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

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**End Semester Examination – Nov/Dec – 2018**

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| **Code : 17CS3056** |  | **Duration :** | **3hrs** |
| **Sub. Name : PERVASIVE COMPUTING** |  | **Max. marks :** | **100** |

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

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Elaborate on the hardware and software concepts associated with smart card. | CO1 | 20 |
| (OR) | | | | |
| 2. |  | Describe the role played by Smart sensors and actuators in appliances and home networking. | CO6 | 20 |
|  |  |  |  |  |
| 3. |  | Pervasive computing plays a major role in Heating, Ventilation and Air Conditioning. Substantiate the said statement. | CO6 | 20 |
| (OR) | | | | |
| 4. |  | Elucidate on the architecture and the functionalities of Palm operating system. | CO2 | 20 |
|  |  |  |  |  |
| 5. |  | Illustrate the requirement of WAP 1.1 and explain its architecture. | CO3 | 20 |
| (OR) | | | | |
| 6. |  | Connectivity is a challenge in Pervasive environment. Describe how DECT helps interms of connectivity. Compare it with the working of Bluetooth. | CO3 | 20 |
|  |  |  |  |  |
| 7. |  | Explain the various types of gateways and its purpose. | CO5 | 20 |
| (OR) | | | | |
| 8. | a. | Mr. XYZ has developed a service “A”. Elaborate Mr. XYZ, on the steps of UPnP to register his service. Describe how Mr. XYZ will discover the relevant service instance of “A” using UPnP. | CO4 | 10 |
| b. | List the Tasks of Device Management Systems. Mr. XYZ has to manage the devices provided using a middleware. What are the elements required to manage a device using Tivoli Devise Support Infrastructure? Explain. | CO4 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. |  | An accident has happened on a highway. Justify how Pervasive computing plays an important role in healthcare services based on the following two cases.   1. Connecting paramedical resources. 2. Obtaining the details of the victims. | CO6 | 20 |