Roll No.: _____

COURSE CODE: 10M11CI214   MAX. MARKS: 35
COURSE NAME: Multimedia systems
COURSE CREDITS: 3   MAX. TIME: 2 Hrs

Note: Attempt all the questions. Carrying of mobile phone during examinations will be treated as case of unfair means.

Que.1: *[3 Marks; CO6]* Define synchronization. Why it is required in Multimedia Systems? Also, explain different relationships created between independent objects of Multimedia system.

Que.2: a) *[2 Marks; CO6]* Explain Intra-object synchronization and Inter- object synchronization.

b) *[2 Marks; CO6]* Explain Time-dependent logical data units? Also, explain classification of logical data units.

Que.3: a) *[2 Marks; CO6]* Explain the requirements of hard synchronization and soft synchronization.

b) *[2 Marks; CO6]* What is gap problem? Explain

Que.4: a) *[2 Marks; CO7]* What is resampling? Explain its various types.

b) *[2 Marks; CO7]* Explain Lip synchronization. What are its usages? Explain.

Que.5: a) *[3 Marks; CO7]* What are the requirements to pointer synchronous? Explain the evaluation of the pointer synchronization.

b) *[3 Marks; CO7]* Write and explain the two ways to synchronize the video and text, or video and picture.

Que.6: *[3 Marks; CO7]* Explain the following:
   i.   Live synchronization and its variants
   ii.   Synthetic synchronization

Que.7: *[3 Marks; CO8]* Explain the reference model for Multimedia Synchronization. Also write the various purposes of each layer in this model.

Que.8: a) *[2 Marks; CO8]* What is Interval-based specification? Explain in detail.

b) *[2 Marks; CO8]* What is Control-flow-based specification? Explain in detail.

Que.9: *[2 Marks; CO8]* What is Time-specific Petri Networks? Explain with an appropriate example.

Que.10: *[2Marks; CO1]* Explain the following terms:
   i.   Granularity
   ii.   Media scaling
   iii. Traffic shaping
   iv.   Telecooperation