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**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_\_

**End Semester Examination – Nov/Dec – 2016**

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|  |  | **Semester :** | **2016-17 ODD** |
| **Code :** | **10MB326** | **Duration :** | **3hrs** |
| **SUB. NAME :** | **MOLECULAR PHYSIOLOGY** | **MAX. MARKS :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

**Draw suitable diagrams wherever necessary.**

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| **Q. No.** | **Sub Div.** | **Questions** | **Marks** |
| 1. |  | Describe the role of the functional unit of the kidney. | 20 |
| (OR) | | | |
| 2. |  | How does Nanotechnology help getting through the BBB (Blood Brain Barrier)? | 20 |
| 3. |  | Describe the physiology of muscle contraction. | 20 |
| (OR) | | | |
| 4. |  | Describe the structure and working of the central organ of the cardio vascular system. | 20 |
| 5. | a. | What are the kinds of pain? | 10 |
|  | b. | Explain natural pain killing mechanisms. | 10 |
| (OR) | | | |
| 6. |  | Describe in detail the transmission of electrical signals through nerves. | 20 |
| 7. |  | Explain the bone formation and resorption and the role of hormones. | 20 |
| (OR) | | | |
| 8. |  | Explain the role of collagen in the formation of Extracellular matrix with special reference to bone matrix. | 20 |
|  | | **Compulsory:** |  |
| 9. |  | Explain homeostasis with a suitable example. | 20 |

ALL THE BEST