POKHARA UNIVERSITY

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

The figures in the margin indicate full marks.

Attempt all the questions.

1. a) Define multimedia. Explain global structure of multimedia.   8
   b) What is speech? List the sound generation techniques and explain them briefly.   7
2. a) How is the image represented in a computer system? Explain the transformation steps in image recognition steps.   7
   b) What is animation? Explain the different types of animation.   8
3. a) Distinguish between source, entropy and hybrid coding. Perform Huffman coding for the following set :   8

Symbol source	a_1	a_2	a_3	a_4	a_5	a_6
$p(a_i)$	0.1	0.4	0.06	0.1	0.04	0.3

   b) Explain the JPEG compression techniques.   7
4. a) How is the information stored in optical disk? Explain the working principle of CD-WO with diagram.   7
   b) Explain the Form 1 and Form 2 formats of CD-ROM/XA.   8
5. a) Explain the need of communication architecture. How can hybrid system be implemented? Explain.   7
   b) Differentiate the following: 8
      i. Preemptive Vs Non preemptive scheduling
      ii. EDF Vs. SCAN-EDF disk scheduling algorithm
6. a) What is SGML document? Discuss the processing of SGML documents in brief.   7
   b) Explain the Application subsystem of Multimedia Communication System   8
7. Write short notes on: (**Any two**)   2×5
   a) Animation language
   b) Quality of Service (QoS)
   c) Hypermedia System