

Office of the Bids and Awards Committee Telephone No.: (+63 32) 254 1452 local 141 or 125 Email: <u>cnubacsed@gmail.com</u> Website: <u>www.cnu.edu.ph</u>



PROCUREMENT	:	Procurement of 1 Lot 3D Printed Anatomy Models; 1 Lot 3D Anatomy Software; 1 Lot Virtual Reality Clinic Laboratory and Virtual Reality Augmented Reality for Maternal-Fetal Birthing Simulator; 1 Lot CPR Trainer; 1 Lot Physiology Teaching System; and 1 Lot Chest Drain & Needle Decompression Trainer
BID NO	:	24-10-310
LOCATION	:	Cebu Normal University Osmeña Boulevard, Cebu City
OWNER	:	Cebu Normal University
SUBJECT	:	Bid Bulletin No. 2
DATE	:	October 23, 2024

This Bid Bulletin is to amend/clarify the following requirements as reflected in the Invitation to Bid/Bidding Documents.

ITEM DES	SCRIPTION				
FROM	ТО				
Title:	Title:				
Procurement of 1 Lot 3D Printed Anatomy	Procurement of 1 Lot 3D Printed Anatomy				
Models and 3D Anatomy Software; 1 Lot	Models; 1 Lot 3D Anatomy Software; 1 Lot				
Virtual Reality Clinic Laboratory and Virtual	Virtual Reality Clinic Laboratory and Virtual				
Reality Augmented Reality for Maternal-Fetal	Reality Augmented Reality for Maternal-Fetal				
Birthing Simulator; 1 Lot CPR Trainer; 1 Lot	Birthing Simulator; 1 Lot CPR Trainer; 1 Lot				
Physiology Teaching System; and 1 Lot Chest	Physiology Teaching System; and 1 Lot Chest				
Drain & Needle Decompression Trainer with	Drain & Needle Decompression Trainer with				
Bid No. 24-10-310	Bid No. 24-10-310				
Invitation to Bid for the Procurement of 1 Lot	Invitation to Bid for the Procurement of 1 Lot				
3D Printed Anatomy Models and 3D Anatomy	3D Printed Anatomy Models; 1 Lot 3D				
Software; 1 Lot Virtual Reality Clinic	Anatomy Software; 1 Lot Virtual Reality Clinic				
Laboratory and Virtual Reality Augmented	Laboratory and Virtual Reality Augmented				
Reality for Maternal-Fetal Birthing Simulator;	Reality for Maternal-Fetal Birthing Simulator;				
1 Lot CPR Trainer; 1 Lot Physiology Teaching	1 Lot CPR Trainer; 1 Lot Physiology Teaching				
System; and 1 Lot Chest Drain & Needle	System; and 1 Lot Chest Drain & Needle				
Decompression Trainer with Bid No. 24-10-	Decompression Trainer with Bid No. 24-10-				
310	310				













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the

ITB Item No. 1:

ITB Item No. 1:

1. The Cebu Normal University, through the CHED SUC SEED FUND (MTF-LBP), intends to apply the sum of Thirty-Five Million Pesos (*Php35,000,000.00*) being the ABC to payments under the contract for the Procurement of 1 Lot 3D Printed Anatomy Models and 3D Anatomy Software; 1 Lot Virtual Reality Clinic Laboratory and Virtual Reality Augmented Reality for Maternal-Fetal Birthing Simulator: 1 Lot CPR Trainer: 1 Lot Physiology Teaching System; and 1 Lot Chest Drain & Needle Decompression Trainer with Bid No. 24-10-310. Bids received in excess of the ABC shall be automatically rejected at bid opening.

1. **Scope of Bid**

The Procuring Entity, Cebu Normal University wishes to receive Bids for the 1 Lot 3D Printed Anatomy Models and 3D Anatomy Software; 1 Lot Virtual Reality Clinic Laboratory and Virtual Reality Augmented Reality for Maternal-Fetal Birthing Simulator; 1 Lot CPR Trainer; 1 Lot Physiology Teaching System; and 1 Lot Chest Drain & Needle Decompression Trainer, with identification number 24-10-310.

The Procurement Project (referred to herein as "Project") is composed of **FIVE** (5) **LOTS**, the details of which are described in Section VII (Technical Specifications).

Bid Data Sheet - ITB Clause 19.3 Procurement of 1 Lot 3D Printed Anatomy Models and 3D Anatomy Software, 1 lot Virtual Reality Clinic Laboratory and Virtual Reality





VURI

The Cebu Normal University, through the CHED SUC SEED FUND (MTF-LBP), intends to apply the sum of Thirty-Five Million Pesos (Php35,000,000.00) being the ABC to payments under the contract for Procurement of 1 Lot 3D Printed Anatomy Models; 1 Lot 3D Anatomy Software; 1 Lot

Virtual Reality Clinic Laboratory and Virtual Reality Augmented Reality for Maternal-Fetal Birthing Simulator; 1 Lot CPR Trainer; 1 Lot Physiology Teaching System; and 1 Lot Chest Drain & Needle Decompression Trainer with Bid No. 24-10-310. Bids received in excess of the ABC shall be automatically rejected at bid opening.

1. **Scope of Bid**

The Procuring Entity, Cebu Normal University wishes to receive Bids for the 1 Lot 3D Printed Anatomy Models; 1 Lot Anatomy Software; 1 Lot Virtual Reality Clinic Laboratory and Virtual Reality Augmented Reality for Maternal-Fetal Birthing Simulator; 1 Lot CPR Trainer; 1 Lot Physiology Teaching System; and 1 Lot Chest Drain & Needle Decompression Trainer, with identification number 24-10-310.

The Procurement Project (referred to herein as "Project") is composed of SIX (6) LOTS, the details of which are described in Section VII (Technical Specifications).

Bid Data Sheet - ITB Clause 19.3

Procurement of 1 Lot 3D Printed Anatomy Models; 1 Lot 3D Anatomy Software, 1 lot Virtual Reality Clinic Laboratory and Virtual Reality Augmented Reality for Maternal-Fetal







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Augmented Reality for Maternal-Fetal Birthing Simulator, 1 lot CPR Trainer; 1 lot Physiology Teaching System, and 1 lot Chest Drain & Needle Decompression Trainer amounting to Thirty-Five Million Pesos (Php35,000,000.00)

ITEM NO.	Qty.	Unit	Item Description
1	1	L	1 Lot 3D PRINTED
		0	ANATOMY MODELS
		Т	AND 3D ANATOMY
			SOFTWARE
1.1	1	U	1 Lot 3D PRINTED
		nit	ANATOMY MODELS
			Deep upper limb and
			hand
			This 3D print of a
			superficially dissected right upper limb specimen
			displays a mixture of the
			vascular, nervous, and
			muscular anatomy of the
			distal arm, forearm, and
			hand.
1.2	1	U	Foot - Plantar surface &
		nit	superficial dissection on
			the dorsum
			This 3D printed specimen
			is a left foot with
			superficial structures
			exposed on the dorsum,
			and the superficial layer
			of muscles and nerves on
			the plantar surface. The
			anterior portion of the
			plantar aponeurosis has
			largely been removed to
			expose the first layer of muscles
1.3	1	U	Lower Limb - deep
1.5	1	nit	dissection
			This 3D printed specimen
			consists of a right partial
			lower limb sectioned just
			proximal to the knee joint
			and complete through a
			partially dissected foot
			exposing the structures on
	1	1	

TECHNICAL SPECIFICATIONS:

Birthing Simulator, 1 lot CPR Trainer; 1 lot Physiology Teaching System, and 1 lot Chest Drain & Needle Decompression Trainer amounting to Thirty-Five Million Pesos (Php35,000,000.00)

TECHNICAL SPECIFICATIONS:

ITEM NO.	Qty.	Unit	Item Description
1	1	L O T	1 Lot 3D PRINTED ANATOMY MODELS
1.1	1	U nit	1 Lot 3D PRINTED ANATOMY MODELS Deep upper limb and hand This 3D print of a superficially dissected right upper limb specimen displays a mixture of the vascular, nervous, and muscular anatomy of the distal arm, forearm, and hand.
1.2	1	U nit	Foot - Plantar surface & superficial dissection on the dorsum This 3D printed specimen is a left foot with superficial structures exposed on the dorsum, and the superficial layer of muscles and nerves on the plantar surface. The anterior portion of the plantar aponeurosis has largely been removed to expose the first layer of muscles
1.3	1	U nit	Lower Limb - deep dissection This 3D printed specimen consists of a right partial lower limb sectioned just proximal to the knee joint and complete through a partially dissected foot exposing the structures on the dorsum.





the dorsum.











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1.4	1	U	Popliteal Fossa distal	1.4	1	U	Popliteal Fossa distal	
		nit	thigh and proximal leg			nit	thigh and proximal leg	
			This 3D printed specimen				This 3D printed specimen	
			preserves the distal thigh				preserves the distal thigh	
			and proximal leg,				and proximal leg,	
			dissected posteriorly to				dissected posteriorly to	
			demonstrate the contents				demonstrate the contents	
			of the popliteal fossa and				of the popliteal fossa and	
			surrounding region.				surrounding region.	
1.5	1	U	Knee Joint, flexed	1.5	1	U	Knee Joint, flexed	
		nit	This 3D printed specimen			nit	This 3D printed specimen	
			demonstrates the				demonstrates the	
			ligaments of the knee				ligaments of the knee	
			joint with the leg in				joint with the leg in	
			flexion. In the anterior				flexion. In the anterior	
			view, with the patella and				view, with the patella and	
			part of the patellar				part of the patellar	
			ligament removed, the				ligament removed, the	
			medial and lateral menisci				medial and lateral menisci	
			and anterior and posterior				and anterior and posterior	
			cruciate ligaments are				cruciate ligaments are	
			visible.				visible.	
1.6	1	U	Female right pelvis	1.6	1	U	Female right pelvis	
		nit	superficial and deep			nit	superficial and deep	
			structures				structures	
			This 3D printed female				This 3D printed female	
			right pelvis preserves both				right pelvis preserves both	
			superficial and deep				superficial and deep	
			structures of the true and				structures of the true and	
			false pelvis, as well as the				false pelvis, as well as the	
			inguinal ligament, the				inguinal ligament, the	
			obturator membrane and				obturator membrane and	
			canal, and both the greater				canal, and both the greater	
			and lesser sciatic				and lesser sciatic	
			foramina. Somewhat				foramina. Somewhat	
			unique is the removal of				unique is the removal of	
			portions of the				portions of the	
			peritoneum (a grayish				peritoneum (a grayish	
			color) to create 'windows'				color) to create 'windows'	
			displaying extraperitoneal				displaying extraperitoneal	
			structures				structures	













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Π	1.7	1	U	Heart internal	Т	1.7	1	U	Heart internal
	1.7	1	nit	structures		1.7	1	nit	structures
			me	This 3D printed heart has				me	This 3D printed heart has
				been dissected to display					been dissected to display
				the internal structures of					the internal structures of
				the chambers. At the base					the chambers. At the base
				of the heart the					of the heart the
				termination of the					termination of the
				superior vena cava is					superior vena cava is
				preserved entering the					preserved entering the
				right atrium. Part of the					right atrium. Part of the
				inferior vena cava is also					inferior vena cava is also
				preserved on the inferior					preserved on the inferior
				aspect of the right atrium;					aspect of the right atrium;
				however, most of the					however, most of the
				vessel lumen and much of					vessel lumen and much of
				the anterior wall has been					the anterior wall has been
				removed to expose the					removed to expose the
				pectinate muscles of the					pectinate muscles of the
				right auricle and the fossa					right auricle and the fossa
				ovalis (which is nearly					ovalis (which is nearly
				translucent in the 3D					translucent in the 3D
				print). The anterior wall					print). The anterior wall
				of the right ventricle has					of the right ventricle has
				also been removed to					also been removed to
				expose the right					expose the right
				atrioventricular valve and					atrioventricular valve and
				its three cusps (anterior,					its three cusps (anterior,
				posterior, and septal),					posterior, and septal),
				including the chordae					including the chordae
				tendineae connecting					tendineae connecting
				them to respective					them to respective
				papillary muscles					papillary muscles
				projecting from					projecting from
				trabeculae carneae					trabeculae carneae
				(including a					(including a
				septomarginal trabecula					septomarginal trabecula
				entering the anterior					entering the anterior
				papillary muscle from the					papillary muscle from the
				interventricular septum).					interventricular septum).
[1.8	1	U	Circle of Willis		1.8	1	U	Circle of Willis
			nit	This 3D printed specimen				nit	This 3D printed specimen
				demonstrates the					demonstrates the
				intracranial arteries that					intracranial arteries that
				supply the brain relative					supply the brain relative
				to the inferior portions of					to the inferior portions of
				the 1 Unit P 288,000.00 5					the 1 Unit P 288,000.00 5
				P a g e viscero- and					P a g e viscero- and
				neurocranium. This print					neurocranium. This print
				was created by careful					was created by careful
				segmentation of					segmentation of
				angiographic data. The					angiographic data. The
				model shows the paired					model shows the paired
				vertebral arteries entering					vertebral arteries entering
				the cranial cavity through					the cranial cavity through
				the foramen magnum and					the foramen magnum and















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		uniting to form the basilar artery. The basilar can be seen dividing into their terminal posterior cerebral arteries. The superior cerebellar arteries arise just proximal to this				uniting to form the basilar artery. The basilar can be seen dividing into their terminal posterior cerebral arteries. The superior cerebellar arteries arise just proximal to this	
1.9 1	Unit	termination. Median Section through head sagittal section of head with deep dissection This 3D model combines a midsagittal section of the head with preservation of brain and cranial cavity anatomy, with a unique deep dissection of the pharyngeal region via removal of basicranial bone and the anterior parts of the atlas and axis. As the opposing side is	1.9	1	Unit	termination. Median Section through head sagittal section of head with deep dissection This 3D model combines a midsagittal section of the head with preservation of brain and cranial cavity anatomy, with a unique deep dissection of the pharyngeal region via removal of basicranial bone and the anterior parts of the atlas and axis. As the opposing side is undissected it has been	
1.10 1	U nit	undissected it has been digitally eliminated from the model. Thorax with heart and vessels	1.10	1	U nit	digitally eliminated from the model. Thorax with heart and vessels	
		The superior thoracic aperture contains structures emerging from the thorax and entering the head and neck and upper limb. In this specimen, both clavicles, key venous structures and other musculature have been removed. Despite this, other important components of anatomy can be observed. Key structures include the Trachea seen most superiorly with a thick ring of cartilage, rib one has been exposed prior to meeting its costal cartilage, travelling in a lateral to medial direction and the anterior scalene muscle inserting into Rib one superiorly.				The superior thoracic aperture contains structures emerging from the thorax and entering the head and neck and upper limb. In this specimen, both clavicles, key venous structures and other musculature have been removed. Despite this, other important components of anatomy can be observed. Key structures include the Trachea seen most superiorly with a thick ring of cartilage, rib one has been exposed prior to meeting its costal cartilage, travelling in a lateral to medial direction and the anterior scalene muscle inserting into Rib one superiorly.	
1.11 1	U nit	Human Heart	1.11	1	U nit	Human Heart	















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1.12	1	U nit	Hilum of the left lung	1.12	1	U nit	Hilum of the left lung	
1.13	1	U	Hilum of the right lung	1.13	1	U	Hilum of the right lung	
		nit	The hilum of a lung is the			nit	The hilum of a lung is the	
			point at which visceral				point at which visceral	
			and parietal pleura meet				and parietal pleura meet	
			and functions with the				and functions with the	
			pulmonary ligament as				pulmonary ligament as	
			the lungs only connection				the lungs only connection	
			with the rest of the body.				with the rest of the body.	
			This connection includes				This connection includes	
			the Pulmonary Artery,				the Pulmonary Artery,	
			Superior and Inferior				Superior and Inferior	
			Pulmonary Veins, Main				Pulmonary Veins, Main	
			Bronchi, Nerves and				Bronchi, Nerves and	
			Lymphatics.				Lymphatics.	
1.14	1	U	Abdomen with bilateral	1.14	1	U	Abdomen with bilateral	
		nit	Hernias			nit	Hernias	
			This 3D model represents				This 3D model represents	
			one of the largest and				one of the largest and	
			most complex in the				most complex in the	
			series, consisting of a				series, consisting of a	
			partial torso from the				partial torso from the	
			diaphragm to the proximal thigh with a				diaphragm to the proximal thigh with a	
			complete abdominal				complete abdominal	
			cavity preserving varying				cavity preserving varying	
			levels of dissection. This				levels of dissection. This	
			3D model also records the				3D model also records the	
			rare, simultaneous				rare, simultaneous	
			occurrence of indirect and				occurrence of indirect and	
			direct inguinal hernias				direct inguinal hernias	
			allowing for consideration				allowing for consideration	
			of the anatomical				of the anatomical	
			underpinnings for both				underpinnings for both	
			conditions. Given the				conditions. Given the	
			scale of the dissection this				scale of the dissection this	
			3D model description is				3D model description is	
			divided into discrete parts				divided into discrete parts	
			based on views and				based on views and	
			regions.				regions.	
1.1	1	U	Vasculature of the	1.1	1	U	Vasculature of the	
5		nit	spleen	5		nit	spleen	
			At the splenic hilum, the				At the splenic hilum, the	
			splenic artery and vein				splenic artery and vein	
			can be seen entering the				can be seen entering the	
			spleen to supply and drain				spleen to supply and drain	
			the organ. The opening of				the organ. The opening of	
			the splenic vein has been				the splenic vein has been	
			kept patent by the				kept patent by the	
			insertion of silicon tubing				insertion of silicon tubing	
			in the model. This model				in the model. This model	
			shows the most superior				shows the most superior	
			branch of the splenic vein has been sectioned from				branch of the splenic vein	
							has been sectioned from	
			its normal passage into				its normal passage into	















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			the spleen. The "tortuous" of twisted shape of the splenic artery can be appreciated as it branches at the hilum. This reflects the overall curled and twisted shape of the vessel across its course from the coeliac trunk to the spleen.				the spleen. The "tortuous" of twisted shape of the splenic artery can be appreciated as it branches at the hilum. This reflects the overall curled and twisted shape of the vessel across its course from the coeliac trunk to the spleen.	
1.1 6	1	Unit	Stomach This 3D model is an isolated stomach with two dissection windows to expose the rugae and pylorus. A small portion of the terminal esophagus is preserved at the cardiac region, and a small portion of the proximal duodenum beyond the pyloric sphincter. The large window within the body of the stomach allows for a clear view into the fundus and the well-developed rugae on the posterior aspect of the wall of the organ. The smaller window, opened just at the pyloric region, allows for an appreciation of the thickening of the organ wall at the pyloric sphincter just proximal to the start of the duodenum.	1.1 6	1	Unit	Stomach This 3D model is an isolated stomach with two dissection windows to expose the rugae and pylorus. A small portion of the terminal esophagus is preserved at the cardiac region, and a small portion of the proximal duodenum beyond the pyloric sphincter. The large window within the body of the stomach allows for a clear view into the fundus and the well-developed rugae on the posterior aspect of the wall of the organ. The smaller window, opened just at the pyloric region, allows for an appreciation of the thickening of the organ wall at the pyloric sphincter just proximal to the start of the duodenum.	
1.1 7	1	U nit	Spleen and pancreas This 3D model preserve the deep foregut organs: the descending, horizontal and ascending duodenum, the pancreas, and the spleen.	1.1 7	1	U nit	Spleen and pancreas This 3D model preserve the deep foregut organs: the descending, horizontal and ascending duodenum, the pancreas, and the spleen.	













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1.1	1	U	Liver with vessels and	1.1	1	U	Liver with vessels and	
1.1 8	1	-		8	1	_		
0		nit	gallbladder	0		nit	gallbladder	
			The size and shape of this				The size and shape of this	
			specimen varies				specimen varies	
			somewhat from a typical				somewhat from a typical	
			liver. It is less wedge-				liver. It is less wedge-	
			shaped and longer in the				shaped and longer in the	
			super inferior dimension				super inferior dimension	
			(on the posterior view this				(on the posterior view this	
			would translate to a				would translate to a	
			greater vertical height).				greater vertical height).	
			Normally, a liver is less				Normally, a liver is less	
			than 16cm in the				than 16cm in the	
			midclavicular line.1 This				midclavicular line.1 This	
			specimen measures				specimen measures	
			approximately 18cm in				approximately 18cm in	
			the midclavicular line,				the midclavicular line,	
							,	
			suggesting some degree				suggesting some degree	
			of hepatomegaly.				of hepatomegaly.	
			However, it is worth				However, it is worth	
			mentioning that some				mentioning that some	
			measurement distortion				measurement distortion	
			may have occurred based				may have occurred based	
			on the fixing and curation				on the fixing and curation	
			of the specimen – and it				of the specimen – and it	
			must be noted that the				must be noted that the	
			accuracy of estimating				accuracy of estimating	
			liver size using a single				liver size using a single	
			parameter is limited.				parameter is limited.	
			Liver measurements				Liver measurements	
			diagnostic of				diagnostic of	
			hepatomegaly vary				hepatomegaly vary	
			depending on normal				depending on normal	
			anatomical variation in	1			anatomical variation in	
			liver size and	1			liver size and	
			morphology, the method				morphology, the method	
			of measurement, and				of measurement, and	
			patient features such as				patient features such as	
			sex and BMI.				sex and BMI.	
1.1	1	U	Female hemipelvis and	1.1	1	U	Female hemipelvis and	
9		nit	thigh	9		nit	thigh	
		-	This 3D model preserves	1			This 3D model preserves	
			a left pelvis divided at the				a left pelvis divided at the	
			midsagittal plane, and the				midsagittal plane, and the	
			proximal thigh to				proximal thigh to	
				1				
			approximately the				approximately the	
			midthigh.				midthigh.	













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		*Warranty: One (1) year				*Warranty: One (1) year	
		on parts and services				on parts and services	
		• Certificate of authorized distributorship of the bidder issued by the manufacturer.				• Certificate of authorized distributorship of the bidder issued by the manufacturer.	
		• Certificate from the manufacturer that the 3D Printed Products are ab accurate representation of real human anatomy and are based on imaging scanning data of real human specimen provided by one of the top 20 university worlds ranking in anatomy, ranked by QS World University Ranking for Anatomy and Physiology via its website.				■ Certificate from the manufacturer that the 3D Printed Products are ab accurate representation of real human anatomy and are based on imaging scanning data of real human specimen provided by one of the top 20 university worlds ranking in anatomy, ranked by QS World University Ranking for Anatomy and Physiology via its website.	
		• Certificate from the manufacturer that the 3D printed anatomy models are made of photopolymer resin.				• Certificate from the manufacturer that the 3D printed anatomy models are made of photopolymer resin.	
		■ Certificate of manufacturer's ISO certificate				■ Certificate of manufacturer's ISO certificate	
		■There must be at least one demo unit from the list of 3D printed anatomy models as sample.				■There must be at least one demo unit from the list of 3D printed anatomy models as sample.	
						LOT 1 TOTAL ABC: Php6,805,200.00	
						1 LOT 3D ANATOMY SOFTWARE	
$\begin{array}{c c} 1.2 \\ 0 \end{array}$ 2	Se t	3D ANATOMY SOFTWARE	2.0	2	Se t	3D ANATOMY SOFTWARE	













BAGONG PILIPINAS

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	Anatomy Software,				3D Anatomy Software,
	iding at least 14" i5				including at least 14" i5
	hscreen laptop and				touchscreen laptop and
	ast 65" ViewSonic				at least 65" interactive
	active digital				digital whiteboard
	eboard				The 3D Anatomy
	3D Anatomy				Software is a collection of
	ware is a collection of				at least 300 advanced
	ast 300 advanced				digital images of real
	al images of real				Plastinated specimens of
	inated specimens of				each human body region
	human body region				dissected in various
	cted in various				quantities. High-precision
	tities. High-precision				reconstruction technology
	struction technology				was employed in its
	employed in its				development. It serves as
	lopment. It serves as				a valuable and engaging
	uable and engaging				teaching tool for human
	ning tool for human				anatomy education,
	omy education,				facilitating effective class
	itating effective class				lectures and discussions,
	res and discussions,				serving as a learning
	ng as a learning				resource, and supporting
	irce, and supporting				pop quizzes and pre-exam
	uizzes and pre-exam				preparation.
	aration.				The 3D Anatomy
	3D Anatomy				Software can be used for
Softw	ware can be used for				anatomy lectures in the
anato	omy lectures in the				class, and can be used as a
class,	, and can be used as a				dissection guide for a big
disse	ction guide for a big				group of students in the
group	p of students in the			;	anatomy laboratory.
anato	omy laboratory.				The 3D Anatomy
	3D Anatomy				Software is an offline
Softw	ware is an offline			ĺ	based software allowing it
	d software allowing it				to be used anytime.
	used anytime.				During classroom
	ng classroom				lectures, the instructor
	res, the instructor				controls the software from
	ols the software from				the laptop/from the
	aptop/from the				Interactive Digital Board,
	active Digital Board,				while students listen and
	e students listen and				learn as the image is
	as the image is				shared in a large or
	ed in a large or				multiple TV screen/s or
	iple TV screen/s or				projector for larger image.
proje	ector for larger image.				Note: The 3D Anatomy
Note	: The 3D Anatomy				Software should have no
	ware should have no				yearly subscriptions,
	ly subscriptions,				and must include free
	must include free				lifetime software
lifetin	me software				updates.
upda	ates.			F	LOT 2 TOTAL ABC:
	T 1 TOTAL ABC:				Php4,500,000.00
	2441,305,200.00		· ·		
		ł			GOOD











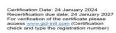




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	1	L	VIRTUAL REALITY	3.0	1	L	VIRTUAL REALITY
		0	CLINIC			0	CLINIC
		Т	LABORATORY AND			Т	LABORATORY AND
			VIRTUAL REALITY				VIRTUAL REALITY
			AUGMENTED				AUGMENTED
			REALITY FOR				REALITY FOR
			MATERNAL-FETAL				MATERNAL-FETAL
			BIRTHING				BIRTHING
			SIMULATOR				SIMULATOR
	2	U	Virtual Reality Clinic	3.1	2	U	Virtual Reality Clinic
		nit	Laboratory			nit	Laboratory
			This is an advanced,				This is an advanced,
			affordable, and				affordable, and
			revolutionary virtual				revolutionary virtual
			reality medical training				reality medical training
			solution.				solution.
			Learn and develop				Learn and develop
			medical diagnostic skills				medical diagnostic skills
			with high resolution				with high resolution
			graphics that are engaging				graphics that are engaging
			and truly immersive.				and truly immersive.
			Virtual patients differ in				Virtual patients differ in
			age and gender and				age and gender and
			answer different medical				answer different medical
			questions which gives the				questions which gives the
			user the chance to analyze				user the chance to analyze
			and make conclusions				and make conclusions
			about possible diagnosis.				about possible diagnosis.
		ŀ	Learners can develop				Learners can develop
			critical skills to				critical skills to
			effectively diagnose				effectively diagnose
			illnesses using a wide				illnesses using a wide
			variety of medical				variety of medical
1			instruments, medicines,				instruments, medicines,
			and laboratory tests in a				and laboratory tests in a
			safe, controlled				safe, controlled
			environment with session				environment with session
			monitoring in real time.				monitoring in real time.
			 Industry-leading 				 Industry-leading
			graphics				graphics
			Minimum space needed				Minimum space needed
1			for use is 4 sq. ft.				for use is 4 sq. ft.
			 Unique teleportation 				 Unique teleportation
			feature inside VR section				feature inside VR section
			 Fastest setup, load and 				 Fastest setup, load and
			response time				response time
			 Smart Center with 				 Smart Center with
			Spectator feature for				Spectator feature for
			managing and tracking				managing and tracking
1			training			1	training















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2.2 1 U nit			3.2	1	Unit	Includes: • VR Goggles, • Laptop Computer, • 65" Flat Panel Display with Stand, • Clinic Software w/ Lifetime License • 200+ outpatient cases • Access to Smart Center – web service monitoring and recording training sessions with tracking learning outcomes, learning progress, registering students • Case Manager – outpatient case editing/creation – up to 30 cases (license for 12 months) VR Headset Specs: Head Strap Designed to offer lightweight comfort for any type of player. This soft strap can be easily adjusted or upgraded with Meta Quest accessories. Optics Specifications Fast-Switch LCD Display 1832 x 1920 Resolution Per Eye 60, 72, 90 Hz Refresh Rate Supported Glasses Compatible o with certificate of exclusivity from the manufacturer *With Trainings Virtual Reality Augmented Reality for Maternal-Fetal Birthing simulator with validated and integrated maternal- fetal physiology and interchangeable static collars to train on all stages of delivery and the rare emergency scenario.	
----------------	--	--	-----	---	------	--	--













BAGONG PILIPINAS

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Elevate neonatal training with augmented reality, a solution that helps learners truly visualize childbirth and accelerates neonatal training. It can be used as a standalone application with a holographic manikin orElevate neonatal training with augmented reality, a solution that helps learners truly visualize childbirth and accelerates neonatal training. It can be used as a standalone application with a holographic manikin or
solution that helpssolution that helpslearners truly visualizelearners truly visualizechildbirth and accelerateschildbirth and acceleratesneonatal training. It canneonatal training. It canbe used as a standalonebe used as a standaloneapplication with aapplication with aholographic manikin orholographic manikin or
learners truly visualize childbirth and accelerates neonatal training. It can be used as a standalone application with a holographic manikin orlearners truly visualize childbirth and accelerates neonatal training. It can be used as a standalone application with a holographic manikin or
childbirth and accelerates neonatal training. It can be used as a standalone application with a holographic manikin orchildbirth and accelerates neonatal training. It can be used as a standalone application with a holographic manikin or
neonatal training. It canneonatal training. It canbe used as a standalonebe used as a standaloneapplication with aapplication with aholographic manikin orholographic manikin or
be used as a standalone application with a holographic manikin or be used as a standalone application with a holographic manikin or
application with a holographic manikin or application with a holographic manikin or
holographic manikin or holographic manikin or
can be integrated with the can be integrated with the
manikin to enable manikin to enable
continuum of learning. continuum of learning.
Accelerate learning and Accelerate learning and
retention with a complete retention with a complete
understanding of understanding of
physiology in childbirth physiology in childbirth
and postpartum scenarios and postpartum scenarios
Improve skills retention Improve skills retention
with self-paced and with self-paced and
repeatable learning repeatable learning
Save precious faculty Save precious faculty
time with self-directed time with self-directed
learning learning
• Deliver training with • Deliver training with
minimal space minimal space
requirements the world's requirements the world's
first childbirth simulator
to offer real-time,
interactive 3D holograms
immersive training. immersive training.
With 5 Scenarios: With 5 Scenarios:
Normal Delivery Normal Delivery
Breech Delivery Breech Delivery
• Shoulder Dystocia • Shoulder Dystocia
Delivery Delivery
• Instrumental Delivery • Instrumental Delivery
• Postpartum Hemorrhage • Postpartum Hemorrhage
*Batteries: 18.5V, 233Wh *Batteries: 18.5V, 233Wh
Lithium Ion
interactivity, students can interactivity, students can
use HoloLens to elevate
3D models above the 3D models above the
physical model and physical model and
bypass them. Although it bypass them. Although it
is designed to work with is designed to work with
the physical simulator, the physical simulator,
this also allows students this also allows students
to train only with to train only with
HoloLens. HoloLens.











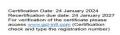




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This brings an impressive			This brings an impressive	
mix of features to the			mix of features to the	
			market, including a more	
market, including a more			<u> </u>	
realistic and controllable			realistic and controllable	
birthing process, better			birthing process, better	
articulation for labor and			articulation for labor and	
delivery maneuvers, and			delivery maneuvers, and	
predicts APGAR scores			predicts APGAR scores	
based on integrated			based on integrated	
maternal and fetal			maternal and fetal	
physiology. From normal			physiology. From normal	
delivery and breech birth			delivery and breech birth	
to shoulder dystocia and			to shoulder dystocia and	
eclampsia, Lucina does it			eclampsia, Lucina does it	
all.			all.	
1. The advanced delivery			1. The advanced delivery	
mechanism is reliable and			mechanism is reliable and	
stable and it is the quietest			stable and it is the quietest	
on the market Tactile			on the market Tactile	
realism of mother and			realism of mother and	
fetus allows learners to			fetus allows learners to	
establish stages of labor,			establish stages of labor,	
determine delivery cases			determine delivery cases	
by seat and perform more			by seat and perform more	
interventions, including			interventions, including	
extraction using a suction			extraction using a suction	
cup			cup	
F			F	
2. Full waist, hip and			2. Full waist, hip and	
thigh joint with visible			thigh joint with visible	
pelvic joint allows			pelvic joint allows	
practice of obstetric			practice of obstetric	
maneuvers including			maneuvers including	
McRobert maneuver			McRobert maneuver	
Advanced			Advanced	
cardiopulmonary			cardiopulmonary	
resuscitation analysis			resuscitation analysis	
measures quality and			measures quality and	
			depth of chest	
depth of chest			1	
compressions, ventilation			compressions, ventilation	
speed and volume,			speed and volume,	
cardiac output and more			cardiac output and more	
Signs of epileptic seizures			Signs of epileptic seizures	
in the mother include			in the mother include	
tremor, rapid blinking of			tremor, rapid blinking of	
the eyes, jaw movement			the eyes, jaw movement	
and stertorous breathing			and stertorous breathing	
3. Postpartum hemorrhage			3. Postpartum hemorrhage	
reservoir holds blood to			reservoir holds blood to	
exercise for a wide range			exercise for a wide range	
of scenarios including			of scenarios including	
class III hemorrhage			class III hemorrhage	
Extraction of the placenta			Extraction of the placenta	
with detection of the			with detection of the	
appropriate level of force			appropriate level of force	
11 1	<u> </u>	1	11 1	

















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3.0 3.1	1	L O T U	CPR TRAINER	4.0	1	L O T U	CPR TRAINER	
2.0	1	T		4.0	1	T		
			Php9,100,000.00				Php9,100,000.00	
			LOT 2 TOTAL ABC:				LOT 3 TOTAL ABC:	
			*With Trainings				*With Trainings	
			the cervix.				the cervix.	
			dilation and effacement of				dilation and effacement of	
			realism includes proper				realism includes proper	
			massage Maternal tactile				massage Maternal tactile	
			Zavanelli and uterine				Zavanelli and uterine	
			pressure, pressure maneuvers. Rubin II,				pressure, pressure maneuvers. Rubin II,	
			maneuver, suprapubic				maneuver, suprapubic	
			lateral tilt, McRoberts				lateral tilt, McRoberts	
			measurement of left				measurement of left	
			detection, response and				detection, response and	
			newborn baby Automatic				newborn baby Automatic	
			standards for a term				standards for a term	
			Organization (WHO)				Organization (WHO)	
			World Health				World Health	
			4. The fetus must meet				4. The fetus must meet	
			and five minutes				and five minutes	
			wailing and APGAR scores after one minute				wailing and APGAR scores after one minute	
			healthy delivery include				healthy delivery include	
			for extraction Signs of "a				for extraction Signs of "a	













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Php1,950,000.00	Php1,950,000.00
	LOT 4 TOTAL ABC:
	exportable
	Assessment results avportable
	number of ventilations
	Count Total volume and
	Number of Compressions
Ventilation · Count Total	Number and Correct
Compression and	Ventilation · Count Total
Training for Chest	Compression and
Evaluation mode	Training for Chest
	mode, Evaluation mode
÷	Game mode, Training
_	Editable guidelines Various Training modes:
	manikins at the same time
-	• Connect up to 6
	Computer
	Preloaded into Tablet
SOFTWARE	SOFTWARE
magnetic stickers)	magnetic stickers)
manikin (Offering	manikin (Offering
embedded magnets in	embedded magnets in
	AED training pads with
	• Semi-permanent use of
-	during ventilation
	Visible Chest rising
	Maneuver, Airway opening
	• Head tilt-Chin lift
	• Sound, LED ON / OFF
	Volume, Rate
number, Good number,	number, Good number,
Ventilation – Total	Ventilation – Total
position	position
Incomplete recoil, Hand	Incomplete recoil, Hand
number, Depth, Speed,	number, Depth, Speed,
Total number, Good	Total number, Good
1	Chest compression –
time feedback (Chest compression Ventilation)	time feedback (Chest compression, Ventilation)
	compression, Ventilation) • Chest compression – Total number, Good number, Depth, Speed, Incomplete recoil, Hand position • Ventilation – Total number, Good number, Volume, Rate • Sound, LED ON / OFF • Head tilt-Chin lift Maneuver, Airway opening • Visible Chest rising during ventilation • Semi-permanent use of AED training pads with embedded magnets in manikin (Offering magnetic stickers) SOFTWARE • Preloaded into Tablet Computer • Connect up to 6 manikins at the same time • Editable guidelines • Various Training modes: Game mode, Training mode, Evaluation mode • Training for Chest Compression and Ventilation · Count Total Number and Correct Number of Compressions Count Total volume and number of ventilations • Assessment results exportable LOT 3 TOTAL ABC:

















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4.0	1	L		 5.0	1	L	
		O T	PHYSIOLOGY TEACHING SYSTEM			O T	PHYSIOLOGY TEACHING SYSTEM
4 .1	4	U nit	Physiology Teaching System	5.1	4	U nit	Physiology Teaching System
			of human and animal physiology Includes at least 90 experiments and at least 250 exercises in cardiovascular, neuromuscular and spirometric physiology, and others.				of human and animal physiology Includes at least 90 experiments and at least 250 exercises in cardiovascular, neuromuscular and spirometric physiology, and others.
			Also include: ■ Control Module with wire compatible Biopotential (ECG, EMG, EEG, GSR) Amplifier, Built-in Stimulator				Also include: ■ Control Module with wire compatible Biopotential (ECG, EMG, EEG, GSR) Amplifier, Built-in Stimulator
			 Spirometer Flow Head, Heart Sounds Sensor 1 Unit Iron Stand 1 Unit Spirometer Collapsible Tubing 10 pieces Spirometer 				 Spirometer Flow Head, Heart Sounds Sensor 1 Unit Iron Stand 1 Unit Spirometer Collapsible Tubing 10 pieces Spirometer
			Mouthpiece ■ 1 Unit Laptop with learning module software				Mouthpiece 1 Unit Laptop with learning module software













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■ Pulse Probe,	■ Pulse Probe,
Temperature Sensor	Temperature Sensor
■ Non-Invasive Blood	■ Non-Invasive Blood
Pressure Sensor	Pressure Sensor
■ Grip Force Sensor,	■ Grip Force Sensor,
Muscle Twitch Sensor	Muscle Twitch Sensor
■ Single-axis	■ Single-axis
Goniometer, Patellar	Goniometer, Patellar
Reflex Hammer	Reflex Hammer
■ Pulse Oximeter,	■ Pulse Oximeter,
Respiration Monitor	Respiration Monitor
■ Event Marker, Force	Event Marker, Force
Transducer	Transducer
Dissolved Oxygen	Dissolved Oxygen
Sensor	Sensor
■ Nerve Bath Chamber,	■ Nerve Bath Chamber,
Needle Electrodes	Needle Electrodes
Bipolar Stimulating	■ Bipolar Stimulating
Electrode	Electrode
Headphones	Headphones
Human Physiology	Human Physiology
Measurements:	Measurements:
■ ECG, EMG, GSR	■ ECG, EMG, GSR
Hemispheric EEG	 Hemispheric EEG
 Blood Pressure, Heart 	 Blood Pressure, Heart
Sounds	Sounds
■ Spirometry	■ Spirometry
 Reflex Testing, 	SphonedyReflex Testing,
Reaction Times,	Reaction Times,
Polygraph	Polygraph
■ Facial EMG, Skin	■ Facial EMG, Skin
Temperature	
-	Temperature
Stroop Test, Eriksen	■ Stroop Test, Eriksen
Flanker Test	Flanker Test
Animal Physiology	Animal Physiology
Measurements:	Measurements:
■ Muscle Contraction	■ Muscle Contraction
■ Frog ECG	■ Frog ECG
Action Potentials	■ Action Potentials
Cellular Metabolism	■ Cellular Metabolism
■ Mechano-reflexes	Mechano-reflexes
Human Circulation:	Human Circulation:
■ Blood Pressure,	■ Blood Pressure,
Peripheral Circulation,	Peripheral Circulation,
and Body Position	and Body Position
■ Blood Pressure,	■ Blood Pressure,
Peripheral Circulation,	Peripheral Circulation,
and Imposed conditions	and Imposed conditions
Pulse Wave Velocity	Pulse Wave Velocity
Human Heart:	Human Heart:
■ The Electrocardiogram	■ The Electrocardiogram
(ECG) and the Pulse	(ECG) and the Pulse















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Heart Sounds and the	Heart Sounds and the
Electrocardiogram (ECG)	Electrocardiogram (ECG)
■ The Effects of Exercise	■ The Effects of Exercise
on the	on the
Electrocardiogram (ECG)	Electrocardiogram (ECG)
and the Pulse	and the Pulse
■ The Six-Lead	■ The Six-Lead
Electrocardiogram	Electrocardiogram
■ The Diving Reflex	■ The Diving Reflex
 He Diving Kenex Heart Rate Variability 	 Heart Rate Variability
(HRV)	(HRV)
Human Muscle:	Human Muscle:
■ Grip Strength and	■ Grip Strength and
Electromyogram (EMG)	Electromyogram (EMG)
Activity	Activity
■ Electromyogram	■ Electromyogram
Activity in Antagonistic	Activity in Antagonistic
Muscles	Muscles
■ EMG and Arm	■ EMG and Arm
Wrestling	Wrestling
Oculomotor Muscle	Oculomotor Muscle
Activity	Activity
■ Response, Work,	■ Response, Work,
Summation and Tetanus	Summation and Tetanus
in Human Muscle	in Human Muscle
Kinesiology Targeted	 Kinesiology Targeted
Muscles	Muscles
Human Muscle Twitch	 Human Muscle Twitch
Human Spirometry:	Human Spirometry:
Breathing Parameters at	 Breathing Parameters at
Rest and after Exercise	Rest and after Exercise
Breathing and Gravity	Breathing and Gravity
■ Factors that Affect	 Factors that Affect
Breathing Patterns	Breathing Patterns
■ Lung Volumes and	Lung Volumes and
Heart Rate	Heart Rate
Human Nerve:	Human Nerve:
Auditory and Visual	 Auditory and Visual
Reflexes	Reflexes
■ Stretch Receptors and	■ Stretch Receptors and
Reflexes with Reflex	Reflexes with Reflex
Hammer	Hammer
■ Stretch Receptors and	■ Stretch Receptors and
Reflexes with	Reflexes with
Plethysmograph	Plethysmograph
Human to Human	■ Human to Human
Interface	Interface
Animal:	Animal:
■ Skeletal Muscle -	Skeletal Muscle -
Work, Summation and	Work, Summation and
Tetanus	Tetanus
Smooth Muscle	Smooth Muscle
Contraction	Contraction
Byssal Retractor	■ Byssal Retractor
Muscle	■ Byssar Retractor Muscle
Frog Electrocardiogram	■ Frog Electrocardiogram

















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■ Crayfish Heart ■ Crayfish Heart Membrane Potentials Membrane Potentials Compound Action Compound Action Potentials Potentials ■ Cockroach Leg ■ Cockroach Leg Mechanoreceptors Mechanoreceptors ■ Cockroach Cercal ■ Cockroach Cercal Sense Organs Sense Organs *With Trainings *With Trainings LOT 4 TOTAL ABC: LOT 5 TOTAL ABC: Php11,394,800.00 Php11,394,800.00 6.0 5.0 **CHEST DRAIN & CHEST DRAIN &** L 1 L 1 0 NEEDLE 0 NEEDLE Т **DECOMPRESSION** Т DECOMPRESSION TRAINER TRAINER 5.1 U 6.1 U 1 **Chest Drain & Needle** 1 **Chest Drain & Needle** nit **Decompression Trainer** nit Decompression Trainer This is a Simulator to This is a Simulator to deliver training in both deliver training in both surgical and guide-wire surgical and guide-wire assisted thoracostomy and assisted thoracostomy and thoracentesis, chest thoracentesis, chest drainage and needle drainage and needle decompression decompression techniques. Chest tube techniques. Chest tube insertion is for both types insertion is for both types of pads, with the of pads, with the Advanced model's eco-Advanced model's ecolucent material allowing lucent material allowing practice of Seldinger's practice of Seldinger's ultrasound technique. ultrasound technique. • Reservoirs in the rear of • Reservoirs in the rear of the model can be filled the model can be filled with fluid or mock blood with fluid or mock blood to represent pleural to represent pleural effusion effusion • Needle decompression • Needle decompression air reservoirs provide air reservoirs provide realistic releases of air on realistic releases of air on insertion of needle insertion of needle • Anatomically accurate • Anatomically accurate representation of an adult representation of an adult male torso with raised male torso with raised arms arms • Standard Pads have a • Standard Pads have a Pleural Layer which has Pleural Layer which has realistic give and "pop" realistic give and "pop" when puncturing with when puncturing with forceps or finger forceps or finger















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• Combined use of the		• Combined use of the	
Advanced Pads and the		Advanced Pads and the	
chest reservoirs allows for		chest reservoirs allows for	
the simulation of pleural		the simulation of pleural	
effusion		effusion	
VERSATILITY		VERSATILITY	
• Able to perform the		 Able to perform the 	
Seldinger Technique		Seldinger Technique	
• Trainer can be used in a		 Trainer can be used in a 	
sitting or supine position		sitting or supine position	
CLEANING		CLEANING	
• Clean the product with a		 Clean the product with a 	
damp soft cloth or		damp soft cloth or	
sponge, using warm water		sponge, using warm water	
with mild detergent		with mild detergent	
• Always drain, clean and		• Always drain, clean and	
dry after use to ensure that the trainer remains in		dry after use to ensure that the trainer remains in	
good condition		good condition	
good condition		good condition	
ANATOMY		ANATOMY	
• Adult male torso with		• Adult male torso with	
raised arms		raised arms	
• Internal landmarks: ribs,		• Internal landmarks: ribs,	
lung and diaphragm		lung and diaphragm	
SKILLS GAINED		SKILLS GAINED	
Needle decompression/		 Needle decompression/ 	
needle thoracostomy of a		needle thoracostomy of a	
tension pneumothorax at		tension pneumothorax at	
both the 2nd and 5th		both the 2nd and 5th	
intercostal space		intercostal space	
• Ultrasound guided chest		Ultrasound guided chest	
tube insertion, also known		tube insertion, also known	
as the Seldinger		as the Seldinger	
Technique, including		Technique, including	
insertion of the needle		insertion of the needle	
into the pleural space		into the pleural space under direct vision and	
under direct vision and ultrasonic recognition of		ultrasonic recognition of	
chest structures		chest structures	
• Open or cut-down chest		• Open or cut-down chest	
tube insertion, including		tube insertion, including	
recognition of correct		recognition of correct	
position, surgical incision,		position, surgical incision,	
blunt dissection through the chest wall, perforation		blunt dissection through the chest wall, perforation	
of pleura and finger		of pleura and finger	
sweep		sweep	
		1	















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• Use of a chest drain, including using with an underwater seal	
*With Trainings	
LOT 5 TOTAL ABC: Php1,250,000.00	

Suturing of the tube to the chest wall
Use of a chest drain, including using with an underwater seal

> LOT 6 TOTAL ABC: Php1,250,000.00

*With Trainings

Prepared By:

Noted By:

MS. MA. EVA L. OMPOC Assistant Head, BAC Secretariat

DR. ALLAN ROY B. ELNAR BAC Chairperson







