**Mid Term Assignment (2020)**

**Course Title: Basic Physiology (DT– 2nd) Instructor: Dr. Irfan Ali Khan**

**Multiple Choice Questions Time: 48 hours**

**Class Code. \_\_\_\_\_\_\_\_16398\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Name/Class Rollno: \_\_\_\_\_\_\_AbdurRahman\_ 16398\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Note:**

* **Attempt all questions from this section. Select the best answer from given choices.**
* **Use Blue / Black Ink only. Do not use red color.**
* **Tick or encircle only one option in each given question.**

It’s an open book Conceptual Assignment paper. Time to Use your brain now.

1. **A short Gap in the myelin sheath around a nerve fiber is called**
2. Dendrite
3. Axon terminal
4. ***Node of Ranvier***
5. None of these
6. **The maximum amount of carbon dioxide in the human body is transported as**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. ***Bicarbonate***
8. Carbide
9. Amylase
10. None of the above
11. **The lungs are protected by\_\_\_\_\_\_\_\_\_\_\_**
12. ***Ribcage***
13. Sternum
14. Backbone
15. All of the above
16. **The three different cells found in the stomach**

a) Chief cells, renal cells, nephron

b) Renal cells, mucous cells, hepatic cells

c) Nephrons, hepatic cells, parietal cells

d) ***Chief cells, parietal cells, mucous cells***

1. **For action potential to occur,**
2. The stimulus should reach or exceed threshold
3. Na+ influx must exceed K+ efflux
4. ***Both A & B***
5. None of these
6. **During rising phase of action potential,**
7. ***Voltage gated Na+ channels open***
8. Voltage gated K+ channels open
9. Voltage gated Na+ channels close
10. Voltage gated K+ channel close

**Stay home, stay Safe**

1. **The movement of an esophagus to help the food down the GI tract \_\_\_\_\_\_\_\_\_\_**

a) Mastication

b) Emulsification

c) ***Peristalses***

d) Ejection

1. **Simple diffusion is \_\_\_\_\_\_\_\_.**
2. Movement of molecules against the conc. gradient
3. ***Movement of molecules down the conc. gradient***
4. Both A & B
5. None of these
6. **97% of Oxygen is carried in blood from lungs is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
7. Bound to Sulphate ion
8. ***Bound to Hemoglobin***
9. Dissolved in plasma
10. All of these
11. **Intrinsic factor secreted in stomach helps in**
12. Absorption of vitamin D
13. Absorption of vitamin K
14. ***Absorption of vitamin B12***
15. Removal of vitamin B12

**Midterm Assignment(2020)**

**Course Title: Basic Physiology (DT- 2nd) Instructor: Dr. Irfan Ali Khan**

**Time: 72 Hours Section 2**

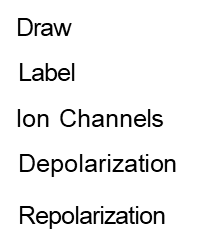
**Name: ……………………..…………………… Class/Roll.no …………………………………….**

**Note:**

* **Attempt all questions from this section.**
* **Use only Blue / Black Ink other than diagrams**
* **Answer Briefly and to the point, avoid un-necessary details**

1. **Draw and Label the Action Potential in a large myelinated nerve fiber. Which ion channels are involved in its different stages?**

**Key points:**



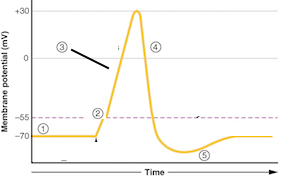
ANS= ***(1) Resting potential***.

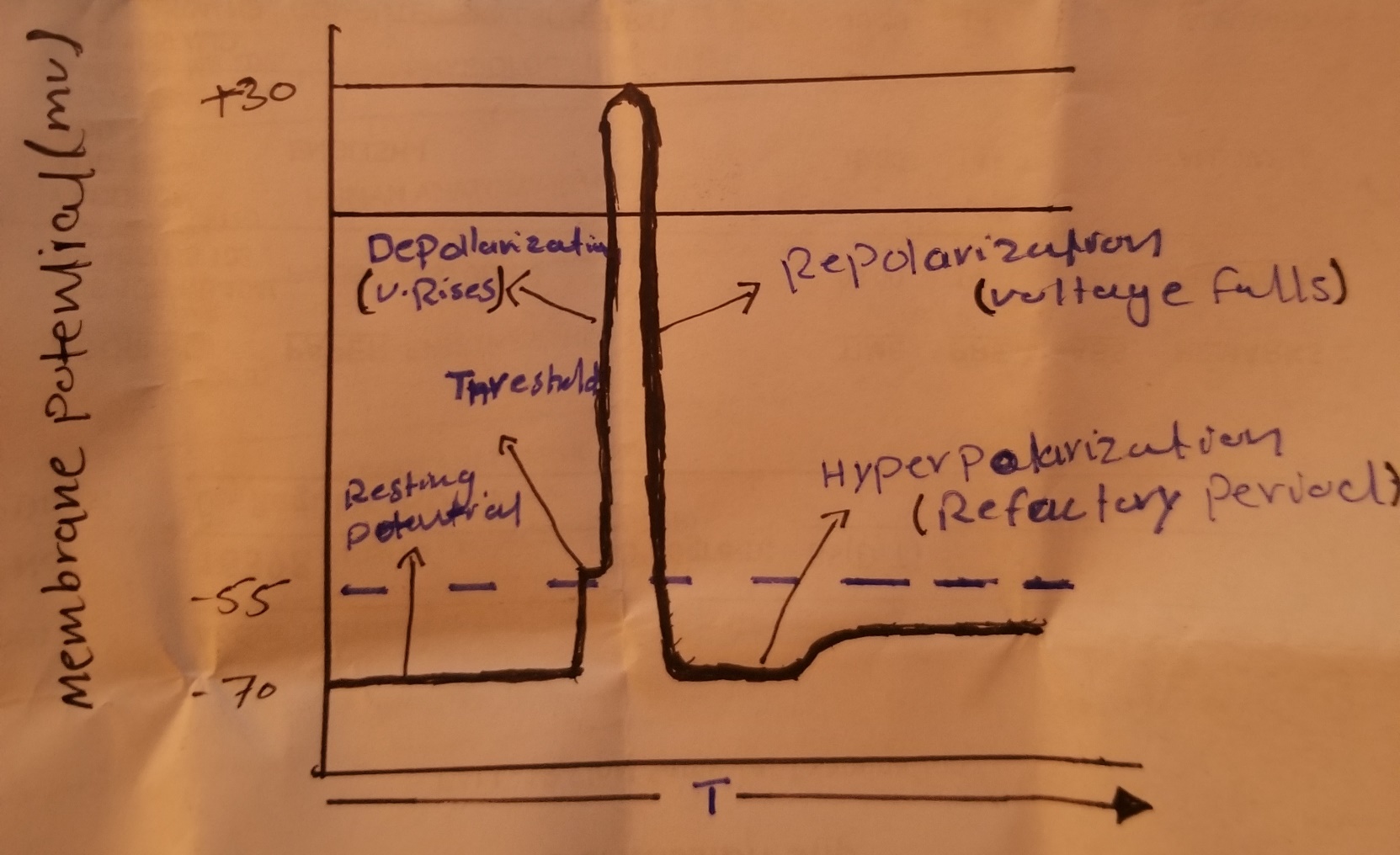
***(2) Threshold.***

***(3) Depollarization (V.Rise)***

***(4) Repolorization(voltages)***

***(5) Hyperpolorization(refractory period)***



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1. **What is the role of oxygen, carbon dioxide and hydrogen ions in control of respiration? Marks 10**

***ANS***

***Respiratory System***

The human respiratory system is one of the most vital organ system of the body we breath about 16000 to 29000 per day which exchange 11000 t of air with atmosphere . IN the process the oxygen of the atmosphere is delivered to the human body which is then utillzed by all the tissues and the carbon dioxide which is produced by the human body is exposed to the lung and then exchange with atmosphere.

***Respiratory system and circulatory system***

The respiratory and circulatory system bring oxygen and nutrients to the cell. The respiratory system work togather to maintain homeostasis. The respiratory system moves gases into the bronchi ; bronchules and aveoli

***GASES EXCHANGE***

***ROLE OF OXYGEN***

THE most important function of breathing is supply oxygen to the and the removel of its waste product of co2 under most condition the partial pressure of co2 **(PCO2)** control the respiration rate . THE peripheral chemoreceptor that detect changes in the level of oxygen and carbon dioxide are located in the arterial aortic and the carotid bodies.

***ROLE OF HYDROGEN***

EXCESS hydrogen in blood act directly on the respiration centre cause increase respiration blood flow through these bodies is extreme so the percentage of o2 removed from the blood

***R0LE OF CO2***

WHEN it combine with water its form carbonic acid making the blood acidic . so co2 in blood stream lower the **ph** ofblood breathingrate increase and kidney bicarbonate production in order of hydrogen