student must be able to discuss the different peiord of immobilization of different fractures in non ambulatory patients and complications of prolonged bed staty with their prevention correctly.	K/S/A/C	KH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			
OBJECTIVE 4	At the end of the session the Phase III student must be able to demonstrate the skills to counsel the patients regarding the prognosis of a fracture that requires prolonged bed stay correctly.	K/S/A/C	KH/SH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			
OBJECTIVE 5	At the end of the session the Phase III student must be able to discuss the various factors affecting prognosis of the bone tumours, their broad principles of management and managed conditions correctly.	K/S/A/C	KH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			
OBJECTIVE 6	At the end of the session the Phase III student must be able to demonstrate the skills to counsel the patients regarding the prognosis of a fracture that requires prolonged bed stay correctly.	K/S/A/C	KH/SH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			
OBJECTIVE 7	At the end of the session the Phase III student must be able to discuss the various congenital disabilities in Orthopaedics correctly.	K/S/A/C	KH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OBJECTIVE 8	At the end of the session the Phase III student must be able to demonstrate the skills to counsel the patient regarding prognosis of various congenital disabilities in Orthopaedics correctly.	K/S/A/C	KH/SH	Y	Small group discussion, video assisted lectures, teaching, skill lab sessions, case discussion	OSCE with Simulation based assesment			
OR14.2	<b>Demonstrate the ability to counsel patients to obtained consent for various orthopaedic procedures like limb amputation, permanent fixations etc. :</b>	K/S/A/C	KH/SH	Y	<b>Small group discussion, case discussion, video assisted lecture, Teaching, Skill lab sessions</b>	<b>OSCE with Simulation based assesment</b>			
OBJECTIVE 1	At the end of the session the Phase III student must be able to discuss the indications of amputation of a limb or a part of the limb and complications of retaining that nonsalvagable part of the limb correctly.	K/S/A/C	KH	Y	Small group discussion, case discussion, video assisted lecture, Teaching, Skill lab sessions	OSCE with Simulation based assesment			
OBJECTIVE 2	At the end of the session the Phase III student must be able to demonstrate the skill to counsel the patients to obtain consent for amputation of a limb or part of the limb correctly.	K/S/A/C	KH/SH	Y	Small group discussion, case discussion, video assisted lecture, Teaching, Skill lab sessions	OSCE with Simulation based assesment			
OBJECTIVE 3	At the end of the session the Phase III student must be able to discuss the indication of fixation of the common fracture of bones and their complications correctly.	K/S/A/C	KH	Y	Small group discussion, case discussion, video assisted lecture, Teaching, Skill lab sessions	OSCE with Simulation based assesment			
OBJECTIVE 4	At the end of the session the Phase III student must be able to demonstrate the skill to counsel the patients to obtain consent for fixation of the fractures correctly.	K/S/A/C	KH/SH	Y	Small group discussion, case discussion, video assisted lecture, Teaching, Skill lab sessions	OSCE with Simulation based assesment			

No.	Competencies	Domain K/S/A/C	Level K/KH/SH/P	Core	Teaching and learning method	Assessment method	Number required to certify P	Vertical integration	Horizontal integration
OR14.3	<b>Demonstrate the ability to convince the patient for referral to a higher center in various orthopaedic illnesses, based on the detection on the warning signals and need for sophisticated management.</b>	K/S/A/C	KH/SH	Y	Small group discussion, case discussion, video assisted lecture, Teaching, Skill lab sessions	OSCE with Simulation based assesment			
OBJECTIVE 1	At the end of the session the Phase III student must be able to discuss about the various warning signals for sophisticated management for various orthopaedics illnesses based on the available resources correctly.	K/S/A/C	KH	Y	Small group discussion, case discussion, video assisted lecture, Teaching, Skill lab sessions	OSCE with Simulation based assesment			
OBJECTIVE 2	At the end of the session the Phase III student must be able to demonstrate the skill to convince the patient for referral to a higher centre in various orthopaedics illnesses on the basis of different warning signals for a sophisticated management correctly.	K/S/A/C	KH/SH	Y	Small group discussion, case discussion, video assisted lecture, Teaching, Skill lab sessions	OSCE with Simulation based assesment			