Name : ....

Roll No. : ....

Invigilator's Signature : ....

CS/M.Tech(ECE-OLD)/SEM-2/MC-207/2011

2011

APPLICATION OF PROGRAMMABLE DSP's IN MOBILE COMMUNICATION

Time Allotted : 3 Hours   *Full Marks* : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer any *five* questions.   5 × 14 = 70

1. a) What are the different multimedia signals ?   5

   b) What is the goal of data compression ?   4

   c) Give examples of data compression achieved for multimedia signals using compression.   5

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2. a) Draw the architecture of a digital signal processor. 7

   b) Show one example of its application in mobile telephony. 7

3. a) Using a block diagram, show the method used for JPEG image compression. 8

   b) State some methods of digital image representation. 6

4. a) State the characteristics of a video signal.

   b) How is prediction used to achieve video compression in μPEG. 14

5. a) Show the main processing steps to encode μPEG audio. 7

   b) Briefly describe a speech synthesis technique in mobile phones. 7

6. a) Write a note on internet access using a mobile phone.

10

b) State some multimedia compression standards used in mobile phones. 4

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