**Neha Malhotra** **R.L. Institute M: 9416974837**

**Max Time : 2 hr** **Class = 11th Biology Test Max Marks : 55**

**Topic: Human Physiology**

1. Multiple choice questions : [ 1 X 10 = 10]
2. Glenoid cavity articulates:

|  |  |
| --- | --- |
| a) scapula with acromion | b) Clavicle with scapula |
| c) Humerus with Scapula | d) Clavicle with Acromion |

1. CO2 dissociates form carbamino haemoglobin when

|  |  |
| --- | --- |
| a) PCO2 is high & PO2 is low | b) PCO2 is low & PO2 is high |
| c) PCO2 & PO2 are equal | d) None of the above |

1. The PO2 and PCO2 (in mm Hg) at alveoli are :

|  |  |
| --- | --- |
| a) PO2 = 104 & PCO2 = 40 | b) PO2 = 40 & PCO2 = 45 |
| c) PO2 = 95 & PCO2 = 40 | d) PO2 = 159 & PCO2 = 0.3 |

1. In ABO system of blood group, if both antigens are present but no antibody, the blood group of individual would be :

|  |  |  |  |
| --- | --- | --- | --- |
| a) B | b) O | c) AB | d) A |

1. Dup sound is produced due to closure of :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Semilunar valve | b) Bicuspid valve | c) Tricuspid valve | d) Both (b) & (c) |

1. Graves’s diseases is caused due to :

|  |  |
| --- | --- |
| a) Hyposecretion of thyroid hormone | b) Hypersecretion of thyroid hormone |
| c) Hyposecretion of adrenal hormone | d) Hypersecretion of adrenal hormone |

1. Acromegaly is caused by :

|  |  |
| --- | --- |
| a) Excess of STH | b) excess of thyroxin |
| c) deficiency of thyroxin | d) Excess of adrenaline |

1. Glucose and amino acids are reabsorbed in the :

|  |  |  |  |
| --- | --- | --- | --- |
| a) PCT | b) DCT | c) Collecting duct | d) Loop of Henle |

1. Podocytes are the present in :

|  |  |
| --- | --- |
| a) cortex of nephron | b) inner wall of Bowman’s capsule |
| c) outer wall of Bowman’s capsule | d) wall of glomerular capillaries |

1. Which of the following joints would allow no movement?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Fibrous joint | b) cartilaginous | c) Synovial joint | d) Ball & socket |

**One mark questions [ 1 x 10 = 10 ]**

1. Define vital capacity. [ 1 ]
2. Define Glomerular Filtrate Rate (GFR). [ 1 ]
3. What is meant by the term osmoregulation ? [ 1 ]
4. Why we called our heart myogenic ? [ 1 ]
5. Name the instrument used to measure blood pressure. [ 1 ]
6. There are \_\_\_\_\_\_\_\_\_\_ pairs of cranial nerves in human beings. [ 1 ]
7. Define cerebrospinal fluid? [ 1 ]
8. Distinguish between : IRV and ERV [ 1 ]
9. Functional unit of muscles is ………………………………. [ 1 ]
10. Define Synapse? [ 1 ]

**Two marks questions [ 2 x 5 = 10 ]**

1. Explain the mechanism of regulation of respiration by medullary respiratory centre. [ 2 ]
2. What is Rigor mortis? [ 2 ]
3. Draw a standard ECG and explain the different segments in it. [ 2 ]
4. Write a note on thin filament and thick filament [ 2 ]
5. Write a short note on Parathyroid gland [ 2 ]

**Three marks questions [ 3 x 5 = 15 ]**

1. Describe the anatomy of human kidney with the help of diagram [ 3 ]
2. Define Oxygen dissociation curve. Can you suggest any reason for its sigmoid pattern? [ 3 ]
3. Expalin the mechanism of muscle contraction on basis of sliding filament theory [ 3 ]
4. Give an account of following adrenal cortex hormone : [ 3 ]

(a) Mineralocorticoids (b) Glucocorticoids (c) Sexcorticoids

1. Give an account of the counter current mechanism in human kidney. [ 3 ]

**Five marks questions [ 5 x 2 = 10 ]**

1. Define the following diseases : [ 5 ]

(i) Osteoporosis (ii) Renal calculi (iii) Atherosclerosis

(iv) Emphysema (v) Gynecomastia

1. Draw the diagram of human heart and explain its working. [ 5 ]

**Or**

Draw a well labelled diagram of Human Brain and explain the following parts :

(i) Corpora Quadrigemina (ii) Pons varolli (iii) Cerebellum

(iv) Cerebrum (v) Dicephalon