

Program: Diploma in Information Technology/
Computer Engineering

Full Marks: 80

Year/Part: III/II (2022) © Arjun

Pass Marks: 32

Subject: Multimedia System

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt any EIGHT questions.



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1. Define data streams. Explain the components of multimedia system. [3+7]
2. Explain the concept of sound. Explain how speech is analyzed and transmitted. [2+8]
3. What is image analysis? Describe image analysis techniques. [3+7]
4. What do you mean by computer based animation? Explain. Also, discuss on animation language. [7+3]
5. Write five need of multimedia compression. Differentiate between lossy compression method and loss-less compression method. [5+5]
6. Explain the development phases of multimedia in brief. [10]
7. Explain quality of service and database management system in multimedia. [5+5]
8. Discuss on model for multimedia synchronization. [10]
9. Write short notes on: (any TWO) [2×5]
 - a. Tips for creating good user interfaces
 - b. Object oriented approaches
 - c. Trends in multimedia applications
10. Explain multimedia system development cycle in brief. [10]

Good Luck !



Council for Technical Education and Vocational Training

Office of the Controller of Examinations

Sanothimi, Bhaktapur

Regular/Scholarship Exam – 2081 Kartik/Mangsir

Program: Diploma in Computer/Information
Technology Engineering

Full Marks: 80

Year/Part: III/II (2022) © Arjun

Pass Marks: 32

Subject: Multimedia System

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.



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Attempt any **EIGHT** questions.

1. What are the applications of multimedia? Explain various multimedia components. [4+6]
2. What are the steps of audio digitization? Describe about methods of controlling animations. [4+6]
3. What is a digital image? Explain how image synthesis and image analysis is performed. [2+8]
4. Write the needs for data compression. Explain about LZW compression. [4+6]
5. What is user interface and why is user interface important? Explain the phases of multimedia project development. [4+6]
6. Explain multimedia database management system. What is collaborative computing? [6+4]
7. What is synchronization and what are synchronization issues? Explain abstraction levels of programming in multimedia system. [5+5]
8. Explain multimedia development cycle. Explain the trends of multimedia application. [5+5]
9. Write short notes on: (any **TWO**) [2×5]
 - a. User friendliness as primary goal
 - b. Multimedia system development life cycle
 - c. Object oriented approach

Good Luck !

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt any **EIGHT** questions.



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1. Define multimedia. Explain the components of multimedia. [2+8]
2. Define analog and digital data? What are the hardware requirement in multimedia? Explain. [2+8]
3. What is font and typeface? Explain the use of textual communications in multimedia. [4+6]
4. Differentiate between vector and bitmap images with examples. [10]
5. What is audio digitization? Explain audio software and production with examples. [4+6]
6. Explain software testing in detail with its types. [10]
7. Define data compression. Differentiate between lossless compression method and lossy compression method. [2+8]
8. Define multimedia network. Explain communication standards. [2+8]
9. Define web based animation. What are the application of animation? [2+8]
10. Write short notes on: (any **TWO**) [2×5]
 - a. Introduction to flash
 - b. Digital video format and technology
 - c. Morphing and inverse kinematics

Good Luck !



Council for Technical Education and Vocational Training

Office of the Controller of Examinations

Sanothimi, Bhaktapur

Regular/Back Exam – 2080 Magh/Phagun

Program: Diploma in Computer Engineering

Full Marks: 80

Year/Part: III/II (2018)

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Pass Marks: 32

Subject: Multimedia Technology

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.



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Attempt any **EIGHT** questions.

1. List out and explain functions and applications of multimedia technology. [3+7]
2. What is universal serial bus? Describe the Graphics Card and Graphics Processing Unit (GPU). [2+4+4]
3. What do you mean by textual communication? Explain text design guidelines in detail. [3+7]
4. Differentiate between bitmap and vector graphics. Explain graphics editing software in detail. [5+5]
5. What do you mean by digitization? Explain audio file format in detail. [3+7]
6. Define animation. Explain application areas of animation in detail. [2+8]
7. Describe the concept of multimedia project development. Write the different types of software testing. [8+2]
8. Define compression. Why multimedia compression is important? Differentiate between lossy and lossless compression. [2+2+6]
9. Write short notes on: (any **TWO**) [2×5]
 - a. Media Composition
 - b. Sound/audio system
 - c. LZW compression

Good Luck !



Program: Diploma in IT Engineering

Full Marks: 80

Year/Part: III/II (2016) ©Arjun

Pass Marks: 32

Subject: Multimedia Technology

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.



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Attempt Any Eight questions.

1. Define Multimedia. Explain various multimedia components. [2+8]
2. Explain speech Generation. How does sound be represented digitally? [6+4]
3. What is Image Analysis and Image Transmission. [5+5]
4. What do you mean by computer based animation? Discuss on the animation languages and transmission of animation on brief with suitable examples. [4+3+3]
5. What do you mean by Data compression? Differentiate between lossless and lossy compression with suitable examples. [2+4+4]
6. Define multimedia design. Explain development phases of multimedia. [2+8]
7. Explain about the Multimedia Communication System. Discuss about Multimedia Database Management System with examples. [2+8]
8. Differentiate between Hypertext and Hypermedia. Explain Open Document Architecture. [5+5]
9. Describe about the four-layer synchronization reference model. [10]
10. Write short notes on : (Any Two) [2x5=10]
 - a) Trends in multimedia application
 - b) Object oriented approaches
 - c) Toolkits

Good Luck !



Council for Technical Education and Vocational Training
Office of the Controller of Examinations
Sanothimi, Bhaktapur

Regular/Back Exam-2079 Chaitra/2080 Baishakh

Program: Diploma in Computer Engineering

Year/Part: III/II (2018) © Arjun

Subject: Multimedia Technology

Full Marks: 80

Pass Marks: 32

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.



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Attempt **ALL** questions.

1. Define multimedia. Write the components of multimedia. [2+2+6]
Explain the application of multimedia.
2. What is analog and digital data? Explain about USB, graphics card and graphical processing unit (GPU). [4+6]
3. Differentiate between hypertext and hypermedia. Write the guidelines for text design. [5+5]
4. List the different graphics editing software. Differentiate between raster and vector image with example. [5+5]
5. Define and explain audio digitization. Write about audio file formats. [6+4]
6. What is animation? Explain the principles of animation. List application of animation. [2+6+2]
7. What is software testing?. List the different software testing. [2+3+5]
Write about the compression techniques used in multimedia.
8. Write short notes on: (any **TWO**) [2×5]
 - a. Multimedia Network
 - b. Font and Typeface
 - c. Computer Color
 - d. Photoshop

Good Luck !



Program: Diploma in IT Engineering

Full Marks: 80

Year/Part: III/II (2016) © Arjun

Pass Marks: 32

Subject: Multimedia Technology

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.



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Attempt Any Eight questions.

1. What are the uses of multimedia? Explain multimedia system and its properties. [3+7]
2. What is sound/audio system? Explain speech generation and analysis. [2+8]
3. How can you represent a digital image? Explain image synthesis. [4+6]
4. What do you mean by Computer-Based animation? What are the methods of controlling animation? [2+8]
5. What is the purpose of data compression? Explain LZW compression. [4+6]
6. What is hypermedia? Explain document architecture ODA. [2+8]
7. Define user interface. Explain about HTML and SGML. [2+8]
8. Explain briefly about model for multimedia synchronization. [10]
9. Write short notes on: (Any Two) [2x5=10]
 - a) Trends in multimedia
 - b) System software
 - c) Designing multimedia

Good Luck!



Council for Technical Education and Vocational Training

Office of the Controller of Examinations

Sanothimi, Bhaktapur

Regular/Back Exam-2078/2079, Chaitra/Baishakh

Program: Diploma in Computer Engineering

Full Marks: 80

Year/ Part: III/II (2018 New) © Arjun

Pass Marks: 32

Subject: Multimedia Technology

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.



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Attempt Any Eight Questions.

1. Define multimedia. Explain various multimedia components. [2+8]
2. Define external storage and Graphical processing unit. Describe about graphic and image editing in multimedia. [4+6]
3. Explain about hypertext and hypermedia. What do you mean by typeface and font? [5+5]
4. What is graphics? List and explain various image formats. [2+8]
5. Describe the standards for Video broadcasting. Explain about graphics editing Software. [6+4]
6. What is animation? Write down the guideline for using animation. Explain briefly about morphing. [2+4+4]
7. What is regression testing? Explain about image and Video Compression. [4+6]
8. What are the applications of Photoshop? Differentiate between lossy and lossless compression. [5+5]
9. Write short notes on : **(Any Two)** [2x5=10]
 - a) Bitmap Vs vector
 - b) Audio digitization
 - c) Application of multimedia

Good Luck !



Council for Technical Education and Vocational Training

Office of the Controller of Examinations

Sanothimi, Bhaktapur

Regular/Back Exam-2078, Chaitra-2079 Baishakh

Program: Diploma in Information Technology

Full Marks: 80

Year/Part: III/II (2016) © Arjun

Pass Marks: 32

Subject: Multimedia Technology

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt any EIGHT questions.



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1. What is multimedia? Explain properties of multimedia system. [5+5]
2. Explain concept of sound. Explain speech transmission in brief. [5+5]
3. How digital image is represented? Explain about image analysis and transmission. [5+5]
4. Define computer based animation. Explain methods of controlling animation. [2+8]
5. What is data compression? Why we need it? Explain about lossy compression. [4+6]
6. Explain development phase of multimedia. [10]
7. Explain about quality of service. Explain about document architecture SGML. [5+5]
8. What is user interface? Explain about user friendliness as the primary goal in user interface. [4+6]
9. What is higher programming language? What is toolkits? [5+5]
10. Write shot notes on : [2×5]
 - a. MHEG
 - b. System Software

Good Luck !



Council for Technical Education and Vocational Training

Office of the Controller of Examinations

Sanothimi, Bhaktapur

Regular/Back Exam-2077, Chaitra

Program: Diploma in IT/Computer Engg.

Full Marks: 80

Year/Part: III/II (2008, 2013) © Arjun

Pass Marks: 32

Subject: Multimedia Technology

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.



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Attempt Any Eight questions.

1. What is multimedia? Classify different types of medium. [2+8]
2. Explain different attributes of sound waves in brief. Also describe MIDI basic Concept. [5+5]
3. What is an image? List the different file format of image. differentiate between vector and raster graphics. [2+2+6]
4. Differentiate between video and animation. Explain different stages of computer based animation. [4+6]
5. What do you mean by data compression? Differentiate between lossless compression method and lossy compression method. [2+8]
6. Explain the importance of Hypermedia database in modern application. Explain different types of multimedia database. [5+5]
7. Explain user Interface. Explain general design issues in multimedia in brief. www.arjun00.com.np [4+6]
8. Describe about the four-layer synchronization reference model. [10]
9. **Write short notes on: (Any Two)** [2x5=10]
 - a) Trends in multimedia application
 - b) Image Synthesis
 - c) Toolkits.

Good Luck!



Regular/ Back 2075 Shrawan / Bhadra

Program: Diploma in Computer Engineering/
Information Technology.

Full Marks:80

Year/ Part: III/II

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Pass Marks: 32

Subject: Multimedia Technology

Time: 3 hrs.

Candidates are required
far as practicable. The 1



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Attempt Any Eight Questions.

1. Explain the properties of multimedia system according to variation of consecutive packet amount. Also discuss on information units. [5+5]
2. Explain speech generation. How does sound be represented digitally? Explain. [6+4]
3. What is image? Differentiate between vector and raster image with examples. [2+2+4]
4. What do you mean by computer based animation? Explain. Also discuss on animation language. [7+3]
5. What is data compression? Why do we need data compression? Explain about entropy and hybrid coding. [2+2+6]
6. What are the basic design issues of user interface? How can we get user friendliness in user interface? [4+6]
7. Explain briefly about application subsystem and multimedia database management system. [10]
8. What is HTML? Why does HTML know as markup language ? Write short notes on document architecture. [3+3+4]
9. Discuss on model for multimedia synchronization. [10]

Contd.....

10

Write short notes on (Any Two):

[2x5]

- i. Media Composition
- ii. System software.
- iii. Trends in multimedia applications



Good luck !



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