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



**End Semester Examination – Nov / Dec – 2019**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **17CS3051** | **Duration :** | **3hrs** |
| **Sub. Name :** | **MULTIMEDIA DATABASE** | **Max. Marks :** | **100** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Construct a general multimedia data model and discuss the functionalities of its various layers. | CO1 | 15 |
| b. | Illustrate the general MIRS architecture. Explain and justify the design complexities in UI design. | CO1 | 5 |
| **(OR)** | | | | |
| 2. |  | Describe the main functions of the user interface for the multimedia database systems. | CO1 | 20 |
|  |  |  |  |  |
| 3. |  | Explain the improvement methods used in basic color based image retrieval technique to overcome the limitations based on making use of similarity among colors and spatial relationships among the pixels. | CO3 | 20 |
| **(OR)** | | | | |
| 4. | a. | Give five reasons why audio classification is important. Summarize the main characteristics of different types of sound based on the features of audio with its frameworks. | CO3 | 10 |
| b. | What is the average energy of the given audio track, if it has 5 samples and the sample value at each interval is given below?  x(0) = 2, x(1) =3, x(2) = 1, x(3) =2 and x(4) =1 | CO3 | 10 |
|  |  |  |  |  |
| 5. |  | Elucidate the important aspects of video indexing and retrieval techniques. Also give the details on how data is acquired and processed. | CO3 | 20 |
| **(OR)** | | | | |
| 6. | a. | Explain binary compression and its different aspects in detail. | CO4 | 10 |
| b. | Explain in detail on the text data types that is used in multimedia. | CO4 | 10 |
|  |  |  |  |  |
| 7. |  | Elucidate the structural constructs of WWW search engines. Write the different aspects with Google architecture. | CO5 | 20 |
| **(OR)** | | | | |
| 8. |  | Explain the way of effective video representation and abstraction by subject classification. | CO3 | 20 |
|  | | **Compulsory**: |  |  |
| 9. |  | Describe the security issues in multimedia by highlighting various solutions available to enhance the security. | CO6 | 20 |