

تم تحميل هذا الملف من موقع المناهج الإماراتية



مراجعة نهائية وفق الهيكل الوزاري منهج بريدج الخطة A-M101

موقع المناهج ← المناهج الإماراتية ← الصف الحادي عشر العام ← علوم ← الفصل الأول ← ملفات المدرس ← الملف

تاريخ إضافة الملف على موقع المناهج: 2024-11-23 19:17:10

ملفات اكتب للمعلم اكتب للطالب الاختبارات الكترونية الاختبارات ا حلول اعروض بوربوينت ا أوراق عمل منهج انجليزي ا ملخصات وتقارير ا مذكرات وبنوك الامتحان النهائي للمدرس

المزيد من مادة
علوم:

إعداد: محمد أحمد رجب

التواصل الاجتماعي بحسب الصف الحادي عشر العام



صفحة المناهج
الإماراتية على
فيسبوك

الرياضيات

اللغة الانجليزية

اللغة العربية

التربية الاسلامية

المواد على تلغرام

المزيد من الملفات بحسب الصف الحادي عشر العام والمادة علوم في الفصل الأول

تدريبات نهاية الفصل وفق الهيكل الوزاري منهج انسباير الخطة M

1

حل تجميعية أسئلة وفق الهيكل الوزاري منهج بريدج الخطة M

2

الهيكل الوزاري الجديد المسار العام منهج بريدج الخطة 101-C

3

مراجعة عامة وفق الهيكل الوزاري

4

ملخص شرح مختصر في درس النباتات الزهرية

5



التوأمة بين مدرسة الظاهرة ومدرسة العطاء

Biology Final Revision

Grad 11 General: M.101-A

CH1- Excretory system

CH2- Endocrine system

Term 1

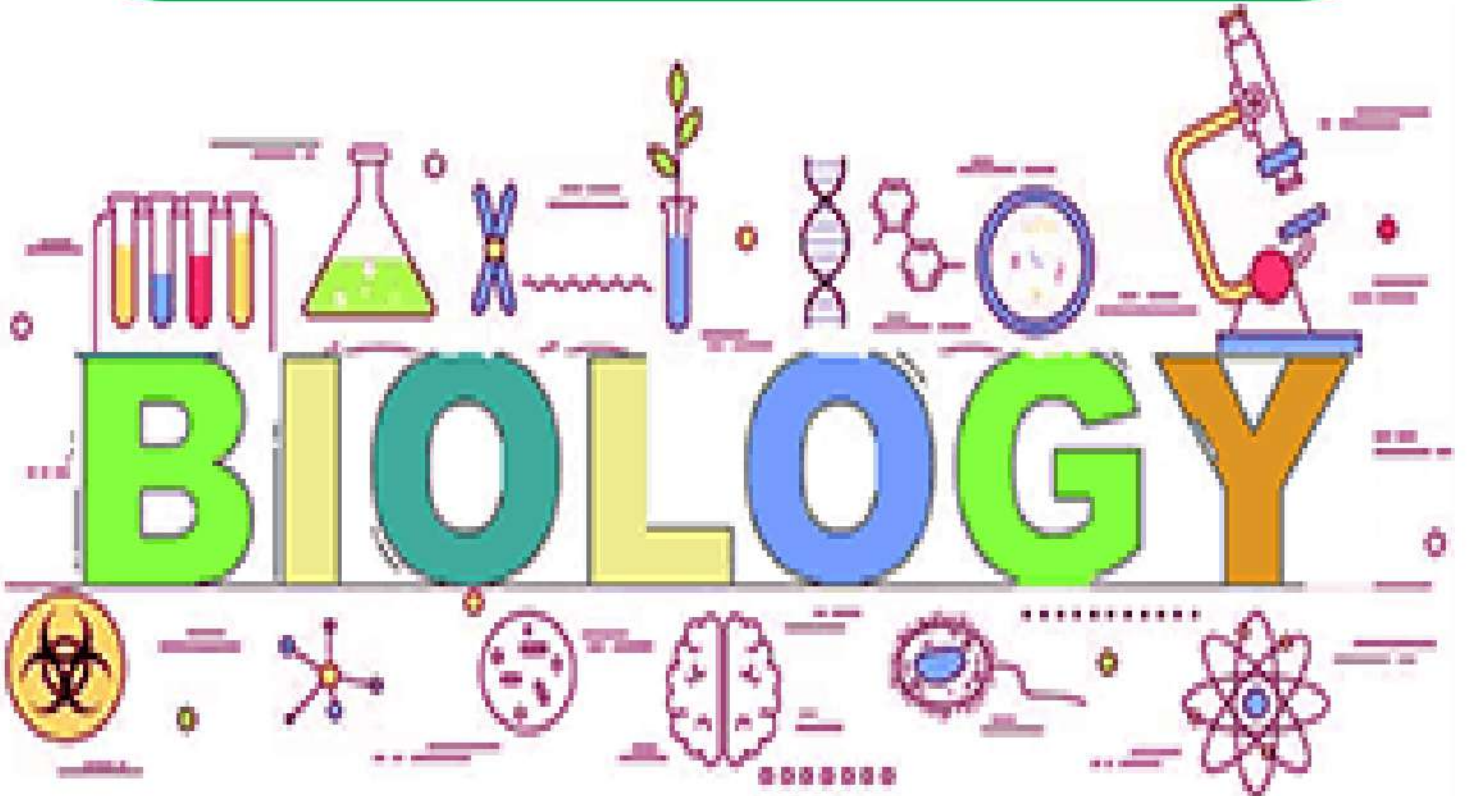
2024-2025

Biology Teacher

Mohammad Rajab

School Principal

Amna Alshamsi



Name:-----

Revision Biology: Gr 11 General

1	Describe the anatomy and physiology of the endocrine, excretory, and nervous systems and explain how these systems interact to maintain homeostasis	Get it	78
		Figure 16	124

1- Which of the following refers to a component of the excretory system?

- A B
C D

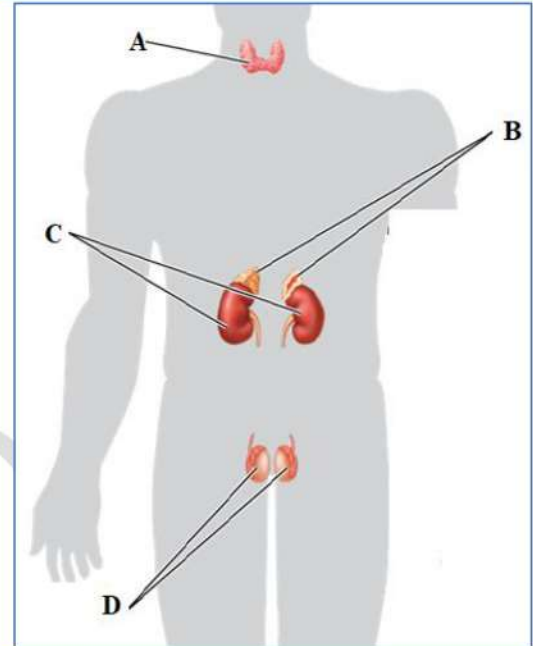
2- Which of the following refers to a component that affects the kidneys in reabsorption of sodium?

- A B C D

3- The major excretory organs in the body?

- a- Skin b – kidneys
c- lungs d-Heart

Mohamad Rajab



3	Explain the main structure and function of the respiratory, excretory and circulatory system	Get it	78
		Figure 17	78
4	Explain the main structure and function of the respiratory, excretory and circulatory system	Get it	78
		Definition from text	78

The functions of excretory system

- 1- Collects and eliminates wastes
- 2-removes toxins and wastes from the body
- 3- regulates of fluid and salts in the body
- 4- maintain the PH of the blood

Excretory system

lungs

Carbon dioxide and water

skin

Water and salts

kidneys

Urea (toxins and wastes) and Water

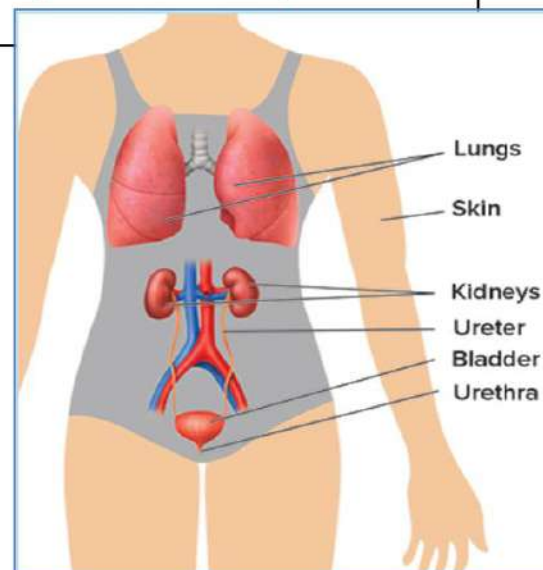
4- Which of the following is the function of the excretory system?

- a- Release energy from food as ATP molecules
b- Transport carbon dioxide to body cells
c- Remove carbon dioxide, salts, and water
d- Maintain the correct amount of nutrients

Mohamad Rajab

5- Which of the following not part of the excretory system?

- a- Skin b- Kidneys c- lungs d- Stomach



6- Which of the following refers to a component of the excretory system?

- A
- B
- C
- D



7- Which of the following part of the excretory system?

- a- Esophagus
- b- Heart
- c- lungs
- d- Stomach

8- Which of the following primarily excretes Water and salts?

- a- Skin
- b- Kidneys
- c- lungs
- d- Bladder

9- Which of the following primarily excretes Carbon dioxide?

- a- Skin
- b- Kidneys
- c- lungs
- d- Bladder

10- bean-shaped organs that filter out wastes, water, and salts from the blood?

- a- Liver
- b- Kidneys
- c- lungs
- d- Heart

5	Explain the main structure and function of the respiratory, excretory and circulatory system	Figure 18 and question	79
		Information from text on specified page	79
6	Explain the main structure and function of the respiratory, excretory and circulatory system	Information from text on specified page	79
		Information from text on specified page	79

10- Which of materials cannot removed by nephrons?

- a- proteins and water
- b- protein and wastes
- c- Protein and blood cells
- d- Blood cells and CO₂

11- Which of the following the basic filtering unit of the kidney?

- a- urinary bladder
- b- nephron
- c- lungs
- d- renal arteries

Mohamad Rajab

12- Where do you find the Bowmans Capsule?

- a- Nephrons
- b- Alveoli
- c- Renal pelvis
- d- Diaphragms

13- In which of the following organ do you find the glomerulus?

- a- Skin
- b- Brain
- c- Kidney
- d- Pancreas

14- Which of the following transports nutrients and wastes to the kidney?

- a- Renal vein
- b- Renal artery
- c- Ureter
- d- collecting tubule

15- Which of the following letters represents the loop of Henle in the picture?

- A B C D

16- Which letter refers to the Bowmans Capsule?

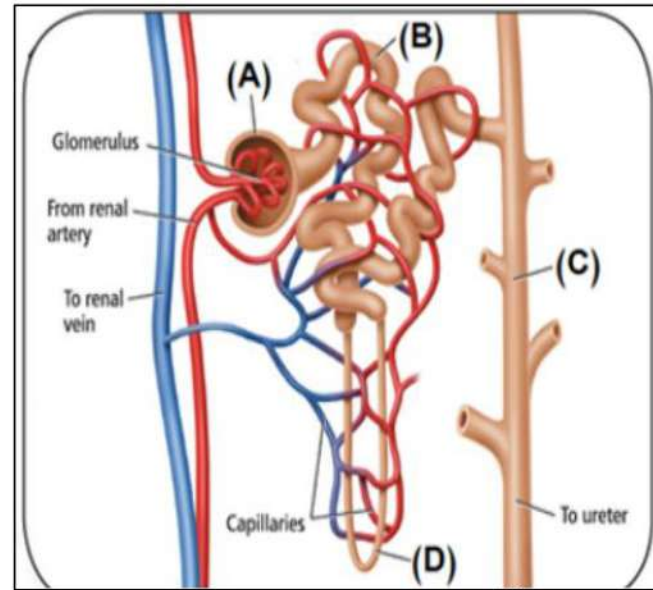
- A B C D

17- Which letter indicates the location of blood filtration?

- A B C D

18- Which letter indicates the location of reabsorption?

- a- A and B b- B and D
c- B and C d- A and D



Mohamad Rajab

19- Which of the following letters represents the Renal Cortex in the picture below?

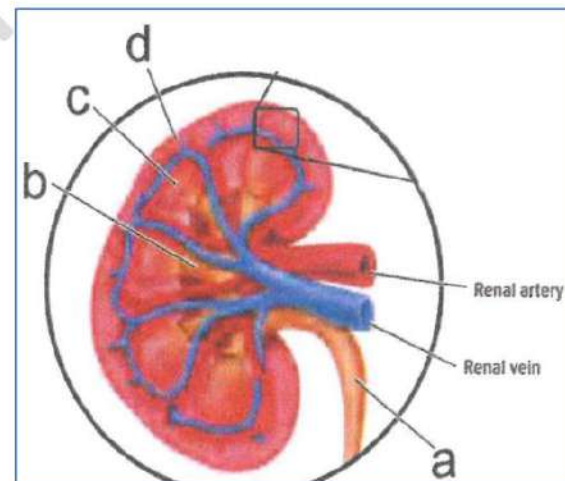
- a b c d

20- Which of the following letters represents the Ureter in the picture below?

- a b c d

21- Which of the following letters represents the Renal medulla in the picture?

- a b c d



22- Which of the following letters represents the Renal pelvis in the picture?

- a b c d

Mohamad Rajab

23- Which of the following carry urine produced in the kidneys to the bladder?

- a- Urethra b- Ureters
c- Renal veins d- Renal tubule

24- Urine exits the body through which structure?

- a- Urethra b- Ureters
c- urinary bladder d- Kidney

Mohamad Rajab

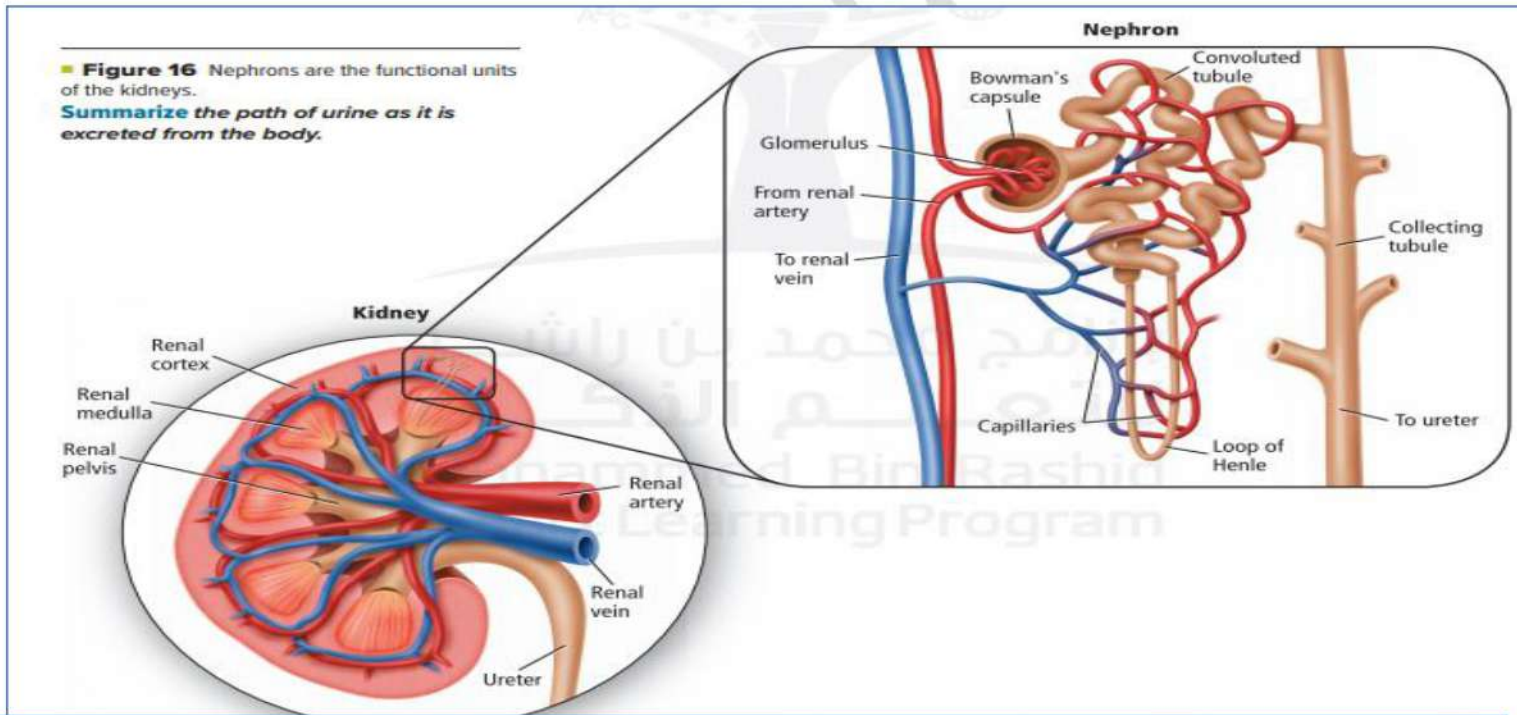
7	Explain the main structure and function of the respiratory, excretory and circulatory system	Definition from text	80
		Demonstrate Understanding (Q2)	82

25- Which is the correct path that urine will follow in the body?

- a- Kidneys → Urethra → Bladder → Ureters
- b- Bladder → Ureters → Kidneys → Urethra
- c- Kidneys → Ureters → Bladder → Urethra
- d- Bladder → Kidneys → Ureters → Urethra

25- Which of the following is the correct sequence of waste products in the Kidney?

- a- Bowman's capsule - glomerulus - Renal medulla - Renal tubule - ureters - urinary bladder
- a- Glomerulus - Bowman's capsule - Renal tubule - Renal medulla - Ureters - Urinary bladder
- a- Glomerulus - Renal tubule - Bowman's capsule - Renal medulla - Ureters - Urinary bladder
- a- Bowman's capsule - Ureters - glomerulus - Renal tubule - Renal medulla - Urinary bladder



11	Explain the main structure and function of the respiratory, excretory and circulatory system	Get it	80
		Demonstrate Understanding (Q3)	82
16	Explain the main structure and function of the respiratory, excretory and circulatory system	Get it	80
		Demonstrate Understanding (Q3)	82

26- Potassium is placed back into the bloodstream by excretory system through a process called.....

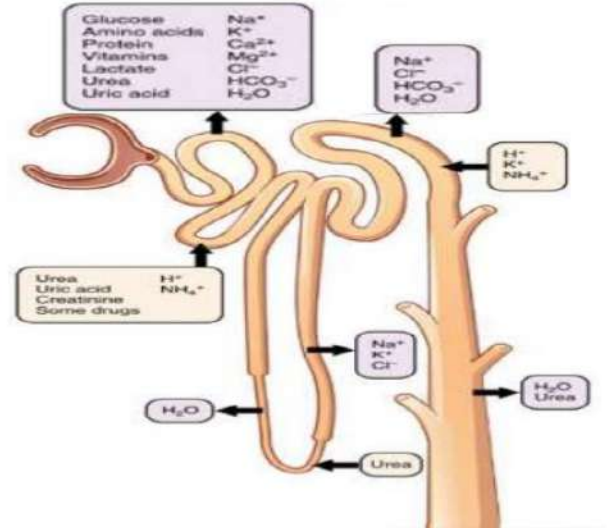
- a- Excretion
- b- Reabsorption
- c- Filtration
- d- Respiration

27- Which one of the kidney functions conserves waters in the body?

- a- absorption
- b- reabsorption
- c- filtration
- d- breathing

28- Which process returns glucose to the blood?

- a- excretion
- b- reabsorption
- c- filtration
- d- exhalation



Mohamad Rajab

If you know that the volume of blood that passes through the kidneys is 180 liters and the volume of the formulated urine is 1.5 liters, what percent of the material passing through the kidneys is filtered as urine?

- a- 0.533
- b- 0.633
- c- 0.733
- d- 0.833

Reabsorption of Some Substances in the Kidneys			
Chemical substance	Amount Filtered by Kidneys (g/day)	Amount Excreted by Kidneys (g/day)	Percent of Filtered Chemical Reabsorbed (per day)
Glucose	180	0	100
Urea	46.8	23.4	50
Protein	1.8	1.8	0

Use the table below to answer question 28,29 and 30.

28- Based on the data from the table above. how much urea is reabsorbed by the kidneys?

- a- 0.50 g/day
- b- 23.4 g/day
- c- 46.8 g/day
- d- 50.0 g/day

Mohamad Rajab

29- Based on the data above, what happens to glucose in the kidney?

- a- It is reabsorbed into the blood
- b- It is permanently filtered out the blood
- c- It is treated in the kidney like creatinine
- d- It is treated in the kidney like urea

Mohamad Rajab



30- Infer why proteins are not removed by nephrons

- a- The collecting ducts are not removed by nephrons
- b- Protein cannot be filtered
- c- Protein never enter the nephron
- d- Protein are reabsorbed by nephrons

12	Explain the main structure and function of the respiratory, excretory and circulatory system	Information from text on specified page	80
		Demonstrate Understanding (Q4)	82
19	Investigate the renal diseases and disorders and their treatment	Table 3	81
		Demonstrate Understanding (Q4)	82
13	Investigate the renal diseases and disorders and their treatment	Information from text on specified page	80
		Information from text on specified page	81
14	Explain what causes the development of kidney stones and the ways to eliminate them	Figure 19	81
		Table 3	81

Excretory Disorder	Brief Description
Nephritis	Inflammation of the glomeruli can lead to inflammation of the entire kidneys. This disorder can lead to kidney failure if it is left untreated.
Kidney stones	Hard deposits form in the kidneys that might pass out of the body in urine. Larger kidney stones can block urine flow or irritate the lining of the urinary tract, leading to possible infection.
Urinary tract blockage	Malformations present at birth can lead to blockage of the normal flow of urine. If it is untreated, this blockage can lead to permanent damage of the kidneys.
Polycystic (kidney disease)	This is a genetic disorder distinguished by the growth of many fluid-filled cysts in the kidneys. This disorder can reduce kidney function and lead to kidney failure.
Kidney cancer	Uncontrolled cell growth often begins in the cells that line the tubules within the kidneys. This can lead to blood in the urine or a mass in the kidneys, or it can affect other organs as the cancer spreads, which can lead to death.

Mohamad Rajab

Moham

31- Predict the consequence of kidney impairment by infections or disorders?

- a- Death
- b- Disrupted homeostasis
- b- inflammation of the kidney
- d- high blood pressure

32- Which of the following is a symptom of Kidney infections?

- a- Nausea
- b- swelling of body tissues
- c- blood in urine
- d- mid- to low- back pain

	Kidney infections	Nephritis
symptoms	fever chills mid- to low- back pain	swelling of body tissues blood in urine protein in urine

33- **Inflammation** of the glomeruli can lead to inflammation of the entire kidneys:

- a- Kidney Stones
- b- Nephritis
- c- Kidney cancer
- d- Polycystic kidney disease

34- Which of the following is a symptom of Nephritis?

- a- Nausea
- b- Frequent and painful urination
- b- Fever
- d- Protein in urine

35- **Crystallized solid** such as calcium compounds, that forms in the kidney?

- a- Nephritis
- b- Nephron
- c- Kidney stone
- d- Glomerulus



36- **Uncontrolled cell growth** often begins in the cells that line the tubules within the kidneys:

- a- Kidney Stones
- b- Nephritis
- c- Kidney cancer
- d- Polycystic kidney disease

37- **Genetic disorder** distinguished by the growth of many fluid-filled cysts in the kidneys. This disorder can reduce kidney function and lead to kidney failure:

- a- Kidney Stones
- b- Nephritis
- c- Kidney cancer
- d- Polycystic kidney disease

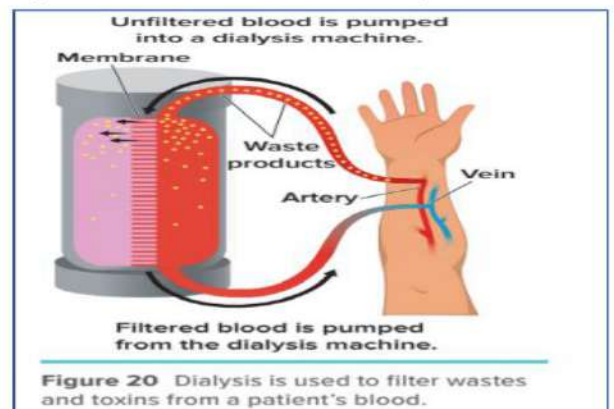
15	Investigate the renal diseases and disorders and their treatment	Figure 20	82
		Explain your thinking (Q5)	82

38- Procedure in which an artificial kidney machine filters out wastes and toxins from a patient's blood:

- a- Dialysis
- b- Kidney Transplant
- c- Reabsorption
- d- Filtration

39- Which of the following patient will most likely need the dialysis machine shown in the figure below?

- a- Kidney stones patient
- b- Kidney failure patient
- c- Urinary tract blockage patient
- d- Liver cancer patient



10	Describe the anatomy and physiology of the endocrine, excretory, and nervous systems and explain how these systems interact to maintain homeostasis	Figure 17	125
		Definition from text	125

1- Which of the following refers to the letter (B)?

- a- Thyroid gland
- b- Pituitary gland
- c- Hypothalamus
- d- pineal gland

2- A gland located at the base of the brain:

- a- Thyroid gland
- b- Pancreas
- c- Pituitary gland
- d- pineal gland

3- Which of the following is called the master gland?

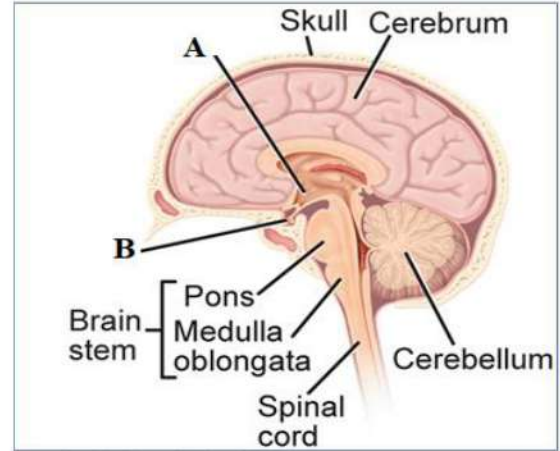
- a- Pancreas
- b- Thyroid gland
- c- Pituitary gland
- d- brain

4- Which of the following hormones secreted by the Pituitary gland?

- a- Calcitonin
- b- Human growth hormone
- c- Insulin
- d- Estrogen

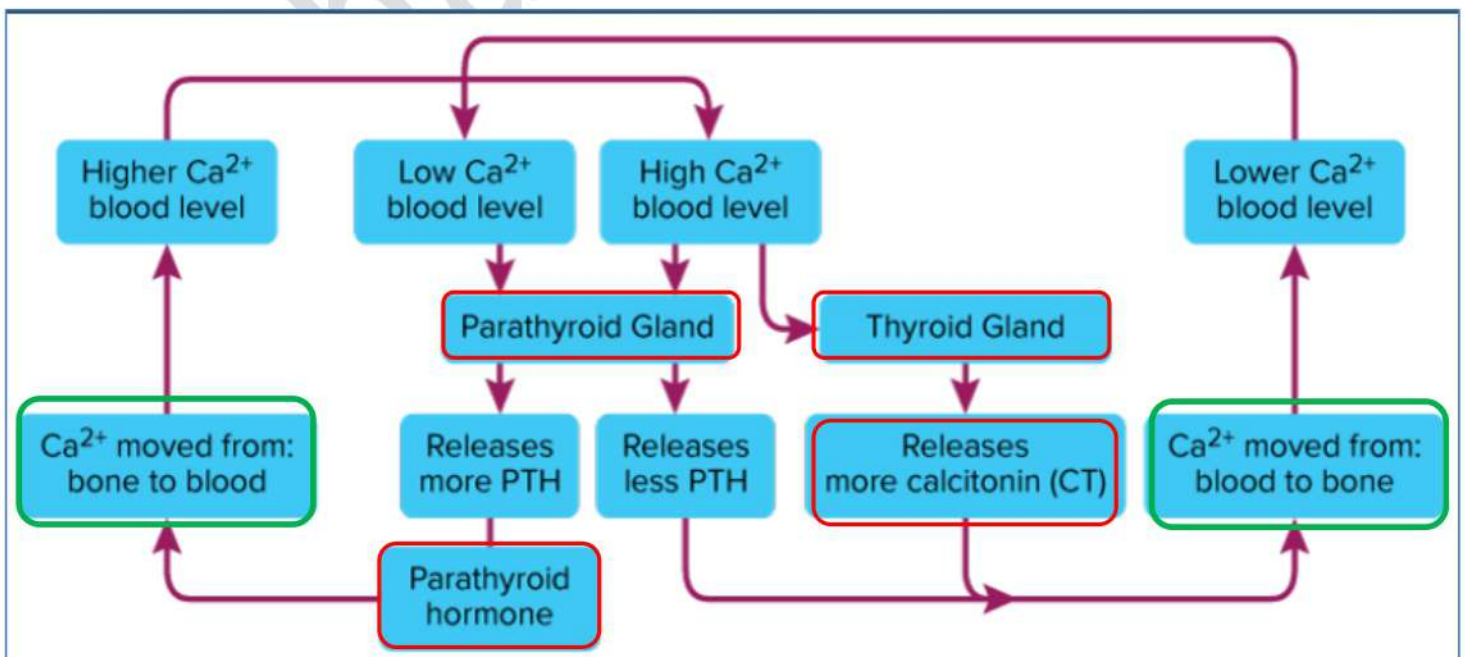
5- Which letter of the following refers to a gland that secretes the Human growth hormone?

- A
- B
- D
- E



The letter	The gland
A	Thyroid gland
B	Para thyroid gland
C	Adrenal (the cortex)
D	Pituitary
E	Pancreas

20	Explain how the positive and negative feedback regulate hormones level in order to maintain the internal conditions of a living system	Get it	125
		Figure 18 and question	125



17	Identify common diseases and the organs and/or body systems that they affect	Information from text on specified page	126
		Information from text on specified page	126

	Injury rate	Age	occurs
Type 1 diabetes	20%	By age of 20	When body cannot produce insulin
Type 2 diabetes	70-80%	After age of 40	The cell of the body becoming insensitive to insulin

13- What is the effect of the body not producing enough insulin?

- a- Dwarfism
- b- Type 1 diabetes
- c- Type 2 diabetes
- d- Low calcium in the blood

14- Which of the following causes Type 2 diabetes?

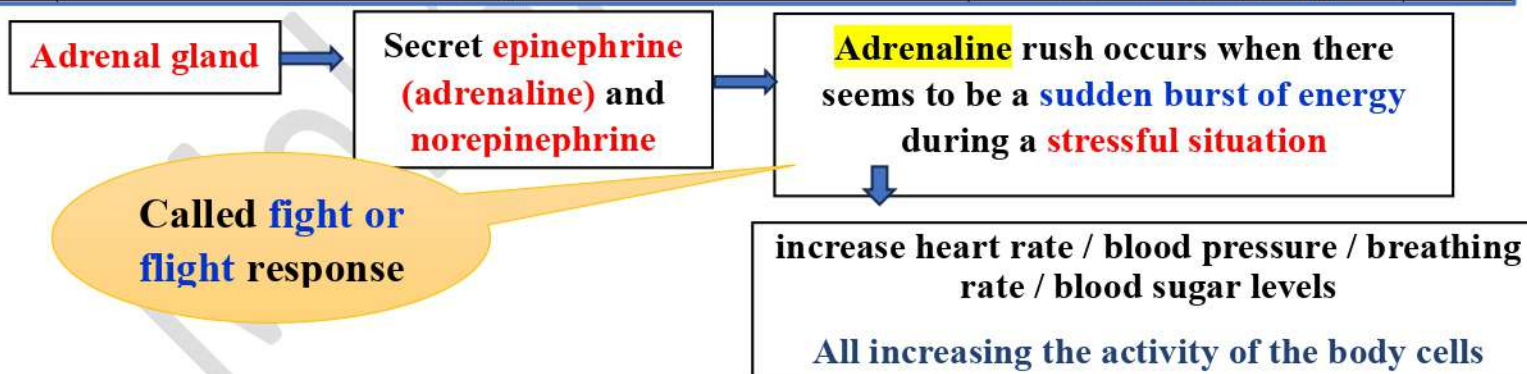
- a- When body cannot produce insulin.
- b- When body cannot produce Glucagon.
- c- The cell of the body becoming insensitive to insulin.
- d- Eat large amounts of carbohydrates and proteins.

Mohamad Rajab

14- Which disease results from the body not using insulin properly?

- a- Asthma
- b- Hypertension
- c- Type 2 diabetes
- d- Arthritis

18	Explain how the positive and negative feedback regulate hormones level in order to maintain the internal conditions of a living system	Information from text on specified page	126
		Information from text on specified page	126



15- Which person is likely to have high levels of epinephrine?

- a- Person A
- b- both person
- c- Person B
- d- nether person



A.



B.

16- Which gland responds to a stressful situation by producing a hormone that increases heart rate, blood pressure, breathing rate, and blood sugar levels?

- a- adrenal gland
- b- hypothalamus
- c- parathyroid gland
- d- pituitary gland

17- Which of the following hormones is secreted during a stressful situation (fight or flight response)?

- a- Insulin and glucagon
- b- Epinephrine and norepinephrine
- c- Calcitonin and parathyroid hormone
- d- aldosterone and Cortisol

18- Which endocrine gland would provide a burst energy to a person moving out of the way of a speeding bicycle?

- a- Parathyroid
- b- Pituitary
- c- Thyroid
- d- Adrenal

19- Which hormone increases heart rate, blood pressure, breathing rate, and blood sugar levels during stressful situations?

Mohamad Rajab

- a- Insulin
- b- Calcitonin
- c- Epinephrine
- d- aldosterone and

Mohamad Rajab

8	Describe the homeostatic processes involved in maintaining water, ionic, thermal, and acid-base equilibrium, and explain how these processes help body systems respond to both a change in environment and the effects of medical treatments	Figure 19	126
		Demonstrate Understanding (Q2)	128

pancreas	Insulin	Lower blood glucose levels
	glucagon	increase blood glucose levels

20- Which organ secretes glucagon (Insulin)?

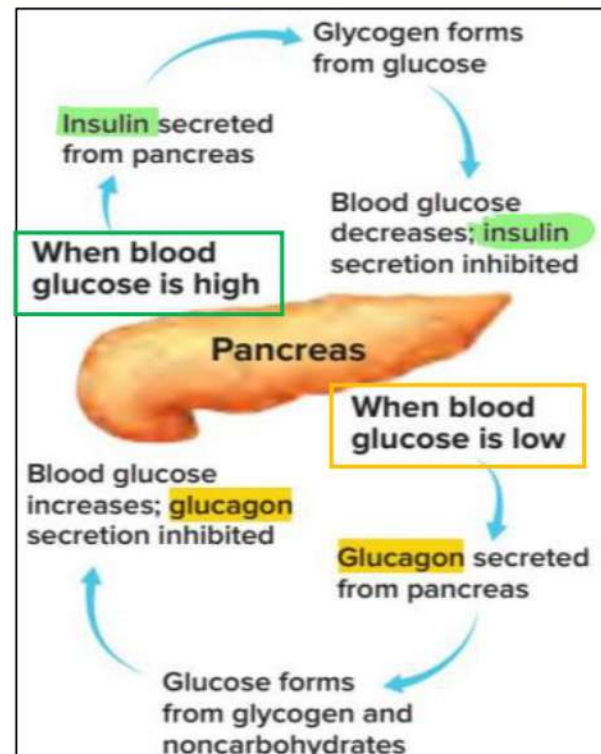
- a- Liver
- b- pancreas
- c- Kidneys
- d- Adrenal

20- Which pairs of hormones have opposite effects?

- a- Epinephrine and norepinephrine
- b- Growth hormone and thyroxine
- c- Insulin and glucagon
- d- Aldosterone and cortisol

21- Which hormone is released when blood glucose is high?

- a- Calcitonin
- b- glucagon
- c- Insulin
- d- Estrogen



22- Which hormone is released when blood glucose is low?

a- Calcitonin

b- Glucagon

c- Insulin

d- Aldosterone

23- What is the role of glucagon hormone?

a- Increase blood glucose levels

b- Converting glucose into glycogen

c- lower blood glucose levels

d- lower blood calcium levels

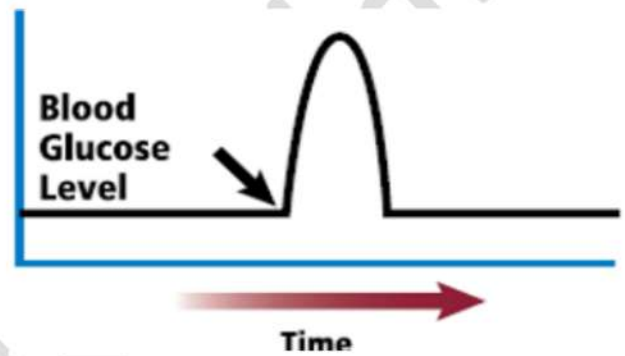
24- The graph below shows the blood glucose levels over a period of time. Which hormone might have caused a sudden sugar as indicated by the arrow?

a- Antidiuretic hormone

b- Growth hormone

c- Insulin

d- Glucagon



Mohamad Rajab

9	Describe the anatomy and physiology of the endocrine, excretory, and nervous systems and explain how these systems interact to maintain homeostasis	Information from text on specified page	126
		Demonstrate Understanding (Q4)	128

Endocrine gland	hormones	Function
Pituitary gland	Human growth hormone (hGH)	regulates the body's physical growth by stimulating cell division in muscle and bone tissue
Thyroid	Thyroxine	causes cells of the body to have a higher rate of metabolism
	Calcitonin	lower blood calcium levels
parathyroid	Parathyroid hormone	increases blood calcium levels
Pancreas	Insulin	Lower blood glucose levels
	glucagon	increase blood glucose levels
Adrenal glands (cortex)	Cortisol	raises blood glucose level / reduces inflammation
	aldosterone	affects the kidneys to reabsorbing sodium
	epinephrine (adrenaline) and norepinephrine	increase heart rate / blood pressure / breathing rate / blood sugar levels (Adrenaline rush occurs when : sudden burst of energy during a stressful situation.)

25- Which letter of the following refers to a gland that secretes the hormone thyroxine?

A B C D

26- Which letter of the following refers to a gland that secretes the hormones Aldosterone and Cortisol?

A B C D

27- Which letter of the following refers to a gland that secretes the Human growth hormone?

A B D E

28- Which letter of the following refers to a gland that secretes the hormone Insulin?

A B C E

Mohamad Rajab

The letter	The gland
A	Thyroid gland
B	Para thyroid gland
C	Adrenal (the cortex)
D	Pituitary
E	Pancreas

29- Which a gland that secretes the hormone thyroxine?

- a- Para thyroid gland
- b- Thyroid gland
- c- Pituitary gland
- d- Pancreas

30- Hormone causes cells of the body to have a higher rate of metabolism.

- a- Thyroxine
- b- Calcitonin
- c- Testosterone
- d- Parathyroid hormone

31- Which of the following hormones secreted by the cortex of Adrenal glands?

- a- Glucagon
- b- Aldosterone
- c- Thyroxine
- d- Insulin

32- Which of the following of hormone affects the kidneys to reabsorbing sodium?

- a- Insulin
- b-Growth hormone
- c- Aldosterone
- d-Cortisol

33- Which of the following of hormone raises blood glucose level and reduces inflammation?

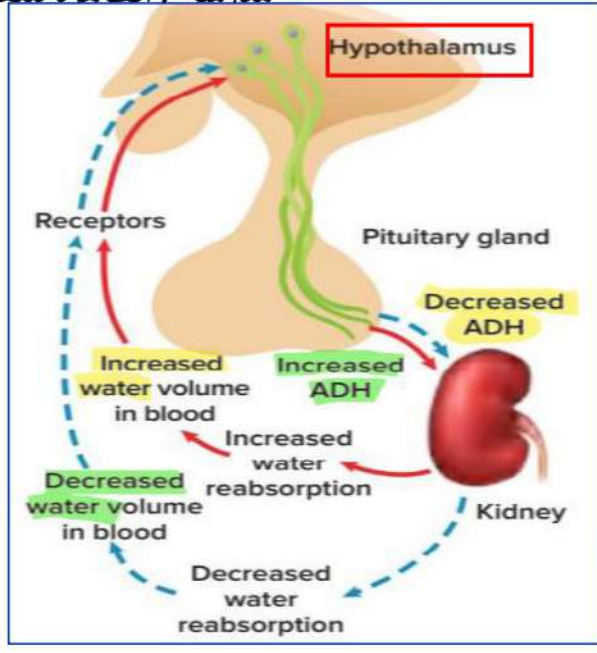
- a- Thyroxine
- b-Growth hormone
- c- Aldosterone
- d-Cortisol

2	Describe the homeostatic processes involved in maintaining water, ionic, thermal, and acid-base equilibrium, and explain how these processes help body systems respond to both a change in environment and the effects of medical treatments	Figure 21	128
		Definition from text	128

34- Which of the following serving as link between the Nervous System and The Endocrine System?

- a- Brain stem
- b- The hypothalamus
- c- liver
- d- Adrenal gland

	Oxytocin	Smooth muscles in uterus
Hypothalamus	Antidiuretic hormone ADH	Regulating water balance



35- Describe the function of the antidiuretic hormone (ADH).

- a- absorb sodium
- b- raise blood glucose levels
- c- regulate water balance
- d- lower blood calcium

Mohamad Rajab

36- Below are three statements about the action of antidiuretic hormone (ADH):

Which of these statements is true?

- 1- More ADH is related when the water content in the blood rises.
- 2- ADH decreases the amount of water in the urine.
- 3- When ADH is released, the kidneys reabsorb more water.

- a- 1 and 2
- b- Only 3
- c- 2 and 3
- d- Only 1

37- In the case of dehydration, the antidiuretic hormone binds to kidney cells receptors causing.....

- a- The kidney to reabsorb more water and increase the amount of water in the urine
- b- The kidney to reabsorb more water and decrease the amount of water in the urine
- c- The kidney to excrete more water and decrease the amount of water in the urine
- d- The kidney to excrete more water and increase the amount of water in the urine

38- What are the hormones secreted by the hypothalamus (nerve cells)?

- a- Aldosterone and cortisol
- b- Calcitonin and cortisol
- c- Estrogen and Growth hormone
- d- Antidiuretic hormone (ADH) and Oxytocin

With my sincere wishes for good luck and success

Teacher: Mohammad Rajab