



وزارة التعليم العالي والبحث العلمي
الجامعة التقنية الشمالية
المعهد التقني الدور



الحقيبة التعليمية

القسم العلمي: الإسعاف
الفوري

اسم المقرر: التشريح

المرحلة / المستوى:
الاول

الفصل الدراسي: الثاني

السنة الدراسية: 2023
2024 -



التشريح				اسم المقرر:				
الإسعاف الفوري				القسم:				
المعهد التقني الدور				الكلية: المعهد				
الاول				المرحلة / المستوى				
الثاني				الفصل الدراسي:				
30		عملي		30		نظري	عدد الساعات الاسبوعية:	
4				عدد الوحدات الدراسية:				
TIDO107				الرمز:				
.		كلهما		عملي		نظري		نوع المادة
				هل يتوفر نظير للمقرر في الاقسام الاخرى				
				/		اسم المقرر النظير		
				/		القسم		
				/		رمز المقرر النظير		
معلومات تدريسي المادة								
أبو بكر سعد حمود				اسم مدرس (مدرسي) المقرر:				
لا يوجد				اللقب العلمي:				
لا يوجد				سنة الحصول على اللقب				
بكالوريوس طب بيطري				الشهادة :				
2023				سنة الحصول على الشهادة				
1 سنة				عدد سنوات الخبرة (تدريس)				

الوصف العام للمقرر

- 1- دراسة الهيكل الجسدي: تحليل البنية العظمية والعضلية والانسجة الرخوة للجسم بما في ذلك الأعضاء الداخلية والأنظمة المختلفة.
- 2- التصنيف الوظيفي: تصنيف وظائف وأنواع الانسجة والأعضاء والأنظمة الحيوية بالتفصيل وكيفية تفاعلها مع بعضها البعض للحفاظ على وظائف الجسم .
- 3- التشريح السريري: دراسة التشريح التطبيقي لتحليل العلاقات الهيكلية في السياق السريري مثل توزيع الاعصاب والاعوية الدموية والانسجة المختلفة.

الاهداف العامة

- فهم البنية الأساسية للجسم البشري : تعلم الطلاب عن تركيب العظام والعضلات والانسجة الأخرى وكيفية تنظيمها داخل الجسم .
- تعرف على الأعضاء الداخلية والأنظمة: دراسة هيكل ووظيفة الأعضاء الداخلية مثل القلب والكلى والكبد والأنظمة مثل الهضمية والتنفسية والعصبية .
- التفاعل بين الأنظمة: فهم كيفية تفاعل الأنظمة المختلفة في الجسم للحفاظ على الوظائف الحيوية والصحة العامة .

الأهداف الخاصة

- 1- تعليم الهيكل الدقيق : فهم ودراسة الهيكل الدقيق للأنسجة والأعضاء والأنظمة داخل الجسم البشري .
- 2- تطوير المهارات التشريحية: تعلم تقنيات التشريح الدقيقة مثل التفريغ والقطع والتلوين والملاحظة تحت المجهر .
- 3- التفاعل مع التقنيات الحديثة: استخدام وتطبيق التقنيات الحديثة مثل التصوير بالرنين المغناطيسي والتصوير بالمقطع المحوري لدراسة الهيكل الداخلي للأعضاء .

الأهداف السلوكية او نواتج التعلم

- القدرة على التعرف على الهياكل التشريحية: تمكين الطلاب من التعرف بدقة على الهياكل التشريحية المختلفة في الجسم البشري بما في ذلك العظام والعضلات والاعصاب والاعوية الدموية.
- المهارات في التشريح التفصيلي: تطوير مهارات الطلاب في القيام بتقطيع وتشريح الاجسام البشرية بدقة وفهم العلاقات الهيكلية بين الأعضاء والأنظمة.
- التفاعل الفعال مع المواد التعليمية : تعزيز القدرة على استخدام المواد التعليمية المتعددة مثل النماذج الثلاثية الابعاد والرسوم التوضيحية لتحسين فهم التشريح .

المتطلبات السابقة

- اذكر أي متطلبات سابقة قد يحتاجها الطالب قبل التسجيل في المقرر، مثل مواد دراسية سابقة أو مهارات معينة.

الأهداف السلوكية او مخرجات التعليم الأساسية		
ت		آلية التقييم
1	الأهداف المعرفية: التعرف على التركيب التشريحي للجسم البشري: يمكن للطلاب تحديد وتصنيف الأعضاء والأنسجة المختلفة في جسم الإنسان.	تقارير، واجبات، امتحانات نظرية شفوية وتحريرية نصف فصلية وفصلية
2	التعرف على الأنظمة الجسمية: يمكن للطلاب وصف الأنظمة المختلفة مثل الجهاز الهضمي، الجهاز التنفسي، الجهاز العصبي، والجهاز العضلي.	تقارير، واجبات، امتحانات نظرية شفوية وتحريرية نصف فصلية وفصلية
3	الأهداف المهارية: تشريح العينات الحية: يمكن للطلاب إجراء تشريح بسيط على عينات حية أو ميتة وفهم العلاقات بين الأعضاء.	تقارير، واجبات، امتحانات نظرية شفوية وتحريرية نصف فصلية وفصلية
4	الاهتمام بالصحة الشخصية: يمكن للطلاب تطبيق المعرفة التشريحية في تحسين صحته الشخصية والعناية بجسمه.	تقارير، واجبات، امتحانات نظرية شفوية وتحريرية نصف فصلية وفصلية

أساليب التدريس (حدد مجموعة متنوعة من أساليب التدريس لتناسب احتياجات الطلاب ومحتوى المقرر)

الاسلوب او الطريقة	مبررات الاختيار
1. المناقشة	تقديم الخلاصة والفهم للموضوع
2. الالقاء	اكتساب الطالب مهارة تفسير النصوص
3. المحاضرة	محدد وواضح ويطبق بسهولة وهو التقليدي

الفصل الثاني من المحتوى العلمي						
				الوقت		عنوان الفصل
طرق القياس	التقنيات	طريقة التدريس	العنوان الفرعي	العملي	النظري	التوزيع الزمني
	سبورة - لايتوب	محاضرة	الاتجاهات التشريحية: إعطاء الإشارة إلى جميع اتجاهات جسم الإنسان	2	2	الأسبوع الأول
	سبورة - لايتوب	محاضرة	التشريح السطحي للقلب وللرنتين وسطح البطن : وصف موضع القلب حسب جدار الصدر وعدد الضلع.	2	2	الأسبوع الثاني
	سبورة - لايتوب	محاضرة	الخلايا والأنسجة	2	2	الأسبوع الثالث
	سبورة - لايتوب	محاضرة	نظام الهيكل العظمي	2	2	الاسبوع الرابع
	سبورة - لايتوب	محاضرة	الأطراف السفلي	2	2	الأسبوع الخامس
	سبورة - لايتوب	محاضرة	العظم المركزي	2	2	الأسبوع السادس
	سبورة - لايتوب	محاضرة	العمود الفقري	2	2	الأسبوع السابع
	سبورة - لايتوب	محاضرة	الجهاز العضلي	2	2	الأسبوع الثامن
	سبورة - لايتوب	محاضرة	الجهاز العصبي	2	2	الأسبوع التاسع
	سبورة - لايتوب	محاضرة	نظام القلب والأوعية الدموية	2	2	الأسبوع العاشر
	سبورة - لايتوب	محاضرة	الجهاز الهضمي	2	2	الأسبوع الحادي عشر
	سبورة - لايتوب	محاضرة	الجهاز البولي التناسلي	2	2	الأسبوع الثاني عشر
	سبورة - لايتوب	محاضرة	العين	2	2	الأسبوع الثالث عشر
	سبورة - لايتوب	محاضرة	الغدد الصماء	2	2	الأسبوع الرابع عشر
	سبورة - لايتوب	محاضرة	الاذن	2	2	الأسبوع الخامس عشر

المحتوى العلمي

The first modular Unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

- 1-3 General view about anatomy.
- 2-3 Anatomical terms.
- 3-3 Surface anatomy .
- 4-3 Anatomical planes and position .
- 5-3 Basic structures of the body .

4-Instructions:

- 4-1 study the over view carefully.
- 4-2 Learn briefly the modular unit of this package.
- 4-3 Perform the pre-test of this unit.

If you get (9) degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

* But when you get less than (9) degree in this test, you will need to continue learning this modular unit.

4-4 After you studying this modular unit.

The post -test you must doing it.

* If you get (9) degree or more, you must go to learn second modular unit.

* In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.

*After you complete the studying, perform the post -test examination for checking.

B- Performanc objectives

After studying this unit ,you should be able to:

1-Define anatomy and its scope .

2-Describe surface anatomy .

3- Describe anatomical planes.

4-Inform about important anatomical terms .

5-Describe the basic structures (skin, fasciae ,muscles ,joints ,ligaments ,bones ,cartilages ,tendons ,blood vessels, lymphatic system ,and nervous system .

C-Pre-test

Put a circle in front of right sentences:

1-Anatomy is the science which deals with the studying :

- | | |
|---------------------------------|--------------------|
| a-Structure . | b-function. |
| c- Structure , function. | d-none. |

2- Skin contains :

- | | |
|----------------------------|---------------------------|
| a-nails . | b-hair follicles . |
| c-sebaceous gland . | d-all . |

3-Flat bone type example:

- | | |
|--------------------|---------------------|
| a-hand . | b-vertebrae. |
| c- patella. | d- Skull . |

4-The blood vessels that transport the blood from the heart to various tissues of the body called :

- | | |
|-----------------------|------------------------|
| a-veins . | b- arteries . |
| c-arterioles . | d-tributaries . |

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Anatomy :

It's the science of the structure and function of the body .

Clinical anatomy :It's the study of the macroscopic structure and function of the body and its related to the practice of the medicine and other healthy science .

Anatomic position :

When the body lie on the back as in standing position and the palm in the front .

Terms related to position :

Imaginary lines ;median sagittal plane ;para median plane; anterior median line ;posterior median line ;mid axillary line ;sup clavicle line.

Direction and relative position :

Medial x lateral ; anterior x posterior ; superior x inferior ;external x internal ; proximal x distal ;palmer x dorsal ;planter x dorsal ; superficial x deep ;supine x prone .

Surface anatomy :

1-Virtical planes and lines .

2-Horizontal planes .

3-Transpyloric planes .

4-Subcostal planes .

5-Intertubrcular planes .

Self expression

Q1-What we mean by anatomy ?

Basic structures :

Skin

1-Epidermis (superficial).

2-Dermis (deep).

3-Skin creases .

4-Contains (nail ,hair ,follicles ,sebaceous gland ,sweat gland).

Fasciae

1- Superficial .

2-Deep .

Muscles

1-skeletal muscle .

2-Smooth muscle .

3-Cardiac muscle .

Joints

Site where two or more bones come together if move or not ;classified according to the tissue that lie between the bones .

1-fibrous joint (little move like skull).

2-cartilaginous joint (rib and sternum).

Either – primary (not move).

--Secondary (small amount of movement).

3-synovial joint :great freedom of movement (knee joint).

Self expression

Q2-Enumerate the types of the joints ?

Ligament

1-Fibrous Ligament .

2-elastic Ligament .

Bone:

Classified as :

-long bone (femur ,humerus).

-short bone (hand).

-flat bone (skull).

-irregular bone (vertebrae).

-sesamoid bone (patella) .

Cartilage and tendons

Blood vessels

-Arteries (transport the blood from the heart to various tissues of the body by their branches (arterioles <0.1mm).

-Veins (transport the blood from the various tissues of the body to the heart).The smaller vein called tributaries .

-Capillaries (microscopic vessels in from of network connecting the arterioles to the venues).

-Sinusoid (similar to the Capillaries but wider ,present in the bone marrow ,liver ,spleen).

Lymphatic system :

1-Lymphatic tissue :Type of connective that contain large number of lymphatic (thymus ,spleen ,lymph node and lymphatic nodules).

2-Lymphatic vessels :they are tubes that help the cardiovascular system in removal the fluid of the body from tissue to the blood .

3-Lymph :tissue fluid .

4- Lymph node .

Self expression :

Q3- What we mean by lymphatic vessels ?

Nervous system

It divided into main parts :

1-Central nervous system (brain and spinal cord).

The brain consist from number of neuron= nerve cell which consist from (cell "axon "dendrites).

2-Periphral nervous system (12 pairs of cranial nerves and 31 pairs of spinal nerves +their ganglia).

8 cervical

12 thoracic

5 lumber

5 sacral

1 coccygeal

Self expression

Q4-Enumerate the spinal nerves in the Peripheral nervous system ?

C :Post –test :

Q1-What we mean by anatomical position ?

Q2- Enumerate the type of the muscles ?

Q3- What we mean by capillaries ?

Q4-\what is the main parts of the nervous system ?

Key of Answers

**For the (1) modular unite in the (1st week) of
learning package**

Answers of the performance objectives Questions

Pre-test answers:

Q1-C.

Q2-D.

Q3-D .

Q4-B .

Self expression answers :

Q1- It's the science of the structure and function of the body .

Q2-1-fibrous joint (little move like skull).

2-cartilaginous joint (rib and sternum).

Either – primary (not move).

--Secondary (small amount of movement).

3-synovial joint :great freedom of movement (knee joint).

Q3- they are tubes that help the cardiovascular system in removal the fluid of the body from tissue to the blood .

Q4-31 pairs of spinal nerves +their ganglia).

8 cervical

12 thoracic

5 lumber

5 sacral

1 coccygeal

Post –test answers:

Q1- Anatomic position :

When the body lie on the back as in standing position and the palm in the front .

Q2-1-skeletal muscle .

2-Smooth muscle .

3-Cardiac muscle .

Q3- microscopic vessels in from of network connecting the arterioles to the venues).

Q4-1-Central nervous system .

2-Peripheral nervous system .

The Second modular Unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1: Surface anatomy of the abdomen .

3-2: Surface anatomy of the lung.

3-3: Surface anatomy of the heart .

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get(9)degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

***But when you get less than (9) degree in this test, you will need to continue learning this modular unit.**

4-4 After you studying this modular unit.

The post -test you must doing it.

*** If you get(9) degree or more, you must go to learn second modular unit.**

*** In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.**

***After you complete the studying, perform the post -test examination for checking.**

B- Performance objectives

After studying this unit ,you should be able to:

1-Know the surface anatomy of the abdomen .

2-Know the surface anatomy of the lung .

3- Know the surface anatomy of the heart .

C-Pre-test

Put a circle in front of right sentences:

1-Right sub costal region contain :

a-Liver .

b-gall bladder.

c- part of ascending colon.

d-all.

2- Umbilical region contain :

a-liver .

b-kidney .

c-small intestine .

d-uterus .

3-Rt. Lung has:

a-2 lobes .

b-3 lobes .

c- 4 lobes .

d- all .

4-Left atrium receive the blood from lung by :

a-3 veins .

b- 2 veins .

c-arteries .

d-none .

5-Inferior border of the heart localized 9cm away from the sternum on :

a-6th Rt.rib.

b-5th rib .

c-7th rib .

d-4th rib.

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package :

Surface anatomy of the body

It's the vertical and horizontal plane that divide the abdomen to nine regions .

1-Left hypochondriac region(left sub costal region).

That contain spleen and part of descending colon .

2-Epigastric region .

Which contain (stomach, duodenum, pancreas, transfer colon, part of liver.

3-Right hypochondriac region(Right sub costal region).

Which contain (liver ,gall bladder ,part of ascending colon).

4-Left lumbar region .

Which contain (descending colon and kidney).

5-Umbilical region .

That contain (small intestine).

6-Right lumbar region .

That contain (ascending colon ,right kidney).

7-Left iliac region .

Which contain (part of descending colon ,and part of sigmoid colon).

8-Supra pubic region .

Which contain (sigmoid colon .rectum ,urinary bladder ,uterus or prostate).

9- Right iliac region .

Which contain (part of descending colon ,appendix).

Self expression :

Q1-Enumerate the organs that present in the right lumber region ?

Surface anatomy of the lungs :

The apex of the lungs project into the neck 2.5 cm above the junction of the medial and intermediate third of the clavicle ;extend down to the base in the 8th rib .

The lungs divided into lobes by fissure .

-Rt lung has 3lobes :

-upper lobe .

-Middle lobe .

-lower lobe .

Its divided by oblique +Horizontal fissure .

-Lf lung has 2 lobes :

-upper lobe .

-lower lobe .

It divided by oblique fissure :which start from 3rd thoracic vertebra and extend down to the 6th rib .

Pleura : Its a membrane that cover the lung .

Self expression :

Q2-What is the extension of the oblique fissure ?

Surface anatomy of heart

The heart is hollow muscular organ ;pyramid shape ,place between the lungs upon the diaphragm .

Its base in the upper of chest and devided to the right ,and the apex in lower area devided to the left .

The heart divided into (4) chamber :

1-Right atrium (in which superior venacava open in it which drain the blood from upper part of body and inferior venacava which drain the blood from lower part of body).

2-Right ventricle (which is thicker than Rt atrium and connect to it by tricuspid valve ;and by pulmonary valve which drain the blood from the heart to lungs by pulmonary arteries).

3- Left atrium (That receives the blood from lung by 4 veins ; 2 from each lung).

4Left ventricle (which connect to Lf atrium and receives the blood from it by mitral valve then by aortic valve sent the blood to all the body).

Superior border :

-2.5cm away from the sternum on the 2nd Lf rib.

-3.5cm away from the sternum on the 3rd Rt rib.

Inferior border :

-9 cm away from the sternum on the 6nd Lf rib.

-1.2cm away from the sternum on the 5rd Rt rib.

Self expression :

Q3-Define the Lt atrium ?

C :Post –test :

Q1-Enumerate the organs that present in the epigastric region ?

Q2- Mention the organs that present in the Lt iliac region ?

Q3- What we mean by pleura ?

Q4-\what is the superior border of the heart ?

Key of Answers

For the (2) modular unite in the(2nd week)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-c.

Q2-c.

Q3-b .

Q4-d .

Self expression answers :

Q1- That contain (ascending colon ,right kidney).

Q2- oblique fissure :which start from 3rd thoracic vertebra and extend down to the 6th rib .

Q3- receives the blood from lung by 4 veins ; 2 from each lung).

Post –test answers:

Q1-They are stomach, duodenum, pancreas, transfer colon, part of liver .

Q2-They are part of descending colon ,and part of sigmoid colon .

Q3- Pleura : Its a membrane that cover the lung .

Q4--2.5cm away from the sternum on the 2nd Lf rib.

-3.5cm away from the sternum on the 3rd Rt rib.

The Third modular Unit

:1- Target population

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

anatomy concepts that want to learn the basic This (unit) will aid those who
.apply to the health field
.who have little or no information background It also intended for student

3-Central ideas

3-1: The cells .

3-2: The cells contents .

3-3: Tissues and its types .

4-Instructions:

.4-1 study the over view carefully

.4-2 Learn briefly the modular unit of this package

4-3 Perform the pre-test of this unit.

If you get (9) degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results

*But when you get less than (9) degree in this test, you will need to continue . learning this modular unit

.4-4 After you studying this modular unit

. The post -test you must doing it

If you get (9) degree or more, you must go to learn second modular unit. *

* In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need

*After you complete the studying, perform the post -test examination for checking

B- Performance objectives

After studying this unit ,you should be able to:

- 1-Know the cells and its contents .
- 2-Know the tissues and its types .

C-Pre-test

Put a circle in front of right sentences:

1-The cells are study by :

a-Microscopic.

b-Macroscopic .

c- None of them.

d-All.

2- The nucleus contents :

a-Protoplasm .

b-Nucleus .

c-Mitochondria .

d-All .

3- Mitochondria:

- a-Jelly like substance .
- b-Living matter .
- c- Respiratory structures .
- d- All .

4-Connective tissues consist from :

- a-Cell .
- b- Fiber .
- c-Supportive substance .
- d-All .

5-Muscular tissues are

- a-Voluntary.
- b-Involuntary.
- c-All .
- d-None of them.

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package.

Cells

The human body are made up of large number of cells of various kind which are so small that they can only be studies by microscopes.

1-Protoplasm:

Which is colorless jelly –like substance composed of protein, fats, carbohydrates, minerals, salt and water .

The cell are surround by thin membrane which is permeable to certain substance to enter it for nutrition and waste products to leave.

2-Nucleus:

Its in the center of the cell which is the living matter of the cell.

The nucleus contain number of rod-like structures called chromosomes these are small in size and there are Forty-six in group into 23 pairs, they possess structures terms genes which transmit the hereditary characteristics .

3-Mitochondria :

Which is small particles that act as respiratory structures in the cell .

4-Lysosomes :

Which is small particles that response for dissolve the complex chemical substance to small simple substance to absorbed and for extraction from the cell .

Self expression :

Q1- What we mean by mitochondria ?

Tissues

Its formed of collection of similar cells :

1-Epithelial tissue:

It is usual to classify it into :

A-Simple : consist of a simple layer of flattened or cubical or columnar (G.I.T)

.

B-Compound : which is composed of several layers (Endocardium ,Pleura, peritoneum).

2-Connective tissue :

Which contains :

1-cell .

2-fiber .

3-supportive substance .

Connective tissues classified into :

1-Fibrous tissue .

2-Areolar tissue .

3-Fatty tissue .

4-Cartilaginous tissue .

5- Bone tissue .

6- Muscular tissue .

Either:-----voluntary (skeletal muscle) .

-----involuntary (smooth and cardiac muscle) .

7-Nervous tissue :

Which consist from :

1-Nerve cell .

2-Axon .

3-Dendrites .

Self expression :

Q2- what are the types of the connective tissues ?

C :Post –test :

Q1-Enumerate the structures that present in the cells ?

Q2- What is the function of the nucleus ?

Q3- What we mean by lysosomes ?

Q4-Enumerate the types of the tissues in the human body ?

Q5- Enumerate the types of the muscles in the human body ?

Key of Answers

For the (3) modular units in the (3rd-4th week) of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-a.

Q2-d.

Q3-c .

Q4-d .

Q5-c .

Self expression answers :

Q1- Which is small particles that act as respiratory structures in the cell .

Q2-1-Fibrous tissue .

2-Areolar tissue .

3-Fatty tissue .

4-Cartilaginous tissue .

5- Bone tissue .

6- Muscular tissue .

7- Nervous tissue .

Post –test answers:

Q1- Protoplasm , Nucleus , Mitochondria , Lysosomes.

Q2- The nucleus contains chromosomes that contain genes which transmit the hereditary characteristics .

Q3- Which is small particles that respond for dissolving the complex chemical substance to small simple substances to be absorbed and for extraction from the cell .

Q4-1- Epithelial tissue.

2- Connective tissue .

Q5-1- voluntary .

2- involuntary .

The Four unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1: Skeleton system .

3-2: Skeleton bone of the shoulder (clavicle ,scapula)..

3-3: Skeleton bone of the arm (humerus).

3-4: Skeleton bone of the forearm (radius, ulna).

3-5: Skeleton bone of the wrist .

3-6: Skeleton bone of the palm .

3-7: Skeleton bone of the fingers .

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get(9)degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

***But when you get less than (9) degree in this test, you will need to continue learning this modular unit.**

4-4 After you studying this modular unit.

The post -test you must doing it.

*** If you get(9) degree or more, you must go to learn second modular unit.**

*** In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.**

***After you complete the studying, perform the post -test examination for checking.**

B- Performance objectives

After studying this unit ,you should be able to:

- 1-Know the Skeleton system.**
- 2-Know the Skeleton bone of the shoulder (clavicle ,scapula).**
- 3-Know the Skeleton bone of the arm (hummers).**
- 4-Know the Skeleton bone of the forearm (radius, ulna).**
- 5-Know the skeleton bone of the wrist .**
- 6-Know the Skeleton bone of the palm.**
- 7-Know the skeleton bone of the fingers .**

C-Pre-test

Put a circle in front of right sentences:

1-Central bones are :

- | | |
|------------------------|---------------|
| a-Skull and vertebrae. | b-Upper limb. |
| c- Lower limb. | d-All. |

2- The skeleton of the wrist consist from :

- | | |
|-------------|--------------|
| a-8 bones . | b-5 bones . |
| c-2 bones . | d-10 bones . |

3- The clavicle bone medial 2/3 are:

- | | |
|--------------|------------|
| a-Concave . | b-Convex . |
| c- Slender . | d- None . |

4-The wrist bone are ossified at :

- | | |
|--------------|--------------|
| a-10 years . | b- 6 years . |
| c-2 years . | d-12 years . |

5-Carpal tunnel its he passages of the :

- | | |
|------------------|-----------------|
| a-Radial nerve. | b-Ulna nerve. |
| c-Medial nerve . | d-None of them. |

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Skeleton system

Its multiple groups of skeletal parts that joints together by cartilage.

Skeleton system divided into (2) main part:

1-Central bones:

Which consist from : 1- skull . 2- vertebral column .

2-Peripheral bones :

Which consist from: 1- upper limb. 2-Lower limb.

Upper limb :

Its consist from :

1-Skeleton of the shoulder (1-clavicle bone. 2-scapula .)

2-Skeleton of the upper arm (Humerus bone).

3- Skeleton of the forearm (1-Radius . 2-Ulna).

4- Skeleton of the hand (skeleton of wrist which consist from 8carpal bones).

5-Skeleton of the palm (which consist from 5 metacarpal bones).

6-Skeleton of the fingers (which consist from phalanges).

Clavicle :

The clavicle is along slender bone lies horizontal across the neck .Its articulated with the sternum medially and scapula laterally .Its medial 2/3 are convex and lateral 1/3 is concave for word .

Scapula :

The scapula is a flat triangular bone that lies on the posterior thoracic wall between the 2nd and 7th. There are two surfaces: anterior + posterior.

There are three angles to the scapula (superior, inferior, lateral angle), but there are (3) borders:

1-superior border.

2-medial border.

3-lateral border.

Self expression: Q1-Enumerate the borders of the scapula bone?

There are two processes that project (coracoid process + Acromial process) which articulate with the clavicle, while the coracoid process articulates with muscles + ligaments.

The anterior surface is concave from the suprascapular fossa, while the posterior surface is divided by the spine into the supraspinatus fossa + infraspinatus fossa.

Humerus:

It is a long + strong bone in the upper arm which consists of (head, anatomical neck, greater tuberosity + lesser tuberosity + inter-tubercular groove + shaft and lower end).

The humerus articulates with the glenoid cavity of the scapula by the shoulder joint and to the ulna + radius.

Skeletal bones of the forearm:

Radius

Which is a lateral bone consisting of head, neck, shaft and lower end that articulates with the bones of the wrist by the wrist joint.

Ulna

Its long bone consist of upper end , shaft and lower end. Both ulna + radius has surfaces (anterior ,posterior ,medial) and has borders (anterior ,posterior, lateral).between the two bones there is inter-osseous space .

Skeleton bone of the wrist :

There are 8 carpal bones made of two row of four .

The proximal consist from (lateral to medial) scaphoid ,lunate ,triquetral ,pisiform bones.

The distal row consist from (trapezium ,trapezoid ,capitates and hamate bones.

There is ossify tunnel(carpal tunnel),its he passage of median nerve and tendon of the fingers.

These bones are cartilage at the beginning of the life but become ossify and complete ossification at 12th years.

Self expression :Q2-How many carpal bones in the wrist?

Skeleton bone of the palm :

There are five metacarpal bones each has base ,shaft ,head .

1st metacarpal bone of the thumb is the shorter and mobile .

skeleton bone of the fingers

There are three phalanges of the fingers but only two for the thumb.

The 1st phalange is the proximal one .

The 2nd phalange is the medial one .

The 3rd phalange is the distal one .

Self expression :Q3 :How many phalanges are present in the fingers?

C :Post –test :

Q1-Enumerate the main part of the skeleton system ?

Q2- Enumerate the skeleton of the upper limb ?

Q3- Enumerate the angles and borders of the scapula bone?

Q4-Mention short note about the skeleton of the palm ?

Q5- Enumerate the phalanges of the fingers ?

Key of Answers

For the (4) modular unit in the(7th -8thweek)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-a.

Q2-a.

Q3-b .

Q4-d .

Q5-c.

Self expression answers :

Q1- There are (3) borders :

1-superior border .

2-medial border .

3-lateral border .

Q2- There are 8 carpal bones made of two row of four bones.

Q3- There are three phalanges of the fingers but only two for the thumb.

Post –test answers:

Q1-The main parts are :

1-Central bones (skull, vertebral).

2-Periphral bones (upper and lower limb).

Q2- Upper limb :

Its consist from :

1-Skeleton of the shoulder (1-clavicle bone. 2-scapula .)

2-Skeleton of the upper arm (Hummers bone).

3- Skeleton of the forearm (1-Radius . 2-Ulna).

4- Skeleton of the hand (skeleton of wrist which consist from 8carpal bones).

5-Skeleton of the palm (which consist from 5 metacarpal bones).

6-Skeleton of the fingers (which consist from phalanges).

Q3- There are three angle to the scapula (superior ,inferior ,lateral angle), but there are (3) borders :

1-superior border .

2-medial border .

3-lateral border .

Q4-There are 5 metacarpal bones each has (base ,shaft ,head).The 1st metacarpal bone of the thumb is the shorter and mobile .

Q5- The1st phalange is the proximal one .

The 2nd phalange is the medial one .

The 3rd phalange is the distal one .

The five unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1: Lower limb.

3-2: Gluteal region (hip bone, sacral bone, ileum bone, pubis and ischium .

3-3: The thigh .

3-4: The legs.

3-5: The skeleton bone of the ankle .

3-6: The skeleton bone of the sole .

3-7: The skeleton bone of the toes.

3-8: The transverse arch .

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get(9)degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

*** But when you get less than (9) degree in this test, you will need to continue learning this modular unit.**

4-4 After you studying this modular unit.

The post -test you must doing it.

*** If you get(9) degree or more, you must go to learn second modular unit.**

*** In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.**

***After you complete the studying, perform the post -test examination for checking.**

B- Performance objectives

After studying this modular unit ,you should be able to:

- 1-Define the lower limb .**
- 2- Know the gluteal region.**
- 3- Know the skeleton bone of the thigh.**
- 4- Know the skeleton bone of the leg.**
- 5- Know the skeleton bone of the ankle.**
- 6- Know the skeleton bone of the sole .**
- 7- Know the skeleton bone of the toes .**
- 8- Know the transverse arch .**

C-Pre-test

Put a circle in front of right sentences:

1-Lower limb is consist from :

a-Gluteal region .

b-Thigh.

c- Knee.

d-All.

2- The hip bone is consist from :

a-Ileum.

b-pubis .

c-Ischium .

d-All .

3-The sacral bone consist from :

a-6 bones .

b-5 bones.

c- 4 bones.

d- None .

4-The tarsal bone consist from :

a-10 bones .

b- 6 bones .

c-2 bones .

d-7 bones .

5-The sole consist from:

a-5 metatarsal bones.

b-4 metatarsal bones.

c-8 metatarsal bones.

d-None of them .

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Lower limb

The primary function of the lower limb is to support the weight of the body and to provide stable in standing ,walking and running etc .The lower limbs are divided into many regions:

1-Gluteal region .

2-Thigh .

3-Knee.

4-Leg .

5-Ankle joint .

6-Foot.

Gluteal region

Which consist from:

Hip bone

Its consist from two big bones which articulate anterior by symphysis pubis and posterior to the trunk by strong joint sacroiliac joint. They protect the structures which is part of abdomen, it connected the trunk to the lower limb and control the weight of the body on it. Its consist from three bone united together (Ileum ,pubis, ischium).The outer surface of hip bone is deep depression called Acetabulum .That articulates to the femur bone .

Sacral bone :

Which consist from (5) big vertebra connect together which is

triangular in shape ,its base articulate with the 5th lumbar vertebra, and the apex to the down articulate with coccyx .

Ilium bone

Its consist from :

1-Gluteal surface .

2-Iliac fosse .

3-Sacropelvic surface .

Self expression : Q1:How many bones sacral bone are consist ?

Pubis bone

Which consist from body ,superior ramus, inferior ramus (superior +inferior +ischium) they form obturator foramen (which is passage of the obturator artery and nerve .

Ischium bone

Which is the lower part of the pelvic bone ,its shape as (v) .

Thigh

Femur bone its strong and long bone .It has (head ,neck ,greater and lesser trochanter ,shaft ,lower end (lateral and medial condoyle). The lower end articulated to knee joint to articulate to patella .

Leg

1-Parella :

It's the largest sesamoid bone triangle in shape ,its attached to the tendon of the quadriceps femoris muscle .

2-Tibia :

Its medial bone consist from upper end (head),shaft , lower end .

3-Fibula :

Its lateral bone has head , shaft , lower end . Its function to

protect the tibia and in movement the foot outer and inner,
between the two bones has interosseous membrane.

Skeleton of the ankle

Its consist from tarsal bones ,its consist from 7th bones in two rows the posterior row has two bones (Talus and Calcaneous),while the anterior row has 4 bones (Cuneiform bone which is medial ,lateral ,intermediate) +Cuboids bone .The 7 bone is Navicular bone .

Skeleton of the sole

They consist from 5 metatarsal bones ,each has base articulated with the anterior row of the ankle bones and apex articulated with the phalanges of the foot and the body between he both the 1st is thumb ,the 5th little finger .

Skeleton of the Toes

They contains of phalanges ,its small bone each finger has 3 phalanges except the thumb has two .

Transverse arch

Its more in the metatarsal bone ,it has important in walking depend on strong tendon that help by muscles for protect the arch .

Self expression Q2:What we means by Transverse arch?

C :Post –test :

Q1-Enumerate the main part of the lower limb ?

Q2- Enumerate the bones of the hip bone ?

Q3- Enumerate parts of the ileum bone ?

Q4-Mention the importance of the obturator foramen ?

Q5- Enumerate the main parts of the legs ?

Key of Answers

For the (5) modular unit in the(5th -6th -9th weeks)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-d.

Q2-d.

Q3-b .

Q4-d .

Q5-a.

Self expression answers :

Q1- Sacral bone is consist from (5) big vertebra connect together.

Q2- Transverse arch :Its more in the metatarsal bone ,it has important in walking depend on strong tendon that help by muscles for protect the arch .

Post –test answers:

Q1-The main parts are :

1-Gluteal region . 2-Thigh . 3-Knee. 4-Leg .
5-Ankle joint . 6-Foot.

Q2- The bones are :

Ileum , pubis , ischium .

Q3- Ilium bone parts are :

1-Gluteal surface .

2-Iliac fosse .

3-Sacropelvic surface .

Q4- The obturator foramen is passage of the obturator artery and nerve .

Q5- 1-Patella .

2-Tibia

3-Fibula .

The six unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1: Central bones.

3-2: Surface anatomy of the skull .

3-3: What we means by suture ,and its types .

3-4: What we means by fontanel and its closed time .

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get(9)degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

*** But when you get less than (9) degree in this test, you will need to continue learning this modular unit.**

4-4 After you studying this modular unit.

The post -test you must doing it.

*** If you get(9) degree or more, you must go to learn second modular unit.**

* In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.

*After you complete the studying, perform the post -test examination for checking.

B- Performance objectives

After studying this modular unit ,you should be able to:

- 1-Dedine the Central bones .
- 2- Know the surface anatomy of the skull.
- 3- Know the suture and its types.
- 4- Know the fontanel and its closed time .

C-Pre-test

Put a circle in front of right sentences:

1-Central bones composed from :

- | | |
|-------------|-------------------------------|
| a-Low jaw . | b-Cranium. |
| c- Skull. | d-Skull and vertebral column. |

2- Skull bones consist from :

- | | |
|-------------|--------------|
| a- Cranium. | b- Low jaw . |
| c-Both . | d-None . |

3- Superior surface of the skull consist from:

a-Frontal bone .

b-Parietal bone.

c- Occipital bone.

d- All .

4-The two parietal bone articulated by :

a-Cartilage.

b- Fibrous .

c-Sagittal suture .

d-None .

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Central bones:

The skull is composed of several separated bones united at immobile joint called sutures .

The mandible is an exception to this rule ,it united to the skull by mobile joint .

Its divided into tow parts:

1.Cranium .

2.lower jaw (mandible).

The cranium divided into two parts :

1.fascial bone.

Surface anatomy of the skull :

There are 6 surface anatomy :

- 1.superior.
- 2.Inferior .
- 3.Anterior.
- 4.Posterior.
- 5.Lateral .

Superior surface :

- 1.Frontal bone.
- 2.Parital bone .
- 3.Occipital bone .

The two parital bone articulated by sagittal suture and with frontal bone by coronal suture and with occipital bone by parito-occipital suture .There is anterior fontanel which closed in the second half of the second year ,and posterior fontanel which closed at the third month of age .

Self expression:Q1:Enumerate the bones that present in superior surface ?

Anterior surface:

Its consist of several bones start from part of frontal bone ,two orbital, maxillary bone ,nasal septum and zygomatic bone .

The bones which present in the anterior surface :

- 1.Frontal bone .
- 2.Nasal bone .
- 3.Orbital bone .
- 4.Maxillary bone .
- 5.Zygomatic bone .

Inferior surface :

It's the base of skull ,its divided :

1-Occipital bone .(foramen magnum).

2-Vomer bone .

3-Maxillary bone .

Self expression:Q2: Enumerate the bones that present in inferior surface ?

Lateral surface :

There is concave surface called (Temporal fosse) also has (Mastoid process or bone).

Posterior surface:

Only the occipital bone on the two side there are the two Mastoid process of the Temporal bone .

C :Post –test :

Q1-What are the two main part of the skull ?

Q2- Enumerate the bones in the lateral surface of the skull ?

Q3- What are the bones in the posterior surface of the skull?

Q4- Enumerate the names of the fontanel and its closed time?

Key of Answers

For the (6) modular unit in the(10th -11th weeks)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-d.

Q2-c.

Q3-d.

Q4-c.

Self expression answers :

Q1- Superior surface :

1.Frontal bone.

2.Parital bone .

3.Occipital bone .

Q2- Inferior surface :

It's the base of skull ,its divided :

1-Occipital bone .(foramen magnum).

2-Vomer bone .

3-Maxillary bone .

Post –test answers:

Q1-1.Cranium .

2.lower jaw (mandible).

Q2- There is concave surface called (Temporal fosse) also has (Mastoid process or bone).

Q3- Only the occipital bone on the two side there are the two Mastoid process of the Temporal bone .

Q4- There is anterior fontanel which closed in the second half of the second year ,and posterior fontanel which closed at the third month of age .

The seven unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1: Vertebral column.

3-2: What are the types of the vertebrae .

3-3: What are the curvatures of the vertebrae column.

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get(9)degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

*** But when you get less than (9) degree in this test, you will need to continue learning this modular unit.**

4-4 After you studying this modular unit.

The post -test you must doing it.

*** If you get(9) degree or more, you must go to learn second modular unit.**

*** In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.**

***After you complete the studying, perform the post -test examination for checking.**

B- Performance objectives

After studying this modular unit ,you should be able to:

1-Define the vertebrae column.

2- Know the types of the vertebrae.

3- Know the curvatures of the vertebrae column.

C-Pre-test

Put a circle in front of right sentences:

1-Vertebral column composed from :

- | | |
|------------------|------------------|
| a-33 vertebrae . | b-18 vertebrae. |
| c- 35 vertebrae. | d- 22 vertebrae. |

2- Cervical vertebrae consist from :

- | | |
|-----------------|------------------|
| a-12 vertebrae. | b- 7 vertebrae . |
| c-5 vertebrae . | d-None . |

3- Lumber vertebrae consist from:

- | | |
|------------------|----------------|
| a-5 vertebrae . | b-7 vertebrae. |
| c- 12 vertebrae. | d- None . |

4-Kyphosis is the defect in :

- | | |
|-----------------------|----------------------|
| a-Thoracic curvature. | b- lumber curvature. |
| c- Side curvature . | d-None . |

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Vertebral column

It's the back which extent from the skull to the tip of coccyx , and can be define as the posterior surface of the trunk. It the central-bony pillar of the body , its support the skull , shoulder girdle , upper limbs , and thoracic cage , and by way of the pelvic girdle transmit the body weight to the lower limb .

Within its cavity lie the spinal cord ,roots of the spinal nerves and the covering meninges to which the vertebral column gives great

The vertebral column consist from small bony parts called vertebrae between them there is pads of fibro cartilage called inter-vertebral disc .

The vertebral column composed from 33 vertebrae :

7 cervical ;12 thoracic ;5 lumber ;5 sacral (2fused to form the sacrum) and 4 coccygeal (the lower 3 are fused) .

The typical consist from ;(body ;vertebral arch ;vertebral foramen; spine ; transverse process ;and articular process .

Self expression: Q1-Defined the typical vertebrae?

1-Cervical vertebrae

Its (7) vertebrae , the 1st one called Atlas which articulate with the occipital bone of the skull by Atlanto-occipital .

The 2nd vertebrae called Axis which support the movement of the atlas vertebrae and skull .

2-Thoracic vertebrae

Its (12) vertebrae each one has big body + long spine , its articulate with the ribs of the chest ,it has free drum in movement .

Self expression: Q2- Defined the thoracic vertebrae ?

3-Lumber vertebrae

They are (5) in number ,it's the biggest one in the vertebral column, it has restriction in movement, and has kidney

shape beside the vertebral canal is triangular in shape .

4-Sacral vertebrae

They are (5) vertebrae ,they joint together to form sacrum bone , which is triangular in shape ,the base is in the upper and the apex in the lower part , articulated with coccyx .

5- Coccygeal vertebrae

Its small bone triangular consist from (4) vertebrae .

The curvatures of the vertebral column

1-Kyphosis (Thoracic curvature) .

2-Lordosis (Lumber curvature) .

3-Scoliosis (side curvature) .

Self expression: Q2-Enumerate The curvatures of the vertebral Column?

C :Post –test :

Q1- Enumerate the types of vertebrae in the vertebral column ?

Q2-Defined the lumbar vertebrae ?

Q3- Defined the Coccygeal vertebrae?

Key of Answers

For the (7) modular unit in the(12th weeks)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-a.

Q2-b.

Q3-a.

Q4-a.

Self expression answers :

Q1- The typical vertebrae consist from ;(body ;vertebral arch; vertebral foramen; spine ; transverse process ;and articular process.

Q2- Thoracic vertebrae

Its (12) vertebrae each one has big body + long spine , its articulate with the ribs of the chest ,it has free drum in movement .

Q3- The curvatures of the vertebral column

1-Kyphosis (Thoracic curvature) .

2-Lordosis (Lumber curvature) .

3-Scoliosis (side curvature) .

Post –test answers:

Q1- The vertebral column composed from 33 vertebrae:

7 cervical ;12 thoracic ;5 lumber ;5 sacral (2fused to form the sacrum) and 4 coccygeal (the lower 3 are fused) .

Q2- Lumber vertebrae

They are (5) in number, it's the biggest one in the vertebral column, it has restriction in movement, and has kidney shape beside the vertebral canal is triangular in shape.

Q3- Coccygeal vertebrae

Its small bone triangular consist from (4) vertebrae

The eight unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1: Muscles types.

3-2: Muscles of the head and face.

3-3: Muscles of the neck.

3-4: What are the muscles of the upper limb .

3-5: What are the muscles of the lower limb .

3-6: What are the muscles of the trunk .

3-7: What are the muscles of the abdomen .

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get (9) degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

*** But when you get less than (9) degree in this test, you will need to continue learning this modular unit.**

4-4 After you studying this modular unit.

The post -test you must doing it.

*** If you get (9) degree or more, you must go to learn second modular unit.**

*** In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.**

***After you complete the studying, perform the post -test examination for checking.**

B- Performance objectives

After studying this modular unit ,you should be able to:

- 1- Know the muscles types.**
- 2-Know the muscles of the head and face.**
- 3-Know the muscles of the neck**
- 4- Know the muscles of the upper limb.**
- 5- Know the muscles of the lower limb .**
- 6-Know the muscles of the trunk .**
- 7-Know the muscles of the abdomen .**

C-Pre-test

Put a circle in front of right sentences:

1-Muscular system are about of the body :

a-30% .

b-40%.

c- 50%.

d-None.

2- External muscles of the eye ball are :

a- 8 muscles.

b- 5 muscles .

c-6 muscles .

d-None .

3-Posterior muscles of the forearm supply by :

a-Radial nerve .

b-Ulner nerve.

c- Median nerve.

d- All .

4-Muscles of the iliac region supply by :

a-Femoral nerve.

b- Gluteal nerve .

c-Both .

d-None .

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Muscular system:

Its about 40% from body weight ,its consist :

1-Skeletal muscles :it's the muscles that cover the skeleton system ,its control by central nervous system and for that called voluntary muscles , also because its function called sport exercise .

2- Visceral muscles

These muscles inter in the structures of the internal organs and the blood vessels . They are involuntary type , and there are two kind ;

1-cardiac muscles.

2-smooth muscles.

Muscles of the hand and face:

1- Muscles of expression which supply by facial nerve and they are: a- muscle of the scalp (frontal belly ---occipital belly)

b- Muscles of the face (4)

2- Muscles of mastication which supply by trigeminal nerve.

3- External muscles of the eye ball: 6muscles

a-4 recti muscles.

b-2 oblique muscles.

these muscles supply by trochlear nerve ,occulomotor nerve and abducent nerve.

Muscles of the neck :-anterior–superficial (4 muscles).

- Deep(4 muscles).

Self expression: Q1:Enumerate the muscles of the neck?

Muscles of the upper limb:

- 1- Muscles of the back(4muscles supply by accessory nerve)
- 2- Muscles of the chest (three anterior muscles and one lateral)
- 3- Muscles of the shoulder (five muscles supply by axillary nerve)
- 4- Muscles of the upper arm (three anterior muscles and two posterior).
Supply by musculo –cutaneous.

muscles of the forearm:

- 1- Anterior muscles (supply by ulnaer and median nerves)
 - a-superficial (5muscles).
 - b-deep (3 muscles).
 - 2-posterior muscles
 - a- Six superficial muscles supply by radial nerve.
 - b- two deep muscles.
- muscles of the hand supply by median and ulnar nerves.

Muscles of the lower limb:

- 1-Muscles of the iliac region (3) muscles supply by femoral nerve .
- 2-Muscles of the gluteal region (9) muscles supply by gluteal nerve .
- 3-Muscles of the thigh, they are 3groups:
 - 1-anterior (2)muscles supply by femoral nerve .
 - 2-posterior (3) muscles supply by sciatic nerve .
 - 3-medial (3) muscles supply by obturator nerve.

Self expression Q2: Enumerate the muscles of the thigh?

Muscles of the legs:

- 1-Anterior(3) muscles supply by deep peroneal nerve.
- 2-Posterior(superficial +deep) supply by tibial nerve.
- 3-Lateral(2) muscles supply by superficial peroneal nerve.

Muscles of the foot:

Planter muscles (4) layers.

Muscles of the trunk:

Chest muscles == superficial.

== deep—intercostal muscles.

---diaphragm .

Muscles of the abdomen:

They are (5) muscles.

C :Post –test :

Q1- Enumerate the muscles of the leg ?

Q2-Write short note about muscle of the expression ?

Q3- Enumerate the muscle of the trunk?

Key of Answers

For the (8) modular unit in the(13th -14th -15th weeks)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-b.

Q2-c.

Q3-a.

Q4-a.

Self expression answers :

Q1- anterior—superficial (4 muscles).

- Deep(4 muscles).

Q2- 1-anterior (2)muscles supply by femoral nerve .

2-posterior (3) muscles supply by sciatic nerve .

3-medial (3) muscles supply by obturator nerve.

Post –test answers:

Q1- Muscles of the legs:

1-Anterior(3) muscles supply by deep peroneal nerve.

2-Posterior(superficial +deep) supply by tibial nerve.

3-Lateral(2) muscles supply by superficial peroneal nerve.

**Q2- Muscles of expression which supply by facial nerve and they are:
a-muscle of the scalp (frontal belly ---occipital belly).**

b- Muscles of the face (4).

Q3- Chest muscles == superficial.

== deep—intercostal muscles.

---diaphragm .

The nine unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1:Nervous system.

3-2: Central N.S.

3-3: Peripheral N.S .

3-4:Autonomic N .S .

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get(9)degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

* But when you get less than (9) degree in this test, you will need to continue learning this modular unit.

4-4 After you studying this modular unit.

The post -test you must doing it.

* If you get(9) degree or more, you must go to learn second modular unit.

* In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.

*After you complete the studying, perform the post -test examination for checking.

B- Performance objectives

After studying this modular unit ,you should be able to:

- 1- Know the nervous system.
- 2-Know the central N.S. .
- 3-Know the peripheral N.S.
- 4- Know the autonomic N .S .

C-Pre-test

Put a circle in front of right sentences:

1-The central N.S.consist from :

a-Brain .

b-Spinal cord.

c- Menings.

d-All.

2-Cranial nerves supply the head and neck except:

a- Vagus.

b- Trigeminal .

c-Both .

d-None .

3-Cerebellum consist from :

a-3 peduncle .

b-4 peduncle.

c- 2 peduncle.

d- None.

4-Parasympathetic N.S.consist from :

a-ganglia.

b- Nerve fiber .

c-Both .

d-None .

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Nervous system

Its divided into :

A-Somatic N.S.

Which divided into two main parts:

I-Central N.S.

Which consist from:

1-Brain :which consist :

1-Cerebrum :They are two hemispheres separated by central fissure, consist from:

A-Cerebral cortex (Motor area ,sensory area ,visual area ,auditory area ,speech, taste ,and smell area).

Self expression Q1- What are the function of the Cerebral cortex ?

B-Internal part :consist from :

****Basal ganglia**

****Thalamus** (receive all the sensation of the body).

****Hypothalamus** :its function:

1-Hormonal sensation secretion control fluid balance.

2-Appetite balance .

3-Autonomic system control .

Self expression Q2-What are the function of the hypothalamus ?

2-Cerebellum .

Which consist from (3)cerebellar peduncles (superior ,middle ,inferior).control all the muscles contraction of the body .

3-Brain stem :consist from two cerebral peduncle which divided into:

*****mid brain .**

*****Pons .**

*****medulla oblongata.**(Which continue to pass through foramen magnum to the beginning of the spinal cord).

2-Spinal cord :

Which consist from grey matter (cells) and white matter (fibers).

3-Meninges:==Dura matter .

==Arachnoids matter.

==Pia matter.

C.S.F(cerebro-spinal fluid):

The fluid that present in the subarachnoid space , its colorless fluid,semiler to the lymphatic fluid in their continece and function .

Its used for the diagnosis some disease throughL.P.(lumber puncture) .

Self expression Q3 Write short note about C.S.F.?

II- Peripheral N.S.

Consist from:

*** (12) pairs of cranial nerves (which supply the head and neck except vagus nerve(10) supply the thoracic and abdomen structures) *** (31) pairs of spinal nerves and its ganglia .

B-Autonomic N.S.

Its function to control the function of the internal organs (heart ,G.I.T.,bladder , blood vessels).Its divided into :

1-Sympathetic N.S.

Which consist from ganglia + nerve fiber +plexuses .

2-Para sympathetic N.S.

Which consist from ganglia + nerve fiber ,its control involuntary activities .

C :Post –test :

Q1- Enumerate the main part of the N.S. ?

Q2-Enumerate the layers of the meninges ?

Q3- What are the function of autonomic N.S.?

Key of Answers

For the (9) modular unit in the(16th -17th weeks)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-d.

Q2-a.

Q3-a.

Q4-c.

Self expression answers :

Q1- Motor area ,sensory area ,visual area ,auditory area ,speech, taste ,and smell area.

Q2-1-Hormonal sensation secretion control fluid balance.

2-Appetite balance .

3-Autonomic system control .

Q3- C.S.F(cerebro-spinal fluid):

The fluid that present in the subarachnoid space , its colorless fluid,semiler to the lymphatic fluid in their continece and function .

Its used for the diagnosis some disease throughL.P.(lumber puncture) .

Post –test answers:

Q1-Somatic N.S.and autonomic N.S.

Q2- Meninges:==Dura matter .

==Arachnoids matter.

==Pia matter.

Q3- Its function to control the function of the internal organs (heart, G.I.T.,bladder , blood vessels).Its divided into :

The Ten unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1: The heart.

3-2: Systemic circulation arteries .

3-3: Blood vessels.

3-4: Applied points.

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get(9)degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

*** But when you get less than (9) degree in this test, you will need to continue learning this modular unit.**

4-4 After you studying this modular unit.

The post -test you must doing it.

*** If you get(9) degree or more, you must go to learn second modular unit.**

*** In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.**

***After you complete the studying, perform the post -test examination for checking.**

B- Performance objectives

After studying this modular unit ,you should be able to:

1-Define the heart .

2- Know the blood vessels.

3- Know the Systemic circulation arteries.

C-Pre-test

Put a circle in front of right sentences:

1-The wall of the heart composed from:

- | | |
|------------------------|-----------------------|
| a-Myocardium . | b-Pericardium. |
| c- Endocardium. | d-All. |

2- The heart supply by coronary arteries :

- | | |
|----------------------|----------------------|
| a-4 arteries. | b-2 arteries. |
| c-3 arteries. | d-None . |

3-The veins has -----that prevent the blood to return back :

- | | |
|---------------------|------------------|
| a-valves . | b-Venues. |
| c- Pressure. | d- None . |

4-The inferior vena cava drain the blood from :

- | | |
|-----------------------|------------------|
| a-Head . | b- Neck . |
| c-Lower body . | d-All. |

5-The superior vena cava drain the blood from :

- | | |
|----------------|-------------------------|
| a-Head. | b-abdomen. |
| c-Neck. | D-Head and neck. |

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Cardio-vascular system

Its closed vascular system consist from :

1-Heart.

2-Blood vessels.(arteries ,veins ,capillaries).

A-Arteries :

They transmitted the blood from the heart to the body ,there are (3)types of them :

1-Elastic arteries :it's the biggest diameter type , has little muscular tissue ;
exp :aorta which used for decreased the pulse pressure which is the rate between systolic and diastolic blood pressure .

2-Muscular arteries :

Its middle size in diameter arteries ,it has more muscular tissue, its supply the internal organs ;exp:coronary arteries + upper and lower limb visceral arteries .

Self expressionQ1 :What we mains by muscular arteries?

3-Arterioles :

Its very small arteries end to capillaries .

B-Veins

Its start as venues then end into vein which transmitted the blood from all the body to form the superior vena cava and inferior vena cava that end in the right atrium .Some veins are superficial like medium cubical vein which use for I.V. supplement, it has valves to prevent return back the blood in opposite direction only to the heart .

C-Capillaries :Its microscopic network of blood vessels receives the blood from arterioles a to the venues, there are two types (continuous , fenestrated).

Heart :

Its muscular hallow organ ,pyramid in shape lies within the Pericardium in the midiastinum , consist from :(2)atrium +(2) ventricles .

The walls of the heart are composed from cardiac muscle (Myocardium) ,cover external by (Pericardium) and lined internally by layer called (Endocardium).

Self expressionQ2 :What are the layers of the heart wall ?

The heart supply by (2) coronary arteries rise from aorta (RT ,Lt) ,its important to develop angina pectoris +myocardial infarction .

Systemic circulation arteries

Aorta *Thoracic aorta .**

*****Abdomen aorta .**

Thoracic aorta :consist from :

1-Ascending which gives (Rt ,Lt) coronary arteries

2-Aortic arch -----Brachio-cephalic artery ---Rt subclavian artery .

---Rt common carotid artery.

-----Lt common carotid artery—external carotid artery.

(facial ,temporal ,occipital and maxillary) .

---internal carotid artery(skull).

-----Lt subclavian artery---vertebral artery .

---Thyroid artery .

--- internal thoracic artery.

(chest +breast) .

**subclavian artery---axillary artery---brachial artery---radial +ulna artery--
--palmer artery .**

Abdominal aorta

1-Coeliac artery .

2-Superior mesenteric artery.

3-Inferior mesenteric artery.

4-Rt renal artery +Lt renal artery.

5-Common iliac arteries (Rt ,Lt).

They divided into ----internal (pelvic organs +uterine artery).

----external (lower limb)—femoral ---popliteal ---anterior and posterior tibial artery ---planter artery .

Veins

Similar to the passage of the arteries in the upper and lower limb ,sent to the inferior venacava from lower part of the body and from upper part of the body through superior venacava to the Rt atrium.

Applied points

1-Sometime there is relationship between internal and external vein inside the skull for that cause transmitted the bacteria to the internal structure of the skull if any infection accrued in the face or skull .

2-Cardiac catheterization :catheter pass from ulna vein to brachial through subclavian to the Rt atrium under the x-ray control.

3-Venous thrombosis :sometime this thrombosis moved through the blood to form embolism (pulmonary or cardiac infarction).

4-Sometime due to increase the pressure in the vein caused dilation of the veins called varicose vein ,exp :between the stomach +esophagus caused haematamesis ,or in the rectum caused haemorrieod, and sometime increase the pressure in the capillaries caused enlargement of the organ like in the spleen ,or increase the fluid in the peritoneal cavity caused ascites .

Self expressionQ1 :What we mains by ascites ?

C :Post –test :

Q1-Enumerate the main part of the cardio-vascular system ?

Q2- What are the main branches of the abdominal aorta ?

Q3- What we main by cardiac catheterization ?

Key of Answers

For the (10) modular unit in the(18th -19th -20th -21th weeks)of
learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-d.

Q2-b.

Q3-a .

Q4-c .

Q5-d.

Self expression answers :

Q1- Its middle size in diameter arteries ,it has more muscular tissue, its supply the internal organs ;exp:coronary arteries + upper and lower limb visceral arteries .

Q2- The walls of the heart are composed from cardiac muscle (Myocardium) ,cover external by (Pericardium) and lined internally by layer called (Endocardium).

Q3- increase the fluid in the peritoneal cavity caused ascites, due to increase the pressure in the capillaries .

Post –test answers

Q1-1-Heart.

2-Blood vessels.(arteries ,veins ,capillaries).

Q2- 1-Coeliac artery .

2-Superior mesenteric artery.

3-Inferior mesenteric artery.

4-Rt renal artery +Lt renal artery.

5-Common iliac arteries (Rt ,Lt).

Q3- Catheter pass from ulna vein to brachial through subclavian to the Rt atrium under the x-ray control.

The eleventh unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1: The digestive canal.

3-2: Additional digestive parts .

3-3: Liver and gall bladder.

3-4: Pancreas.

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get(9)degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

* But when you get less than (9) degree in this test, you will need to continue learning this modular unit.

4-4 After you studying this modular unit.

The post -test you must doing it.

* If you get(9) degree or more, you must go to learn second modular unit.

* In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.

*After you complete the studying, perform the post -test examination for checking.

B- Performance objectives

After studying this modular unit ,you should be able to:

1-Know the digestive canal .

2- Know the additional digestive glands.

3- Know the liver and gall bladder and their function.

4- Know the pancreas and its function .

C-Pre-test

Put a circle in front of right sentences:

1-The digestive system consist from:

- | | |
|----------------------------|----------------------------|
| a-Digestive canal . | b-Digestive glands. |
| c- None . | d-All. |

2- The storage of the vitamins(A,B12,D,E,K) in the :

- | | |
|--------------------|------------------------|
| a-liver. | b-gall bladder. |
| c-pancreas. | d-None . |

3-The storage of the bile is in the :

- | | |
|-------------------------|--------------------|
| a-liver . | b-pancreas. |
| c- Gall bladder. | d- None . |

4-The insulin is secreted from pancreas as :

- | | |
|-------------------------------|--------------------------------|
| a-Internal secretion . | b- External secretion . |
| c- None. | d-All. : |

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Digestive system

Its divided in to :

1-Digestive canal:

Which consist from { mouth, pharynx ,esophageal ,stomach ,small intestine (duodenum, jejunum ,ileum),appendix ,large intestine (colon ,3 part ascending ,transverse ,descending) ,rectum and anal canal } .

2-Additional digestive parts:

1-Salivary gland.

2-parotid gland .

3-submandibular gland.

4-sublingual gland.

Self expression Q1:What are the parts of the large intestine ?

5-liver.

Function of the liver :

1-production of the bile salt .

2-excretion of the bile secretion .

3-Removel some drugs and hormones and poisoning .

4-Storages some vitamins (A,B12,D,E, K) and some material like (ferrous , copper) .

5-Obsorption the damage of the RBC,WBC and some bacteria .

6-Gall bladder:

Its sac pyramidal in shape .

Function of the gall bladder :

- 1-Storage of the bile .
- 2-Increase the concentration of the bile .
- 3-Excretion of the bile on need .

7-Pancreas :

It has two type of secretion:

- a-Internal secretion (insulin ,glycogen ,somatostatine).
- b-External secretion in the intestine for digestive the food .

Self expression :Q2:What are the function of the gall bladder ?

C :Post –test :

- Q1-Enumerate the additional digestive glands ?
- Q2- What are the function of the pancreas ?

Key of Answers

For the (11) modular unit in the(22 -23 -24 - weeks)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-d.

Q2-a.

Q3-c .

Q4-a .

Self expression answers :

Q1-3 part ascending ,transverse ,descending .

Q2- 1-Storage of the bile .

2-Increase the concentration of the bile .

3-Excretion of the bile on need .

Post –test answers

Q1- 1-Salivary gland.

2-parotid gland .

3-Submandibular gland.

4-Sublingual gland.

5-Liver .

6-Gall bladder.

7-Pancreas.

Q2- a-Internal secretion (insulin ,glycogen ,somatostatine).

b-External secretion in the intestine for digestive the food .

The Twelfth Unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1: The respiratory system.

3-2: The genito-urinary system .

3-3: The reproductive (male ,female)system.

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get (9) degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

* But when you get less than (9) degree in this test, you will need to continue learning this modular unit.

4-4 After you studying this modular unit.

The post -test you must doing it.

* If you get(9) degree or more, you must go to learn second modular unit.

* In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.

*After you complete the studying, perform the post -test examination for checking.

B- Performance objectives

After studying this modular unit ,you should be able to:

- 1-Know the respiratory system .
- 2- Know the genito-urinary system.
- 3- Know the reproductive (male ,female)system.

C-Pre-test

Put a circle in front of right sentences:

1-The external organs of the female genital system consist from:

- | | |
|----------------------|-----------------|
| a- Labia major . | b- Labia minor. |
| c- Partholine gland. | d-All. |

2- The external organs of the male genital system consist from :

a- Scrotum .

b- Penis.

c-All.

d-None .

3-The internal organs of the female genital system consist from :

a- Uterus.

b- Fallopian (uterine) tube.

c- Ovary.

d- All .

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Respiratory system :

Its consist from:

1-Thoracic cavity .

2-Diaphragm.

3-Nose .

4-Pharynx.

5-Larynx.

6-Trachea .

7-Bronchi.

8-Lungs.

Genito-urinary system :

Its consist from :

1-Kidney .

2-Ureter .

3-Bladder .

4-Urethra.

Self expression:Q1-Enumerate the structures of the genito-urinary system?

Reproductive (genital) system :

Male genital system :

A-Internal organs:

1-Testis .

2-Epididymis .

3-Vasdegreferens.

4-Seminal vesicle .

5-Ejaculatory .

6-Prostate.

7-Cowper's gland .

B-External organs :

1-Scrotum .

2-Penis .

Self expression:Q2- Enumerate the external organs of the male genital system ?

genital system :

A-External organs :

1-Pubic area .

2-Labia major .

3- Labia minor .

4-Clitoris .

5-Partholine gland .

6-Vagina .

B- Internal organs:

1-Vagina .

2-Uterus .

3-Fallopian (uterine) tube .

4-Ovary .

C :Post –test :

Q1-Enumerate the structures of the respiratory system ?

Q2- Enumerate the Internal organs of the female genital system ?

Key of Answers

For the (12) modular unit in the(25 -26 weeks)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-d.

Q2-c.

Q3-d .

Self expression answers :

Q1-1-Kidney .

2-Ureter .

3-Bladder .

4-Urethra.

Q2- 1-Scrotum .

2-Penis

Post –test answers

Q1- Its consist from:

1-Thoracic cavity .

2-Diphragam.

3-Nose .

4-Pharynx.

5-Larynx.

6-Trachea .

7-Bronchi.

8-Lungs.

Q2-

1-Vagina .

2-Uterus .

3-Fallopian (uterine) tube .

4-Ovary .

The Thirteenth Unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1: The anatomy of the eye .

3-2:The contents of the eye ball .

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get(9)degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

* But when you get less than (9) degree in this test, you will need to continue learning this modular unit.

4-4 After you studying this modular unit.

The post -test you must doing it.

* If you get(9) degree or more, you must go to learn second modular unit.

* In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.

*After you complete the studying, perform the post -test examination for checking.

B- Performance objectives

After studying this modular unit ,you should be able to:

1-Know the eyes .

2- Know the contents of the eye ball.

C-Pre-test

Put a circle in front of right sentences:

1-The eye is embedded in orbital fat but separated by:

a- Fibers .

b- fascial sheath.

c-both .

d-All.

2- The eye ball consists of coats :

a- Three .

b-Five.

c-one.

d-four .

3- Vascular coat consist from:

a- Choroid.

b- Ciliary body.

c- Iris .

d- All .

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Eyes :

The eye is embedded in orbital fat but its separated from it by the fascial sheath of the eye ball .

The eye ball consists of three coats which from out in word are the fibrous coat ,the vascular pigmented coat and the nervous coat .

The fibrous coat is made up of sclera and cornea .

Self expression:Q1-What are the parts of the fibrous coat ?

Lamina eribrosa is the area of the sclera that is pierced by the nerve fibers of the optic nerve ,its a weak area and can be made to bulge into the eye ball by increase cerebro-spinal fluid pressure .

Vascular coat consist from choroid ,the ciliary body and the iris .

The center area of the iris is the pupil .

The nervous coat is the retina.

The content of the eye ball :

Its consist from refractive media ,the aqueous humor ,the vitreous body and the lens .

Self expression:Q2-What are the content of the eye ball ?

The aqueous humor is a clear fluid that filled the anterior and posterior chambers of the eye ball ,its secreted from ciliary processes, any obstruction to the drainage cause arise in the intra-ocular pressure and glaucoma which may produce degeneration changes in the retina with consequent blindness .

Lens is transparent biconvex structure enclosed in a transparent capsule , it is situated behind the iris and in front of the vitreous body and encircles by the ciliary processes .

With advantaging age ,the lens becomes denser and less elastic .

C :Post –test :

Q1-Enumerate the eye ball coats from out in word?

Q2-Writes a short note about the lens of the eye ?

Key of Answers

For the (13) modular unit in the(27 weeks)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-b

Q2-a.

Q3-d .

Self expression answers :

Q1- The fibrous coat is made up of sclera and cornea.

Q2- Its consist from refractive media ,the aqueous humor ,the vitreous body and the lens .

Post –test answers

Q1- The eye ball consists of three coats which from out in word are the fibrous coat ,the vascular pigmented coat and the nervous coat .

Q2- Lens is transparent biconvex structure enclosed in a transparent capsule , it is situated behind the iris and in front of the vitreous body and encircled by the ciliary processes .

The fourteenth unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

- 3-1: The Pituitary gland .
- 3-2: The Thyroid gland.
- 3-3: The parathyroid gland .
- 3-4: The adrenal gland .
- 3-5: The pineal gland .
- 3-6: Thymus gland.

4-Instructions:

- 4-1 study the over view carefully.
- 4-2 Learn briefly the modular unit of this package.
- 4-3 Perform the pre-test of this unit.

If you get (9) degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

* But when you get less than (9) degree in this test, you will need to continue learning this modular unit.

4-4 After you studying this modular unit.

The post -test you must doing it.

- * If you get (9) degree or more, you must go to learn second modular unit.
- * In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.
- * After you complete the studying, perform the post -test examination for checking.

B- Performance objectives

After studying this modular unit ,you should be able to:

- 1-Know the Pituitary gland .
- 2-Know the thyroid gland and parathyroid gland.
- 3- Know the adrenal gland.
- 4- Know the pineal gland.
- 5- Know the Thymus gland.

C-Pre-test

Put a circle in front of right sentences:

1-The growth hormone secrete from :

- | | |
|---------------------|-------------------|
| a- Pituitary gland. | b- Thyroid gland. |
| c-Adrenal gland. | d-None. |

2- The thyroxin T4 hormone secreted from :

- | | |
|--------------------|-------------------|
| a- Thyroid gland . | b- Adrenal gland. |
| c-Both. | d-None . |

3- Thymosin hormone secreted from:

- | | |
|-------------------|---------------------|
| a- Adrenal gland. | b- Pituitary gland. |
| c- Thymus gland. | d- None |

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

Endocrine glands :

1-Pituitary gland: which secreted the hormone from anterior and posterior lobes .

***Anterior lobe :**

1-Growth hormone .

2-Proactine hormone .

3-Thyriod stimulating hormone.

4-Adreno-corticotropic hormone.

6-Follicle stimulating hormone.

7-Luteinizing hormone.

***posterior lobe :**

1-Antidiuretic hormone.

2-Oxytocine hormone.

Self expression:Q1-What are the hormones that secreted from posterior lobe of the pituitary gland?

2-Thyriod gland : which secreted:

1- Thyroxin T4.

2- T3.

3- Calcitonin (decrease Ca, pH in blood by prevent the bone lysis).

3- Parathyroid gland (4 gland):

Which secreted Parathyroid hormone for increase Ca in the blood.

4- The adrenal gland:

1- Cortex area: which secreted (Aldosterone, Cortisone, Androgen).

2- Medulla : which secreted (Adrenaline, Noradrenalin).

Self expression: Q2- Enumerate the hormones that secreted from the adrenal gland medulla part ?

5- Pineal gland: which secreted melatonin (increase the whitish of the skin).

6- Thymus gland : which secreted the thymosin need for growth and maturation of the lymphatic cells.

C : Post –test :

Q1- Enumerate the hormones that secreted from the adrenal gland cortex part ?

Q2- Writes a short note about thymus gland?

Key of Answers

For the (14) modular unit in the(29th-30th weeks)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-a

Q2-a.

Q3-c .

Self expression answers :

Q1- 1-Antidiuretic hormone.

2-Oxytocine hormone.

Q2- Adrenaline ,Noradrenalin .

Post –test answers

Q1- The eye ball consists of three coats which from out in word are the fibrous coat ,the vascular pigmented coat and the nervous coat .

Q2- Thymus gland : which secreted the thymosin need for growth and maturation of the lymphatic cells .

The fifteenth unit

A: Over view

1- Target population:

This learning package has been designed to the first year students in the first ambulance department of al-dour technical Institute.

2- Rationale:

This (unit) will aid those who want to learn the basic anatomy concepts that apply to the health field.

It also intended for student who have little or no information background.

3-Central ideas

3-1: The external ear .

3-2:The middle ear .

3-3:The internal ear .

4-Instructions:

4-1 study the over view carefully.

4-2 Learn briefly the modular unit of this package.

4-3 Perform the pre-test of this unit.

If you get(9)degree or more . you will not need to learn this modular unit .In this case you must contact with your teacher to inform her about your results.

*** But when you get less than (9) degree in this test, you will need to continue learning this modular unit.**

4-4 After you studying this modular unit.

The post -test you must doing it.

*** If you get(9) degree or more, you must go to learn second modular unit.**

*** In case you get less than (9) degree, you must return to the same unit in order to learn and understand the steps which you need.**

***After you complete the studying, perform the post -test examination for checking.**

B- Performance objectives

After studying this modular unit ,you should be able to:

1-Know the external ear .

2-Know the middle ear .

3- Know the internal ear.

C-Pre-test

Put a circle in front of right sentences:

1-The ear consist from :

a-external ear.

b- middle ear .

c-internal ear.

d-All

2- The external ear from :

a- elastic cartilage .

b- fibrous cartilage .

c-Both.

d-None .

3- The ear supply by :

a-maxillary artery.

b- Facial artery .

c- All.

d- None

Note : To be sure from your right answer in the last page .

D-The Modular unit of this package:

The ear :

The ear consist from the external ear ,the middle ear or tympanic cavity and the internal ear or labyrinth ,the last containing the organs of the hearing and balance .

External ear

The external ear has an auricle (which consist from thin plate of elastic cartilage cover by skin) and an external auditory meatus which is a curved tube that leads from the auricle to the tympanic membrane .

Middle ear

It is an air containing cavity in the petrous part of the temporal bone ,its contain the auditory ossicles ,whose function is to transmits the vibration of the tympanic membrane .

The middle ear has a roof , floor , anterior wall ,posterior wall, lateral wall and medial wall .

Self expression:Q1-Howmany walls the middle ear have?

Internal ear or labyrinth

Situated in the petrous part of the temporal bone ,its consist of the bony labyrinth and membrane labyrinth .

The ear supply by facial nerve and vestibulocochlear nerve and maxillary nerve (v2) and supply by maxillary artery .

Self expression:Q2-What are the nerves that supply the ear ?

C :Post –test :

Q1-Enumerate the structures that form the ear ?

Q2-Writes a short note about the external ear ?

Key of Answers

For the (14) modular unit in the(28th weeks)of learning package

Answers of the performance objectives Questions

Pre-test answers:

Q1-d

Q2-a.

Q3-a .

Self expression answers :

Q1- The middle ear has a roof , floor , anterior wall ,posterior wall, lateral wall and medial wall

Q2- The ear supply by facial nerve and vestibulocochlear nerve and maxillary nerve (v2) .

Post –test answers

Q1- The ear consist from the external ear ,the middle ear or tympanic cavity and the internal ear or labyrinth ,the last containing the organs of the hearing and balance .

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Q2- The external ear has an auricle (which consist from thin plate of elastic cartilage cover by skin) and an external auditory meatus which is a curved tube that leads from the auricle to the tympanic membrane .

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• في المحاضرة ويفضل. ان تكون بصيغة رمز الاستجابة السريع QRC

