Number	Competency		Specific Learning Objective (K/S/A-c)	Domain K/S/A/C		Core (Y/N)	Suggested Teaching Learning Method	Suggested Assesment Method	Number Required to Certify P	Vertical Integration	Horigental Integration
Topic:	Visual Acuity Assessment		Number of Competencies: (05)	1		l Numb	l er of procedure	l es that requi		ion : (NIL)	
	Desribe the physiology of vision	At th	he end of session the phase I MBBS students must be able Desribe the physiology of vision	K	KH	Y	Lecture, small group Discussion	Written / Viva		Physiology	
		2.	Describe the structure of rod and cone by a diagram	1			group Discussion	Voce			
		3	Enumerate the color vision deficiency types								
		4	Define the physiology of vision								
OP1.2	Define, classify and describe the types	1	Define refractive errors	K	KH	Y	Lecture, small	Written / Viva			
011.2	and methods of correcting refractive	2	Classify the types of refractive errors	1 **		-	group Discussion				
	errors	3	Describe astigmatism	1			group 2 is cussion	7000			
			Explain myopia	1			A (7)				
			Explain hypermetropia	1							
			Differentiate between myopia and hypermetropia	1							
		7	Draw a labelled diagram of sturms conoid	1		1					
			Discuss the method of the corrections of refractive errors		9-1						
		9	Discuss the benefits of glasses versus LASIK								
		10	Enlist the methods of correcting aphakia								
		11	Enumerate the types of lenses								
OP1.3	Demonstrate the steps in performing	1	Define visual acuity	S	SH	Y	DOAP session	Skill			
	the visual acuity assessment for	2	Demonstrate the steps in performing visual acuity				Lecture	assessment/			
	distance vision, near vision, colour		assessment for distant vision					Logbook			
	vision, the pin hole test and the	3	Demonstrate the steps in performing visual acuity				Y				
	menace and blink reflexes		assessment for near vision				1				
		4	Demonstrate the steps in performing visual acuity	<i>y</i>							
			assessment for colour vision	1							
		5	Demonstrate the steps in performing visual acuity	4							
			assessment for pin hole test								
		6	Demonstrate the steps in performing visual acuity assessment for menace and blink reflexes								
OP1.4	Enumerate the indications and	1	Enumerate the indications of refractive surgeries	K	KH	Y	Lecture, small	Written / Viva			
	describe the principles of refractive	2	Define the principles of refractive surgeries				group Discussion	Voce			
	surgery	3	Discuss the complications of refractive surgeries								
		4	Enumerate the types of refractive surgeries								
OP1.5	Define, enumerate the types and	1	Define amblyopia	K	KH	Y	Lecture, small	Written / Viva	ı		
	mechanism by which strabismus leads	2	Enumerate the types of amblyopia				group Discussion				
	to amblyopia	3	Discuss the factors leading to amblyopia								
		4	Describe the grades of binocularity								
		5	Discuss the mechanism by which strabismus leads to								
			amblyopia								
	V	6	Describe the management of amblyopia								
Topic:	Lids and Adnexa, Orbit		Number of Competencies: (08)		Λ	Numbe	r of procedures	s that require	e certificati	on : (NIL)	
OP2.1	Enumerate the causes, describe and	1	Enumerate lid pathologies								
	discuss the etiology, clinical		Define hordeolum externum								
	presentation and diagnostic features of	3	Describe hordeolum internum								
	common conditions of the lid and	4	Discuss blepheritis								
	adnexa including hordeolum externum	5	Describe preseptal cellulitis								
	/ internum , blepharitis , preseptal	6	Discuss dacrocystitis								
	cellulitis, dacrocystitis, hemangioma,	7	Define hemangioma								
	dermoid, ptosis, entropion, lid lag,	8	Describe dermoid								

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	Horigental Integration
	iagopninaimos	9	Define ptosis								
			Enumerate the types of entropion	1							
			Enlist the causes of lid lag	1							
			Describe lagophthalmos	1			.4				
			Define the etiology of blepheritis	1							
			Discuss the clinical presentation of ptosis	1							
			Discuss the diagnostic features of preseptal cellulitis	1							
			Discuss the management of blepheritis	1				. (			
			Discuss the management of entropion	1							
OP2.2	Demonstrate the symptoms and		Demonstrate the symptoms of hordeolum externum	S	S	Y	DOAP session	Skill		Human Anatomy	
01 2.2	clinical signs of conditions enumerated		Demonstrate the symptoms of hordeolum internum	1			DOM Session	assesment		Tuman / matomy	
	in OP2.1		Demonstrate the symptoms of blepharitis	1	A 20			assesment			
	III 01 2.1		Demonstrate the symptoms of preseptal cellulitis	1							
			Demonstrate the symptoms of dacryocystitis	- /							
			Demonstrate the symptoms of dacryocystus  Demonstrate the symptoms of haemangioma	•							
			Demonstrate the symptoms of naemangionia  Demonstrate the symptoms dermoid								
			Demonstrate the symptoms of ptosis								
			Demonstrate the symptoms of entropion								
			Demonstrate the symptom of lid lag				AC				
			Demonstrate the symptom of lagophthalmos.								
			Demonstrate the clinical signs of chalazion			2.4					
			Demonstrate the clinical signs of stye								
			Demonstrate the clinical signs of hordeolum internum				1				
			Demonstrate the clinical signs of blepharitis								
			Demonstrate the clinical signs of preseptal cellulitis	1		Ĭ					
			Demonstrate the clinical signs of dacryocystitis	- 4							
			Demonstrate the clinical signs of haemangioma								
			Demonstrate the clinical sign of dermoid		·						
			Demonstrate the clinical sign of ptosis	1							
			Demonstrate the clinical sign of entropion	, ,							
			Demonstrate the clinical sign of lid lag	-							
			Demonstrate the clinical sign of lagophthalmos								
	Demonstrate under supervision clinical		Demonstrate bells phenomenon	S	SH	Y	DOAP session	Skill			
	procedures performed in the lid		Demonstrate assessment of entropion	_			Lecture	assessment			
	including : bells phenomenon,		Demonstrate assessment of ectropion	_							
	assessment of entropion/ectropion,	4	Demonstrate procedure of regurgitation test of lacrimal								
	perform the regurgitation test of		sac								
	lacrimal sac, massage technique in	5	Demonstrate the lacrimal sac massage techinique in								
	congenital dacryocystitis, and trichiatic		congenital dacryocystitis								
	cilia removal by epilation	6	Describe the epilation of trichiatic lash								
OP.2.4	Describe the aetiology, clinical	1	Describe the aetiology of orbital cellulitis	K	KH	Y	Lecture, small	Written / Viva			
	presentation . discuss the complication		Describe the clinical presentation of orbital cellulitis	]			group Discussion	Voce			
	and management of orbital cellulitis	3	Discuss the complication of orbital cellulitis	]							
			Discuss the management of orbital cellulitis								
OP 2.5	Describe the clinical features on ocular		Define cavernous sinus thrombosis	K	KH	Y	Lecture, small	Written / Viva			
	examination and management of a patient with cavernous sinus	2	Describe clinical features of cavernous sinus thrombosis				group Discussion	Voce			
	thrombosis	3	Discuss the management of cavernous sinus thrombosis								
OP 2.6	Enumerate the causes and describe the	1	Enumerate the causes of proptosis	К	КН	Y	Lecture, small	Written / Viva			
OP 2.6	Enumerate the causes and describe the	1	Enumerate the causes of proptosis	K	KH	Y	Lecture, small	Written / Viva			

Number	Competency		Specific Learning Objective (K/S/A-c)	Domain K/S/A/C		Core (Y/N)	Suggested Teaching Learning Method	Suggested Assesment Method	Number Required to Certify P	Vertical Integration	Horigental Integration
	defferenting features, and clinical	2	Describe the differentiating features of proptosis				group Discussion	Voce			
	features and management of proptosis	3	Discuss the clinical features of proptosis								
		4	Discuss the management of proptosis								
		5	Enumerate the surgeries of proptosis								
OP 2.7	Classify the various types of orbital	1	Enumerate the various types of orbital tumors	K	KH	Y	Lecture, small	Written / Viva			
	tumors. Differentiate the symptoms	2	Discuss the signs of orbital tumors				group Discussion	Voce			
	and signs of the presentatin of various types of ocular tumours	3	Discuss the symptoms of orbital tumors				00	3			
OP 2.8	List the investigation helpful in	1	Investigations helpful in diagnosis of orbital tumors	K	KH	Y	Lecture, small	Written / Viva			
01 2.0	diagnosis of orbitaltumors. Enumerate the indications for appropriate referral		Enumerate the indications for referral of orbital tumors				group Discussion				
		3	Discuss the management of orbital tumors								
Topic:	Corneas		Number of Competencies: (10)		1	Vumbe	er of procedures	s that reauir	e certificat	ion : (NIL)	
	Enumerate, describe and discuss the	1	At the end of the sessions the phase iii part 1 mbbs	K	КН	Y	-	Written / Viva		Human Anatomy	
021111	type and causes of corneal ulceration	•	students must be able		J	-	group Discussion	Voce		111111111111111111111111111111111111111	
	31	2	To define corneal ulceration		1			, 555			
			To classify different types of corneal ulceration								
			To enlist the predisposing factors of corneal ulceration								
		5	To enumerate the causative organisms								
		6	To describe the clinical feature			24					
		7	To enumerate the complications and sequeale								
		8	To discuss the management of corneal ulceration			10					
OP.4.2	Enumerate and discuss the differential diagnosis of infective keratitis.	1	To enumerate differential diagnosis of infective keratitis.	K	KH	Y	Lecture, small group Discussion	Written / Viva Voce			
		2	To differentiate infective keratitis from other type of								
			keratitis.								
		3	To discuss about the differential diagnosis of infective keratitis.								
OP 4.3	Enumerate the causes of corneal	1	To enumerate the layers of the cornea.	K	KH	Y	Lecture, small	Written / Viva			
	edema.	2	To discuss anatomy and physiology of cornea.				group Discussion	Voce			
			To enumerate factors responsible for transparency of cornea.								
			To enumerate the causes of corneal edema								
			To enumerate the different clinical features.								
		6	To discuss the treatment of corneal edema.								
OP. 4.4	Enumerate the causes and discuss the	_1	To define dry eye	K	KH	Y	Lecture, small	Written / Viva			
	management of dry eye.	2	Enumerate the causes.				group Discussion	Voce			
		_	To discuss etiopathogenesis.								
	,	_	To discuss the tear film and their tests.								
			To list grading	4							
			To discuss clinical features	4							
			To discuss treatment	1	<u> </u>	<b>.</b>					
OP4.5	Enumerate the causes of corneal		To define corneal blindness.	K	KH	Y	_ ′	Written / Viva			
	blindness		To list the causes of corneal blindness.	4		group Discussion	group Discussion	Voce			
		_	To discuss the prevention of corneal blindness.	1	<u> </u>						
<b>OP 4.6</b>	Enumerate the indications and types of		To define keratoplasty.	K	KH	Y	· ·	Written / Viva			
	keratoplasty.	2	To discuss the different types of keratoplasty.	L	l		group Discussion	Voce		]	

Number	Competency		Specific Learning Objective (K/S/A-c)	Domain K/S/A/C			Suggested Teaching Learning Method	Suggested Assesment Method	Number Required to Certify P	Vertical Integration	Horigental Integration
		3	To enumerate indications of different types of keratoplasty.								
		4	To enumerate the different methods of corneal preservation.				.4				
		5	To enlist complications of keratoplasty.	1							
OP 4.7	Enumerate the indication and describe	1	To define tarsorraphy	K	KH	Y	Lecture, small	Written / Viva			
	the methods of tarsorraphy	2	To discuss different types of tarsorraphy				group Discussion	Voce			
		3	To enumerate the indications of different types of								
			tarsorraphy								
OP 4.8	Demonstrate techniques of removal of	1	To enlist layers of cornea	S	SH	Y	DOAP session	Skill			
	foreign body in the cornea in a	2	To enlist different types of foreign body					assessment			
	simulated environment	3	To discuss the complications of foreign body								
		4	To discuss about type of anaesthesia required required for removal of foreign body				·O				
		5	To enlist the equipment for removal of foreign body								
		6	Demonstrate the techniques of removal of foreign body in		· ·						
			cornea								
		7	To interpret when to refer the patient to ophthalmologist		. C	0					
		8	To identify the complication				4				
OP 4.9	Describe and discuss the importance	1	To define eye donation	K	КН	Y	Lecture, small	Written / Viva			
	and protocols involve in eye donation	2	To define eye banking		,		group Discussion	Voce			
	and eye banking	3	To discuss importance of eye donation				g 1				
	, ,	4	To discuss importance of eye banking		$\sim$		1				
		5	To describe the various standard protocols involved in eye donation		0						
		6	To describe the various protocols involved in eye banking								
		7	To describe the different methods of preservation of eye								
<i>T</i> C •	7 . 7	8	To document the details of eye donation			7. 7	C 1			• (3777)	
	Iris and anterior chamber		Number of Competencies: (10)			1	er of procedure			ion : (NIL)	T
OP6.1	Describe clinical signs of intraocular	1	Describe the clinical signs of intraocular inflamation	K	KH	Y	Lecture, small				
	and enumerate the features that	2	Describe the signs and symptoms of granulomatous				group Discussion	Voce			
	disiguish granulomatous from non-		uveitis								
	granulomatous inflammation. Identity acute iridocyclitis from chronic	3	Describe the signs and symptoms of non granulomatous								
	condition		uveitis	-							
	Condition	4	differntiate between granulomatous and non								
			granulomatous uveitis								
	· ·	5	Differentiate between acute and chronic iridocyclitis Enumerate the causes of anterior uveitis	_							
OD( 1	Talantifa and distinguish a set	6		T/	1711	<b>X</b> 7	T 4	XX7 *44 / X7*	-		
OP6.2	Identify and distinguish acute iridocyclitis from chronic iridocyclitis	2	Discuss the clinical features of acute iridocyclitis  Discuss the clinical features of chronic iridocyclitis	K	KH	Y	Lecture, small group Discussion	Written / Viva Voce			
)1 U.Z	indocyclius from enforce indocyclius	3	Differentiate between acute and chronic iridocyclitis	1			group Discussion	v oce			
				K	Kn	Y	Lecture, small	Written / Viva	<del>                                     </del>		General
OD6 2	Enumerate systemic conditions that	stemic conditions that	N	КН	1 X			1			
OP6.3	Enumerate systemic conditions that can present as iridocyclitis and	1					group Discussion	ssion Voce			Vienicine
OP6.3	can present as iridocyclitis and		iridocyclitis.	-			group Discussion	voce			Medicine
OP6.3		2	iridocyclitis.  Describe the ocular manifestations of the systemic				group Discussion	voce			Medicine
OP6.3	can present as iridocyclitis and		iridocyclitis.	_			group Discussion	voce			Medicine

Number	Competency		Specific Learning Objective (K/S/A-c)	Domain K/S/A/C		Core (Y/N)	Suggested Teaching Learning Method	Suggested Assesment Method	Number Required to Certify P	Vertical Integration	Horigental Integration
	hypopyon	2	Describe hypopyon.				group Discussion	Voce			
		3	Discuss the management of hyphaema.								
		4	Enumerate the causes of hyphaema.								
		5	Differentiate between hyphaema and hypopyon.								
			Discuss causes of hypopyon.								
			Explain the management of hypopyon.								
OP6.5	Describe and discuss the angle of the anterior chamber and its clinical	1	Draw a labelled diagram of angle of anterior chamber.	K	КН	Y	Lecture, small group Discussion	Written / Viva Voce			
	correlates	2	Discuss the clinical corelate of angle of anterior chamber.					6			
		3	Describe the grading of angle of anterior chamber.								
OP6.6	Identity and demonstrate the clinical features and distinguish and diagnose		Discuss the clinical conditions affecting the anterior chamber.	S	SH	Y	DOAP session, Bedside clinic	Skill Assessment			
	common clinical conditions affecting	2	Explain the angle anomaly after blunt trauma.	6							
	the anterior chamber		Lens induced changes affecting the angle of anterior chamber	20							
		4	Distinguish common clinical conditions affecting the anterior chamber.								
OP6.7	Enumerate and discuss the aetiology, the clinical distinguishing features of	1	Enumerate the aetiology of various types of glaucoma.	K	КН	Y	Lecture, small group Discussion	Written / Viva Voce		Human Anatomy	
	various glacomas associated with		Discuss the aetiology of various types of glaucoma.				, y				
	shallow and deep anterior chamber. Choose appropriate investigations and treatment for patients with above conditions.	3	Discuss various types of glaucoma associated with shallow and deep anterior chamber.			0	V*				
			Define open angle glaucoma.		_47						
			Define closed angle glaucoma.								
			Discuss the investigations done for the diagnosis of OAG.								
			Discuss the investigations done for the diagnosis of ACG.								
			Describe the treatment of OAG.								
			Describe the treatment of ACG.								
			Discuss the management of LIG.								
		11	Explain the treatment of Acute congestive glaucoma.								
OP6.8	Enumerate and choose the appropriate investigation for patients with	1	Enumerate the appropriate the investigations done for uveitis.	K	KH	Y	Lecture, small group Discussion	Written / Viva Voce			
	conditions affecting the uvea	2	Enlist the investigations to be done for chronic uveitis.								
OP6.9	Choose the correct local and systemic	_	Discuss the management of anterior uveitis.	K	KH	Y	Lecture, small	Written / Viva			
	theraph for conditions of the anterior		Discuss the management of posterior uveitis.				group Discussion	Voce			
	chamber and enumerate their indications, adverse events and		Describe the adverse affect of systemic therapy used for uveitis								
Topic:	Lens		Number of Competencies: (06)		$\overline{I}$	Numbe	er of procedure.	s that requir	e certificat	tion : (NIL)	
	Describe the surgical anatomy and metabolism of lens	7	At the end of the session phase-1 MBBS, student must be able to	K	KH	Y	Lecture, small group Discussion			Biochemistry, Human Anatomy	
		1	Describe the embryogenesis and surgical anatomy of lens								
		2	Explain metabolism of lens								
			Classify cataract								
		4	Enumerate causes of congenital cataract								
		5	Enumerate causes of leucocoria	1							

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	Horigental Integration
		6	Define cataract								
	Describe and discuss the etiopathogenesis, stages of maturation		At the end of the session phase-1 MBBS, student must be able to	K	KH	Y	Lecture, small group Discussion	Written / Viva Voce		Pathology	
	and complications of cataract	1	Discuss etiopathogenesis of cataract including pre-senile cataract	1							
		2	Describe stages of maturation of cataract								
		3	Explain difference between immature, mature and	1			00	.0,			
		4	hypermature cataract Discuss complications of cataract								
OP7.3	Demonstrate correct technique of	4	At the end of the session phase-1 MBBS, student must be	S	SH	Y	DOAP session	Skill			
OF 7.5	ocular examination in a patient with a		able to		311		DOAT SESSION	assessment			
	cataract	1	Demonstrate clinical examination findings of different parts of eyeball								
		2	Demonstrate and discuss immature, mature and								
			hypermature cataract								
		3	Demonstrate and discuss aphakia, phakia and pseudophakia								
OP7.4	Enumerate types of cataract surgery		At the end of the session phase-1 MBBS, student must be	S	KH	Y	DOAP session,	ritten / Viva Vo			
	and describe steps, intra-operative and		able to	1			Lecture, small				
	post-operative complications of extracapsular cataract extraction	1	Discuss management of cataract				group Discussion				
		2	Enlist and explain types of cataract surgery								
	surgery	3	Describe steps of extracapsular cataract surgery		ľ	6					
		4	Enumerate types of IOL								
		5	Describe intraop and postop complications of cataract				1				
			surgery and its management								
OP7.5	To participate in the team of cataract		At the end of the session phase-1 MBBS, student must be	S	SH	Y	DOAP session	Skill			
	surgery		able to					assessment/Lo			
		1	Diagnose and assess a patient with cataract					gbook			
		2	Observe preoperative work-up for cataract surgery					documentatio			
		3	Observe cataract surgery in Operation theatre					n			
		4	Demonstrate and explain instruments used in cataract surgery								
		5	Perform direct and consensual light reflex test and	1							
			diagnose RAPD								
	Administer informed consent and counsel patients for cataract surgery in	40	At the end of the session phase-1 MBBS, student must be able to	S	SH	Y	DOAP session	Skill Assessment			
	simulated environment	1	Clinical examine and assess the patient for cataract	1							
			surgery								
		2	Explain and counsel the patient regarding cataract								
		4	surgery procedure and complications of the same								
		3	Administer informed consent from the patient posted for								
			cataract surgery								
	Retina & optic Nerve	1	Number of Competencies: (05)		Λ	Vumbe	er of procedures				
	Discuss the aetiology, pathology, clinical features and management of	1	Discuss the etiology of vascular occlusion disorders of retina.	K	KH	Y	Lecture, small group Discussion			Human Anatomy Pathology	
	vascular occlusions of the retina	2	Describe the pathophysiology of vascular occlusion	1			8- out 2 iscussion	. 500		z amologj	
			disorders of retina.								
	3	3	describe the clinical features of vascular occlusion disorders of retina.								
		4	Enumerate the vascular occlusion disorders of retina.				1	1			ĺ

Number	Competency		Specific Learning Objective (K/S/A-c)	Domain K/S/A/C		Core (Y/N)	00	Suggested Assesment Method	Number Required to Certify P	Vertical Integration	Horigental Integration
		5	Define diabetic retinopathy.								
		6	Classification of diabetic retinopathy.								
		7	Labelled diagram of retina .								
		8	Labelled diagram of diabetic retinopathy.								
		9	Explain BRVO.	1							
		10	Discuss CRVO.	1			1069				
		11	Discuss CRAO.	1			0.0				
		12	Discuss BRAO.								
		13	Discuss Management of	1							
		14	BRVO	1				40			
		15	CRVO	1							
		16	BRAO	1	A 4 9						
		17	CRAO	1							
OP8.2	Enumerate the indications of laser	1	Enumerate the indications for laser therapy in the	К	К	Y	Lecture, small	Written / Viva			+
	therapy in the treatment of retinal	1	treatment of retinal detachment.	A N	0.1	. 1	group Discussion	Voce Voce			
	diseases.(Including retinal	2.	Enumerate the indications for laser therapy in the	-			group Discussion	voce			
	detachment.Retinal	2	treatment of retinal degeneration.								
	degenrations, diabetic retinopathy and	2		4							
	hypertensive retinopathy.)	3	Enumerate the indications for laser therapy in the	4							
	hypertensive reunopathy.)	_	treatment of Diabetic retinopathy.	-							
		4	Enumerate the indications for laser therapy in the								
			treatment of Hypertensive retinopathy.	400		1					
		5	Enumerate the indications for laser therapy in treatment								
	-	<u> </u>	of Hypertensive retinopathy								<u> </u>
	Demonstrate the correct technique of	1	Demonstrate the correct technique of fundus examination	S	SH	Y	Lecture, small	Written / Viva			
	fundus examination and describe and		on a patient.	4 /			group Discussion	Voce			
	distinquish the funduscopic features in	2	Demonstrate and distinguish the abnormal retinal finding	<i>j</i>							
	a normal condition and in conditions		with normal retinal finding.								
	causing an abnormal retinal exam.			K.O.							
		$oldsymbol{ol}}}}}}}}}}}}}}}}}$									
OP8.4	Enumerate and discuss treatment	1	Enumerate the treatment modalities of retinal	K	KH	Y	Lecture, small	Written / Viva			
	modalities in management of disease		detachment.	P			group Discussion	Voce			
	of retina.	2	Discuss the treatment modalities of BRVO.	]							
		3	Discuss the treatment modalities of CRVO.								
		4	Discuss the treatment modalities of CRAO.	]							
		5	Classify hypertensive retinopathy.	1							
OP8.5	Describe and discuss the corelative	1	Labelled diagram of visual pathway.	K	KH	Y	Lecture, small	Written / Viva			
	anatomy, aetilogy, clinical	2	Enumerate the optic nerve disease.				group Discussion	Voce			
	manifestations, disgnostic tests,	3	Discuss the diagnostic test for optic nerve disease.	1							
	imaging, and management of diseases	4	Describe the imaging technique for optic nerve pathway.	1							
	of the optic nerve and visual pathway.										
		5	Discuss the management of optic neuitis.	1							
	4	6	Enumerate the tumours of optic nerve and their clinical	1							
			signs and symptoms.								
Topic ·	Miscellaneous		Number of Competencies: (05)	-	λ	umho	r of procedures	that require	certificati	on : (NII.)	.*
•	Demonstrate correct technique to	$\overline{}$	At the end of the session phase-1 MBBS, student must be	e S	P	Y	DOAP session	Skill	5	• (11111)	T
	examine extraocular movements		able to		ľ	1	DOAI SESSIOII	Assessment			
		1	Enlist extraocular muscles and their actions	1				Assessment			
	(uniocular & binocular)			┥							
		_	<u> </u>	4					[		1
	(uniocular & binocular)	2 3	Enlist extraocular muscles and their actions  Demonstrate uniocular ductions  demonstrate vergence and versions	<u> </u>							

Number	Competency		Specific Learning Objective (K/S/A-c)	Domain K/S/A/C		Core (Y/N)	Suggested Teaching Learning Method	Suggested Assesment Method	Number Required to Certify P	Vertical Integration	Horigental Integration
		4	Demonstrate movement in all nine gazes and identify								
			limitation of movement(if any)								
		5	Demonstrate Hirschberg light reflex test								
OP9.2	Classify, enumerate the types, methods of diagnosis and indications for		At the end of the session phase-1 MBBS, student must be able to	K	KH	Y	Lecture, Small group discussion	Written/Viva voce/skill			
	referral in a patient with hetrophoria/	1	Define strabismus				000	assessment			
	strabismus	2	Describe types of strabismus				00	0.			
		3	Describe causes of pseudo strabismus								
		4	Explain difference between hetrophoria and hetrotropia					0			
		5	Enlist methods used to diagnose and calculate degree of strabismus		4		01160				
		6 7	Enumerate causes of hetrophoria and hetrotropia  Describe nerve supply and actions of extraocular muscles			1					
		8	Explain laws of strabismus	20							
		9	Describe indications for referral in squint patient								
OP9.3	Describe the role of refractive error correction in a patient with headache		At the end of the session phase-1 MBBS, student must be able to	K	K	Y	Lecture,Small group discussion	Written/Viva			General Medicine
	and enumerate the indications for	1	Explain asthenopic symptoms and its relevance				group discussion	Voce			Wieurchie
	referral	2	describe various refractive errors								
		3	Describe management of myopia and hypermetropia		ľ		D'	all Written/Viva			
		4	Explain difference between convex lens and concave lens and uses of them		6		)				
	l	5 Explain uses of prisms									
		6	Enumerate indications for referral in patients with								
			refractive error								
		7	Describe presbyopia and its management								
OP9.4	Enumerate, describe and discuss the causes of avoidable blindness and the		At the end of the session phase-1 MBBS, student must be able to	K	KH	Y	Lecture,Small				Community Medicine
	national programme for control of	1	Enumerate and discuss causes of avoidable blindness				group discussion	voce			Medicine
	blindness (Including vision 2020)			-							
		3	Describe WHO classification for blindness Enlist different National programmes for control of	-							
		3	blindness								
	l	4	Describe in detail Vision 2020								
OP9.5	Describe the evaluation and enumerate		At the end of the session phase-1 MBBS, student must be	K	КН	Y	Lecture,Small	Written/Viva			
	the steps involved in the stabilization,		able to	-			group discussion	voce			
	initial management and indication for referral in a patient with ocular injury	1	Describe approach to a patient of ocular injury including BAC protocol								
		24	Explain initial assessment in a patient of ocular injury	1							
		$\pi$	including history taking and clinical examination								
	4	3	Describe various mechanism of ocular injury including	1							
			blunt and penetrating ocular injury								
		4	Describe management of non magnetic vs. magnetic intraocular foreign body								
	_	5	Enumerate indications for referral of patient with ocular injury								
Integra	tion		1	1							
	Explain effect of pituitary tumors on		At the end of the session phase-1 MBBS, student must be	K	KH	N	Lecture	Written		Ophthalmology	
	visual pathway		able to								

Number	Competency		Specific Learning Objective (K/S/A-c)	Domain K/S/A/C		Core (Y/N)	Suggested Teaching Learning Method	Suggested Assesment Method	Number Required to Certify P	Vertical Integration	Horigental Integration
		1	Describe and draw the diagram of visual pathway								
		2	Explain importance of optic chiasma and crossing of nasal fibers								
		3	Understand relation between nerve fiber injury with visual field defect				A				
		4	Enumerate types of perimetry	1							
		5	Explain effect of pituitary tumors on visual field defect	1			00	0.			
AN31.3	Describe anatomical basis of Horner's syndrome		At the end of the session phase-1 MBBS, student must be able to	K	КН	N	Lecture	Written		Ophthalmology	
			Describe and enlist symptoms found in patients of Horner's syndrome				1	0			
		2	Explain types of Horner's syndrome and discuss anatomical basis and causes of each of them	]							
		3	Describe tests to differentiate between types of Horner's syndrome		0.						
AN31.5	Explain anatomical basis of		At the end of the session phase-1 MBBS, student must be	K	KH	Y	Lecture	Written		Ophthalmology	
	oculomotor, trochlear and abducent		able to								
	nerve palsies along with strabismus		Describe nerve supply of extraocular muscles								
		2	Explain difference between comitant and incomitant squint								
		3	Explain anatomical basis of squint caused by 3, 4 or 6 cranial nerve			6					
		4	Explain difference between paralytic and restrictive squint		9						
	Describe and demonstrate parts and layers of eyeball		At the end of the session phase-1 MBBS, student must be able to	K/S	SH	Y	Practical, Lecture, Small	Written/Viva voce		Ophthalmology	
		1	Describe parts and layers of eyeball				group discussion				
			Demonstrate various parts of eyeball								
			Describe normal and abnormal findings of each part of eyeball								
			Explain difference between immature, mature and hypermature cataract								
			Demonstrate direct and consensual light reflex	4							
		6	Demonstrate how to check for Perception of light and projection of rays								
	Describe the anatomical aspects of cataract, glaucoma and central retinal		At the end of the session phase-1 MBBS, student must be able to	K	КН	N	Lecture	Written		Ophthalmology	
	artery occlusion	1	Define cataract	_							
		2	Define glaucoma	1							
		3	Define central retinal artery occlusion	1							
		4	Describe the difference in diminution of vision in								
			cataract, glaucoma and CRAO	_							
		5	Describe the anatomical aspects of cataract, glaucoma								
			and central retinal artery occlusion								