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| **SCHOOL OF PHARMACY** | E:\Blank format\AJU LOGO.jpg | **1ST INTERNAL EXAMINATION** |
| Program Name | **BACHELOR OF PHARMACY** | Program Code | **B.PHARM** |
| Course Name | **Human Antomy & Physiology-I Theory** | Semester | **1st Semester**  |
| Course Code | **PHM21001** | Year | **2023/ODD** |
| Time: 1Hour | **Answer all Questions of Section A****Answer Any one of Section B****Answer Any two of Section C** | Maximum Marks | **30** |
| Knowledge Level (KL) | **K1 :** Remembering | **K3 :** Applying | **K5 :** Evaluating |
| **K2 :** Understanding | **K4 :** Analysing | **K6 :** Creating |
| **Section A** **All the Questions are COMPULSORY****MULTIPLE CHOICE type Question [1 x 10 = 10 Marks]** |
| **Q. No.** | **Questions** | **Marks** | **COs** | **KL** | **PO** |
| **1(i)** | **Microtubule organizing center is**1. Microfilament
2. Mitochondria
3. Golgi Complex
4. Centrosome
 | **1** | **CO1** | **K1** | **PO1, PO2** |
| **1(ii)** | **Which layer is absent in thin skin**1. Stratum spinosum
2. Stratum granulosum
3. Stratum lucidum
4. Stratum corneum
 | **1** | **CO3** | **K4** | **PO1, PO2** |
| **1(iii)** | **Which of the following cell organelles have vesicle which contains oxidases (oxidative enzymes) and catalase (decomposes hydrogen peroxide)**1. Lysosome
2. Peroxisome
3. Proteasome
4. Mitochondria
 | **1** | **CO1** | **K2** | **PO1, PO2** |
| **1(iv)** | **Merocrine gland is**1. Salivary gland
2. Mammary gland
3. Sebaceous gland
4. Pancreas
 | **1** | **CO1** | **K1** | **PO1, PO2** |
| **1(v)** | **Coronal Suture is present between**1. Parietal bone and Temporal bone
2. Frontal bone and parietal bone
3. Parietal bone and Occipital bone
4. Frontal bone and Temporal bone
 | **1** | **CO2** | **K1** | **PO1, PO2** |
| **1(vi)** | **This event occurs during muscular contraction**I. H-zone disappearsII. A band widensIII. I band shortensIV. Width of A band is unaffectedV. M line and Z line get closer1. I, II and III
2. I, III, IV and V
3. II, IV and V
4. I, II and V
 | **1** | **CO3** | **K3** | **PO1, PO2, PO10** |
| **1(vii)** | **Which of the following cell junction do not link to adjacent cells**1. Tight junction
2. Gap Junction
3. Hemidesmosome
4. Desmosome
 | **1** | **CO1** | **K2** | **PO1, PO2** |
| **1(viii)** | **Match the following**

|  |  |
| --- | --- |
| 1. Osteoprogenitor cells
 | 1. Mature bone cells
 |
| 1. Osteoblast
 | 1. Derived from the fusion of monocytes
 |
| 1. Osteocytes
 | 1. Unspecialized bone stem cells
 |
| 1. Osteoclasts
 | 1. Bone-building cells
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1. A (I), B(II), C(III), D(IV)
2. A (III), B(IV), C(I), D(II)
3. A (II), B(III), C(IV), D(I)
4. A (I), B(III), C(IV), D(III)
 | **1** | **CO2** | **K4** | **PO1, PO2, PO10** |
| **1(ix)** | **Which of the following cells are detect touch sensations**1. Merkel cells
2. Langerhans cells
3. Keratinocytes
4. Melanocytes
 | **1** | **CO3** | **K1** | **PO1, PO2** |
| **1(x)** | **Osteon is**1. Repeating unit of Spongy bone
2. Repeating unit of Cardiac mucle
3. Repeating unit of Muscle fibre
4. Repeating unit of Compact bone
 | **1** | **CO2** | **K1** | **PO1, PO2** |
| **Section B****Answer any ONE out of TWO [1x 10= 10Marks]** |
| **Q. No.** | **Questions** | **Marks** | **COs** | **KL** | **PO** |
| **1** | Define Tissue. Classify Epithelial tissue, Connective tissue, Muscular tissue & Nervous tissue. | **10** | **CO1** | **K1, K2** | **PO1, PO2, PO9** |
| **2** | Define joints. Classify it with location of joints. | **10** | **CO2** | **K1, K2** | **PO1, PO2, PO9** |
| **Section C****Answer any TWO out of THREE [2 x 5 = 10 Marks]** |
| **Q. No.** | **Questions** | **Marks** | **COs** | **KL** | **PO** |
| **1** | Write about Mitochondria & Golgi apparatus. | **05** | **CO1** | **K1, K2** | **PO1, PO2, PO9** |
| **2** | Write structure & functions of Skin. | **05** | **CO3** | **K1, K2, K6** | **PO1, PO2, PO9** |
| **3** | Write in details about total number of bones. | **05** | **CO2** | **K1, K2** | **PO1, PO2, PO9** |

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

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| Course Outcomes | CO1 | Explains the gross morphology, structure and functions of various organs of the human body |
| CO2 | Describe the various homeostatic mechanisms and their imbalances. |
| CO3 | Identify the various tissues and organs of different systems of human body. |
| CO4 | Perform the various experiments related to special senses and nervous system. |
| CO5 | Appreciate coordinated working pattern of different organs of each system. |