Con. 5622-10.   **GT-8484**

(3 Hours)   [Total Marks : 100

N.B. (1) Question No. **1** is **compulsory**.
    (2) Attempt any **four** from the remaining **six** questions.
    (3) Assume **suitable** data wherever **required**.

1. (a) Draw and explain the workstation based architecture for multimedia systems.   **10**
     Also specify hardware and software expected at each layer (if any) considering
     an example.
   (b) Explain lossy and losless compression techniques.   **10**

2. (a) Explain RTP, RTCP, RSVP, RTSP and IP multicast.   **10**
   (b) Explain Level 0 through Level 05 of RAID functionality.   **10**

3. (a) Describe the algorithm for CCITT group 3 standard. How does CCITT group 4   **10**
     differ from CCITT group 3 ?
   (b) Explain different scheduling and policing mechanism in multimedia networking. **10**

4. (a) What are different types of workflow ? Suggest application of Mail enabled
     workflow.   **10**
   (b) Explain JPEG DIB file format for still and motion images.   **10**

5. (a) Explain virtual reality design considerations.   **10**
   (b) Explain MPEG compression in detail.   **10**

6. (a) You are appointed as a Consultant to develop an implementation strategy for **10**
     an automated tourist system that helps its customers to plan this tours. The
     system has agencies that provides services like air, railway, luxury, economic
     planning of tour, hotels, services etc. For such a system design the multimedia
     authorising system and also specify the multimedia data base scheme for the same.
   (b) Explain hypermedia messaging with suitable example.   **10**

7. Write short notes on any **two** of the following :—   **20**
     (a) Video conferencing : Design Issues
     (b) Architectural and telecommunications considerations
     (c) Distributed multimedia system.