

**KAFR EL-SHEIKH UNIVERSITY**  
**FACULTY OF PHYSICAL THERAPY**  
**ANATOMY DEPARTMENT**  
**24-12-2017**

**2<sup>nd</sup> YEAR**  
**FINAL EXAM**  
**TOTAL TIME: 2 HOURS**  
**TOTAL MARKS: 50 marks**

**Neuro-anatomy**

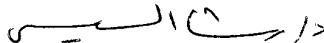
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All questions are to be answered (2 pages)

1. Mention the ascending tracts in the spinal cord and their functions, and describe the reflex arc .....(5marks)
2. Discuss the deep origin and functional component of facial nerve, and describe its lesion .....(5marks)
3. Describe the relations, connections and thalamic radiations of thalamus .....(5 marks)
4. Mention the parts of internal capsule and the fibers pass through each one, and enumerate types of commissural fibers..... (5 marks)
5. Describe the boundaries, roof, floor, recesses and foramina of the fourth ventricle.....(5marks)
6. Describe the boundaries and the content of the inter-peduncular fossa and mention the component of circle of Willis..... (5 marks)
7. Draw cross section in the mid brain at the level of superior colliculus .....(5 marks)
8. Draw horizontal section of the brain .....(5 marks)
9. Choose the correct answer .....(10 marks)
  1. The lateral wall of the third ventricle is formed by:
    - a. Thalamus
    - b. Lamina terminalis
    - c. Hypothalamus
    - d. a & c only
  2. The external capsule lie between:
    - a. Insula & claustrum
    - c- Thalamus & lentiform

- b. b- Claustrum & lentiform.      d- Caudate & lentiform
3. Regarding the lateral ventricle, the tail of caudate nucleus is related to which part?
- a. Anterior horn      c. Posterior horn  
b. Inferior horn      d. Body of the ventricle
4. Which of the following is included in the meta-thalamus:
- a. Geniculate bodies      c. Pineal body  
b. Habenular nuclei      d. Posterior commissure
5. The artery which lies on the medial surface of the brain is called:
- a. Middle cerebral artery      c. basilar artery  
b. Anterior cerebral artery  
c. posterior communicating
6. The hippocampus are present in which part of lateral ventricle?
- a. Anterior horn      c. Posterior horn  
b. Inferior horn      d. Body of the ventricle
7. The occipital pole is supplied by:
- a. Anterior cerebral artery      c. middle cerebral a.  
b. Posterior cerebral a.      d. none of the above
8. Absorption of csf through:
- a. Choroid plexus      c. arachnoid granulation  
b. Ependymal cells      d. tela choroidae
9. Posterior inferior cerebellar artery supply:
- a. Medulla      c. cerebellum  
b. Choroid plexus of 4<sup>th</sup> ventricle      d. all of the above
10. One of the following structures lie between the caudate nucleus and the thalamus:
- a. Stria terminalis      c. internal capsule  
b. External capsule      d. stria habenularies

**WITH MY BEST WISHES**



All Questions must be answered:

A. Choose the best answer: (20 Marks)

Choose A if the first sentence is true. Choose B if the second sentence is true.  
Choose C if the two sentences are true. Choose D if the two sentences are false.

1. Nominal level of measurements:
  - a. Used to classify or categorize data
  - b. Can be ordered or added
2. Ordinal level of measurements:
  - a. The numbers imply definite magnitude
  - b. The intervals between the numbers are equal.
3. Reliability:
  - a. Repeatability
  - b. The extent to which comparable results are achieved every time a test is repeated.
4. Biceps Brachii muscle:
  - a. Inserted in radial tuberosity.
  - b. Innervated by radial nerve.
5. Manual muscle testing:
  - a. A procedure for evaluation.
  - b. Detects function and strength of individual and muscle group.
6. Brachialis Muscle:
  - a. Flex forearm from all positions.
  - b. Innervated by median nerve.
7. Brachioradialis:
  - a. Innervated by ulnar nerve
  - b. Inserted in the styloid process of ulna.
8. Effect of weakness of elbow extensors:
  - a. Interfere with reaching upward toward a high shelf.
  - b. There is loss of ability to throw objects.
9. Effect of weakness of Supinator.
  - a. Interfere with feeding oneself.
  - b. Forearm remains in a supinated position.
10. Effects of weakness of forearm pronator muscles:
  - a. Interfere with in picking up a cup or other object.
  - b. Interfere with turning a doorknob.

**11. The purpose of manual muscle testing:**

- a. Assess accurately a patient's present status.
- b. Assess the progress of the treatment program.

**12. Synergists:**

- a. A muscle that contracts and works along with the antagonist
- b. To produce the desired movement.

**13. Neutralizing Muscles:**

- a. Muscles contracted to prevent unwanted movements
- b. Example of synergist muscle.

**14. Deltoid Muscles:**

- a. Innervated by Long Thoracic Nerve
- b. A middle fiber adducts the shoulder joint.

**15. Supraspinatus:**

- a. Innervated by axillary nerve C5, C6.
- b. Innervated by Suprascapular Nerve: C4, C5, and C6.

**16. Pectoralis Major Muscle:**

- a. Its weakness interferes with shoulder horizontal adduction.
- b. Its weakness decreases strength of shoulder flexion and medial rotation

**17. Muscular Endurance:**

- a. The maximal amount of tension.
- b. Maintain an isometric contraction for a period of time.

**18. Axillary Nerve Injury:**

- a. Lead to drop shoulder.
- b. Lead to paralysis of deltoid muscle.

**19. Scapular Adductors:**

- a. Upper fibers of trapezius.
- b. Middle fibers of trapezius.

**20. Trapezius muscle:**

- a. Innervated by long thoracic nerve
- b. Innervated by spinal Accessory nerve.

**B. Put True or False: (10 Marks)**

- 1. Rhomboid Major, Minor: Connect the scapula with the vertebral column.
- 2. Rhomboid Major, Minor are innervated by long thoracic nerve.
- 3. Levator scapulae muscle responsible for shoulder depression.
- 4. Serratus anterior muscle protracts the scapula.
- 5. Supraspinatus muscle initiate shoulder abduction from 10-15 degrees.
- 6. Latissimus-dorsi muscle innervated by thoraco-dorsal nerve.
- 7. Agonist is a muscle or muscle group that makes the minor contribution to movement.

8. Muscular strength: The maximal amount of tension that a muscle can voluntarily exert in one maximal effort.
9. Outer range: Is from a position where the muscle is on full stretch to a position halfway through the full range of motion.
10. Eccentric contraction: Tension is developed in the muscle during its shortening.

**C. Match the following: ( 5 Marks)**

	I		II
1	Serratus Anterior.	A	Responsible for shoulder contour and supplied by axillary nerve C5,6
2	Supinator muscle.	B	Dorsal scapular Nerve C3,C4,C5
3	Levator Scapulae Nerve supply.	C	Scapular abductor and outward rotators.
4	Deltoid Muscle.	D	Radial nerve.
5	Supraspinatus Muscle	E	Suprascapular Nerve

**D. Complete the following: (5 Marks)**

1. Qualities of a Good Measuring test are .....
2. Effect of weakness of pectoralis Major Muscle: .....
3. Effect of weakness of latissimus-dorsi muscle: .....
4. The purpose of muscle test: .....
5. Methods to Assess Muscle Strength: .....

**VI. Give short account on the following: (10 Marks)**

1. Factors Affecting Strength:
2. Contra-indication and precautions of Manual muscle strength test.
3. Types of muscle contraction.
4. Effect of weakness of Elbow Extensors.
5. Effect of weakness of scapular abductors and outward rotators.

**With my best wishes.**

**Answer Sheet**

**A. Choose the best answer (20 Marks)**

	a	b	c	d		a	b	c	d
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**B. True and False (10 Marks)**

1	2	3	4	5	6	7	8	9	10

**C. Match the Following: (5 Marks)**

1	2	3	4	5

**D. Complete the Following: (5 Marks)**

- Qualities of a Good Measuring test are.**

**2. Effect of weakness of Pectoralis Major Muscle:**

**3. Effect of weakness of latissimus-dorsi muscle:**

4. The purpose of muscle test:

5. Methods to Assess Muscle Strength:

E. Give short account on the following: (10 Marks)

1. Factors Affecting Strength:



2. Contra-indication and precautions of Manual muscle strength test.

3. Types of muscle contraction.

4. Effect of weakness of Elbow Extensors.

5. Effect of weakness of scapular abductors and outward-rotators.

All the following Questions Must be Answered:

**A- Use the following to answer the next questions. (20 Marks)**

- (a) Only first statement is true. (b) Only second statement is true.  
(c) Both statements are true. (d) Neither statement is true

1. **Non Ionized Electromagnetic Energy Modalities.**
  - a. Deep X-Ray therapy.
  - b. Ultra-violet Radiation.
2. **Thermal Energy Modalities.**
  - a. Intermittent compression
  - b. Shortwave diathermy.
3. **Electromagnetic radiation.**
  - a. Transverse magnetic and electric waves
  - b. Oscillate in phase perpendicular to each other
4. **Ultraviolet Radiation.**
  - a. Thermal Energy.
  - b. Has A Chemical effect.
5. **General contra-indications for Electromagnetic Radiation:**
  - a. Recent Deep X-Ray Therapy
  - b. Malignancy.
6. **Motor nerves send impulses.**
  - a. To the brain and spinal cord
  - b. To all of the muscles in the body.
7. **Motor nerves :**
  - a. Control muscle contraction
  - b. Their lesions affect muscle control.
8. **Sensory Nerves:**
  - a. Send messages to the spinal cord
  - b. Efferent Fibers
9. **Autonomic nerves.**
  - a. control voluntary functions
  - b. control involuntary functions
10. **Autonomic nerves:**
  - a. Control heart rate.
  - b. Control voluntary muscle contraction.
11. **Type A Nerve Fibers:**
  - a. The thickest and slow conducting.
  - b. The thinnest and fastest conducting.
12. **Type A. Nerve Fibers.**
  - a. They are myelinated.
  - b. Has fast conduction of impulse.
13. **Type C Nerve Fibers:**
  - a. They are myelinated.
  - b. They have a Fast conduction.

14. **Factors affecting the extend of physiological response to heat:**

- a. Intensity of radiation
- b. Age of the patient

15. **With increase in temperature there is:**

- a. Decrease gamma ( $\gamma$ ) fiber activity
- b. Increase firing of secondary afferents to muscle spindle.

16. **An infrared radiation.**

- a. Deep thermal agent
- b. Has a Mechanical effect.

17. **An infrared radiation.**

- a. Lies between visible light and microwave radiation.
- b. Wavelength extended from 760 nm to 1 mm.

18. **The heat produced by Ultrasound leads to:**

- a. Increased pain threshold.
- b. Increase connective tissue extensibility.

19. **Local Effects of UVR:**

- a. Formation of Vitamin D
- b. Erythema.

20. **Ultrasound therapy:**

- a. Considered to be mechanical energy.
- b. Means to heat through.

**B. Put True or False (10 Marks):**

- 1. Ultrasound encourages the growth of new capillaries in chronic ischaemic tissue.
- 2. Infra-Red Radiation decreases connective tissue extensibility.
- 3. The diathermies are considered to be low-frequency modalities.
- 4. Ultrasound has anti-inflammatory effect.
- 5. Type C- Nerve fibers considered a non-nociceptive pain transmitting fibers.
- 6. Continuous US mean heat dissipation equals heat generation there is no net rise in temperature.
- 7. Cavitation is the formation of tiny gas bubbles in the tissues as a result of US vibration.
- 8. Type A. Nerve fibers considered fast conducting myelinated fibers.
- 9. SWD can heat larger areas than other penetrating agents.
- 10. Pules Ultrasound used in management of chronic pain.

**C- Match the following (5 Marks)**

	I		II
1.	Type C-nerve fibers.	a	Has a chemical effect
2.	Non-thermal Ultrasound.	b	Accelerate the metabolic rate of tissue
3.	Type A. Nerve Fibers.	c	Large myelinated, fast conducting, motor and sensory nerve fibers.
4.	Continuous Ultrasound.	d	Pain transmitting non myelinated nerve fibers
5.	Ultraviolet Radiation	e	Used to treat acute musculoskeletal conditions

**D. Complete the following: (5 Marks)**

- a. Types of UVR according to wavelength are: 1 .....2.....3.....
- b. Ultrasound Cavitation is minimized by the following measures:  
1.....2.....3.....
- c. The thermal effects of ultrasound include:  
1.....2.....3.....4.....5.....
- d. SWD produces heat through tissue by: 1 .....2.....3.....
- e. Effects of Infra-Red on pain control: .....

**D. Give Short Account on The Following: (10 Marks)**

- 1. Therapeutic uses of Infra-red radiation.
- 2. How can UVR facilitate wound healing?
- 3. Therapeutic uses of Ultrasound.
- 4. Non-Thermal Effects of Ultrasound Therapy.
- 5. Function of the Skin.

**Good Luck**

**D. Complete the Following: (5 Marks)**

a. **Types of UVR according to wavelength are:**

b. **Ultrasound Cavitation is minimized by the following measures:**

c. **The thermal effects of ultrasound include:**

d. SWD produces heat through tissue by

e. Effects of Infra-Red on pain control

**E. Give short account on: (10Marks)**

**1. Therapeutic uses of Infra-red radiation.**

2. How can UVR facilitate wound healing?

3. Therapeutic uses of Ultrasound.



4. **Non-Thermal Effects of Ultrasound Therapy.**

5. **Function of the Skin.**



Kafrelsheikh University

Department of biomechanics

Examiner Name: Prof.Dr. Anees Saleh Ghiet

Course Title: Biomechanics 1 Date: 4/01/2018

Year :second year

Time: 2 hours

Pages: 1 page

Total Mark: 50 Marks

## BIOMECHANICS (1)

DISCUSS IN DETAILIS THE FOLLOWING TOPICS :

1-*Stress strain curve of osseous tissue ?*

*(20 marks)*

2-*Biomechanics of implants and internal fixation ?*

*(15 marks)*

3-*Biomechanics of march fractures ?*

*(15 marks)*

*With my best wishes*

*Prof.dr.anees s s ghiet*

Examination for (2<sup>nd</sup> Year)  
Course Title: Biochemistry 2  
Date: 9/1/2018  
Time Allowed: 2 hour  
Total Assessment Marks: 50 marks

Kafr Elsheikh University  
Faculty of Physical Therapy  
Department of Medical biochemistry

All questions should be answered

Q.I – Give short notes on:

(15 marks)

- 1- Metabolic Interrelation of tissues during Muscular Exercise.
- 2- Basal Metabolic Rate BMR (Definition, Significance & factors affecting it).
- 3- Vitamin C. (sources, functions & deficiency)
- 4- Citric acid cycle (Location & Metabolic importance)
- 5- Lipolysis (Definition, Location & steps)

Q.II – Compare in a Table between :

(10 marks).

- 1- Group I & Group II hormones.
- 2- Glycolysis and Hexose Monophosphate shunt

Q. III - Calculate the net ATP generated from: (illustrate your answer with steps of reaction)

(5 marks).

- 1- B- Oxidation of one molecule of palmitoyl CoA.
- 2- Conversion of  $\alpha$  ketoglutarate to succinate during Kreb's Cycle.

Q.IV – Write the scientific term of each of the following :

(10 marks)

- 1- That portion of the total energy that is available for useful work. ( )
- 2- The number of ATP molecules produced per O atom reduced ( )
- 3- Potent rodenticide that Inhibits aconitase enzyme with the ultimate effect of blocking Kreb's cycle and oxidative phosphorylation. ( )
- 4- Aerobic oxidation of glucose via Kreb's cycle inhibits the anaerobic degradation of glucose via glycolysis ( )
- 5- Enzyme acts on triacylglycerols of chylomicrons, converting them into glycerol and free fatty acids. ( )
- 6- Hydrolases which attack on the internal peptide bonds to release peptide fragment, e.g. pepsin, trypsin ( )
- 7- A reversible reaction in which a transfer of amino group from  $\alpha$ -amino acid to  $\alpha$ -ketoacid to form a new  $\alpha$ -amino acid and a new  $\alpha$ -ketoacid ( )
- 8- The amount of heat required to raise the temperature of 1 gm of water by 1°C. ( )
- 9- It is a medical condition in which excess body fat has accumulated to the extent that it may have an adverse effect on health. ( )
- 10- Vitamins precursors which are converted to vitamins inside the body. ( )

تابع باقي الاسئلة في الخلف

**Q.V –Select only ONE correct answer :**

**( 5 marks)**

- 1-Which of following is located in mitochondria :  
A. Dihydropyridyl dehydrogenase      B. Succinate dehydrogenase  
C. Cytochrome oxidase      D. All of the above.
- 2- Which of the following statements is NOT true of glycolysis?  
A. Glucose is transformed into pyruvate.      B. It can take place by anaerobic metabolism.  
C. It requires O<sub>2</sub>. and the final product is CO<sub>2</sub>.      D. It takes place mainly in cytoplasm.
- 3-In muscle cells, when O<sub>2</sub> concentrations are deficient, glucose can be converted to:  
A. lactate      B. CO<sub>2</sub>      C. acetylCoA      D. succinate.
- 4-TCA cycle mainly functions in .....and under ..... conditions :  
A. Golgi apparatus, anaerobic      B. Ribosomes, aerobic  
C. Mitochondria, aerobic      D. Lysosomes, aerobic or anaerobic
- 5- The enzymes of urea synthesis are found in  
(A) Mitochondria only      (B) Cytosol only  
(C) Both mitochondria and cytosol      (D) Nucleus
- 6- Lovastatin and mevastatin lower Serum  
(A) triglycerides      (B) cholesterol      (C) phospholipids      (D) All of these
- 7- ketone bodies are true except  
(A) They may result from starvation      (B) They are formed in kidneys  
(C) They include acetoacetic acid and acetone      (D) They may be excreted in urine
- 8-Calcitriol synthesis involves  
(A) Both liver and kidney      (B) Intestine      (C) Adipose tissue      (D) Muscle
- 9-The requirement of vitamin E is increased with greater intake of  
(A) Carbohydrates      (B) Proteins      (C) Polyunsaturated fat      (D) Saturated fat
- 10-Body Mass Index(BMI) gives a measure of relative weight adjusted for height. The healthy range for BMI is between:  
(A) 15- 19.5      (B) 19.5- 25.0      (C) 25- 29.9      (D) 30 or more.

**Q.VI –Write True ( √ ) or False ( X ):**

**( 5 marks)**

- 1--Normal NH<sub>3</sub> level of blood is < 20 µg/100 ml. ( )
- 2-The energy from one glucose residue derived from glycogen is 2 ATP molecules in muscle. ( )
- 3- kidney is the only site for urea formation. ( )
- 4-Parathyroid hormone increase in serum inorganic Phosphorus (PO<sub>4</sub>). ( )
- 5-SDA for protein, fats and carbohydrates is 30%, 13% and 5% respectively. ( )
- 6- Action of vitamin D started by binding to its cell membrane receptor. ( )
- 7-The richest sources of vitamin E are liver, egg yolk and meat. ( )
- 8-Oxidative phosphorylation is ATP formation by oxidation-reduction reactions. ( )
- 9-pyruvate dehydrogenase (PDH) enzyme complex has 3 coenzymes. ( )
- 10- Glucagon acts as an insulin antagonist. ( )

**Good luck**

انتهت الاسئلة

**Kafr El sheikh University**  
**Faculty of Physical Therapy**

*Written Exam. In Public Health for the second year students ( January ,2018 )*

*Time allowed :one hour.*

*All questions must be attempted .*

1-discuss briefly each of the followings ::

*a-Laboratory significance of HBs Ag. (8 marks)*

*b-Handicapped children :etiology &prevention of visual handicap.(8 marks )*

*c-Complications of each of " Measles"-----&"Botulism" ( 8 marks )*

2-Give an account on each of the followings ::

*a-Modes of transmission &high risk groups of "AIDS"( 8 marks)*

*b-prevention of each of " Nosocomial infections" ----&" Iron def.Anaemia "( 8 m*

*. D. EL KAS*

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T

**Hydrotherapy**

**Second Year (1<sup>st</sup> Semester) (Code: 130120)**  
**Kafrelsheikh University**  
**Faculty of Physical Therapy**  
**Basic Sciences Department**

**Date: 14 / 1 /2018**  
**Time Allowed: One Hour**  
**Total Marks: 50 Marks**  
**Number of Pages: 4**

[REDACTED] ( 20 grades)

- [REDACTED]
- [REDACTED]
- [REDACTED]
- 1- Water has specific gravity of 1.0 at 4°C, and the human body has a specific gravity of 0.974. that mean:  
A) ability of human body to float.  
B) ability of human body to sink.
  - 2- At level C 7 human body immersion under water:  
A) urine production is about 0.034 ounces (1 ml) per minute  
B) urine production is about 0.21 - 0.26 ounces (6.2 - 7.6 ml) per minute.
  - 3- a body immersed to a depth of 48 inches is subject to a force equal to:  
A) 88.9 mm Hg.  
B) 98.9 mm Hg.
  - 4- Organic moor or peat mud:  
A) It consists of decaying or decomposed vegetable matter.  
B) This type of mud is found in a crude form.
  - 5- Black mud:  
A) Can be used in treatment of Poisoning  
B) Can be used in treatment of liver disorder.
  - 6- At level C 7 human body immersion under water:  
A) This causes anti-diuretic hormone (ADH) stimulation.  
B) Help in creatinine clearance.
  - 7- water holds heat well, approximately ..... times more than an equivalent volume of air:  
1. A) 200  
B) 100.
  - 8- cryotherapy is therapeutic use of..... cold applicationfor treating pathological lesions  
A) local.  
B) general.
  - 9- In Fluidotherapy the lower ranges are recommended for patients who have:  
A) Greater predisposition for edema formation  
B) Chronic hand strain
  - 10- The whirlpool bath combined the effects of:  
A) conductive heat

B) Gentle massage.

11- The whirlpool bath can be indicated in:

- A) Open wound
- B) Advanced peripheral vascular disease

12- Which of the following would be the modality of choice in cases of post immobilization joint stiffness and adhesion.....

- A) Cryotherapy
- B) Hot whirlpool

13- Contrast bath is more efficient in:

- A) Excessive sweating
- B) Acute edema.

14- Paraffin oil is added to the melted wax in order to

- a) Reduce the melting temperature of paraffin
- b) Keep the wax liquid at higher temperatures.

15 CVD:

- A) may provide protection to the tissue from damage
- B) caused by decreases release of histamine, prostaglandins

16- Hydrotherapy used for wound care because:

- A) facilitates the dehydration, softening, and debridement of necrotic tissue
- B) Removal of exogenous wound debris.

17- Hunting Response:

- A) Physiological phenomena that protect tissue from damage.
- B) Vasoconstriction followed by marked vasodilatation

18) blood viscosity increase by:

- A) cold.
- B) hot.

19- In patient with multiple sclerosis:

- A) Hot water is more recommended.
- B) Neutral water is more recommended.

20- Role of Cold used in management of ACUTE trauma:

- A) decrease in metabolism.
- B) decrease vasoactive agents.

(10 grades)

21- Balance training involves exercises that reduce the base of support.

( )

22- Cryotherapy in Brief application (*few seconds*) facilitates alpha motor neuron activity.

( )

- 23- Spastic or hypertonic muscles tend to sink so it can be helpful to provide more support. ( )
- 24- *Retrostasis*, the result of blood vessel constriction in the skin and subcutaneous tissues ( )
- 25- Cryokinetics involves the use of cold in conjunction with movement. ( )
- 26- Buoyancy is a force experienced as an upward thrust on the body in the opposite direction to the force of gravity... ( )
- 27- Erythema 'pinkness' due to cold-induce vasodilatation is distinguish from that due to heating because it contains less oxyhemoglobine and less of the reduced hemoglobin in blood. ( )
- 28- Aquatic exercise programs may be highly beneficial in the restoration of fitness in obese patients ( )
- 29- Contrast bath is used to improve circulation. ( )
- 30- Cryotherapy indicated in Raynaud's Disease ( )
- 31- Frost Bite is good indicator of treatment of ice. ( )
- 32- The tactile input of water is a different source of feedback, compared to dry land ( )
- 33- Contrast bath could be used to decrease spasticity ( )
- 34- During relaxation states in water, heart rate variability demonstrates an autonomic bias toward vagal or parasympathetic nervous system control. ( )
- 35- In the low boy tank, the patient is seated in chest-high water with flexed hips and knees ( )
- 36- On dry land, the ability to achieve an aerobic exercise level for sufficient time to produce a conditioning effect may be easy. ( )
- 37- Paraffin packs increases the circulation which then removes pain metabolites and thus breaks down the vicious cycle of pain and increase muscle spasm. ( )
- 38- The sudden rise in temperature can also create a counter-irritant effect, and this causes a temporary relief of pain. ( )
- 39- In cases of acute inflammation, elevation of temperature will cause an increase in Phagocytosis and aid in absorption of exudates. ( )
- 40- Cold packs in conjunction with other physical means such as stretching exercises which help in stretch adhesions and contractures of tissues ( )



### Answer Sheet

#### I- Choose the best answer:

(20 grades)

	a	b	c	d		A	b	C	D		a	b	c	d
1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	18	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	19	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	20	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					

#### II- True and False:

(20 grades)

	True	False		True	False		True	False		True	False
21	<input type="radio"/>	<input type="radio"/>	27	<input type="radio"/>	<input type="radio"/>	33	<input type="radio"/>	<input type="radio"/>	39	<input type="radio"/>	<input type="radio"/>
22	<input type="radio"/>	<input type="radio"/>	28	<input type="radio"/>	<input type="radio"/>	34	<input type="radio"/>	<input type="radio"/>	40	<input type="radio"/>	<input type="radio"/>
23	<input type="radio"/>	<input type="radio"/>	29	<input type="radio"/>	<input type="radio"/>	35	<input type="radio"/>	<input type="radio"/>			
24	<input type="radio"/>	<input type="radio"/>	30	<input type="radio"/>	<input type="radio"/>	36	<input type="radio"/>	<input type="radio"/>			
25	<input type="radio"/>	<input type="radio"/>	31	<input type="radio"/>	<input type="radio"/>	37	<input type="radio"/>	<input type="radio"/>			
26	<input type="radio"/>	<input type="radio"/>	32	<input type="radio"/>	<input type="radio"/>	38	<input type="radio"/>	<input type="radio"/>			

3- Complete the following table

( 5 grades)

- 1- In warm pools, participants should drink....., and focus on muscle ..... and ..... exercises rather than .....training .

- 2- Enumerate Therapeutic Effects of Mud: ( 5 grades)

.....

.....

.....

.....

.....

Kafrelsheikh University  
Faculty of physical therapy  
Second year 1<sup>st</sup> term



Physiology final exam  
Time: two hours  
18/1/2018

Answer the following questions? (each question 10 marks)

**Q1- pain analgesia system: definition, components and mechanism?**

**Q2- Mention the following?**

1- Pharyngeal phase of deglutition.

2- Causes and types of tetany

**Q3- Compare between?**

1- Secretin and cholecystokinin.

2- Slow and fast pain

**Q4- Cutaneous hyperalgesia: definition, types and mechanisms?**

**Q5- Enumerate the following?**

1- Metabolic functions of thyroxine.

2- Functions of HCL.

***Good luck***

***DR SANAD ELKHILY***

KAFR EL-SHEIKH UNIVERSITY  
FACULTY OF PHYSICAL THERAPY  
ANATOMY DEPARTMENT  
24-12-2017

2<sup>nd</sup> YEAR  
FINAL EXAM  
TOTAL TIME: 2 HOURS  
TOTAL MARKS: 50 marks

Neuro-anatomy

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All questions are to be answered (2 pages)

1. Mention the ascending tracts in the spinal cord and their functions, and describe the reflex arc .....(5marks)
2. Discuss the deep origin and functional component of facial nerve, and describe its lesion .....(5marks)
3. Describe the relations, connections and thalamic radiations of thalamus .....(5 marks)
4. Mention the parts of internal capsule and the fibers pass through each one, and enumerate types of commissural fibers..... (5 marks)
5. Describe the boundaries, roof, floor, recesses and foramina of the fourth ventricle.....(5marks)
6. Describe the boundaries and the content of the inter-peduncular fossa and mention the component of circle of Willis..... (5 marks)
7. Draw cross section in the mid brain at the level of superior colliculus .....(5 marks)
8. Draw horizontal section of the brain .....(5 marks)
9. Choose the correct answer .....(10 marks)
  1. The lateral wall of the third ventricle is formed by:
    - a. Thalamus
    - b. Lamina terminalis
    - c. Hypothalamus
    - d. a & c only
  2. The external capsule lie between:
    - a. Insula & claustrum
    - c- Thalamus & lentiform

- b. b- Claustrum & lentiform.      d- Caudate & lentiform
- 3. Regarding the lateral ventricle, the tail of caudate nucleus is related to which part?**
- a. Anterior horn      c. Posterior horn  
b. Inferior horn      d. Body of the ventricle
- 4. Which of the following is included in the meta-thalamus:**
- a. Geniculate bodies      c. Pineal body  
b. Habenular nuclei      d. Posterior commissure
- 5. The artery which lies on the medial surface of the brain is called:**
- a. Middle cerebral artery      c. basilar artery  
b. Anterior cerebral artery  
c. posterior communicating
- 6. The hippocampus are present in which part of lateral ventricle?**
- a. Anterior horn      c. Posterior horn  
b. Inferior horn      d. Body of the ventricle
- 7. The occipital pole is supplied by:**
- a. Anterior cerebral artery      c. middle cerebral a.  
b. Posterior cerebral a.      d. none of the above
- 8. Absorption of csf through:**
- a. Choroid plexus      c. arachnoid granulation  
b. Ependymal cells      d. tela choroidae
- 9. Posterior inferior cerebellar artery supply:**
- a. Medulla      c. cerebellum  
b. Choroid plexus of 4<sup>th</sup> ventricle      d. all of the above
- 10. One of the following structures lie between the caudate nucleus and the thalamus:**
- a. Stria terminalis      c. internal capsule  
b. External capsule      d. stria habenularies

**WITH MY BEST WISHES**

