

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE(MINOR) - SEMESTER-VI EXAMINATION – SUMMER 2023**

**Subject Code:116AH01**

**Date:10-08-2023**

**Subject Name:Steganography and Digital Watermarking**

**Time:02:30 PM TO 05:00 PM**

**Total Marks:70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

	<b>Marks</b>
<b>Q.1</b> (a) Explain in about steganography.	<b>03</b>
(b) Is steganography is secure method of communication?.if yes, justify your answer.	<b>04</b>
(c) What is information hiding? List out various files where information can be hidden and explain?	<b>07</b>
<b>Q.2</b> (a) Differentiate active and passive Steganalysis.	<b>03</b>
(b) Write down some applications of steganography.	<b>04</b>
(c) What are Pure, Secret key and public key steganography and explain.	<b>07</b>
<b>OR</b>	
(c) Compare cryptography and steganography.	<b>07</b>
<b>Q.3</b> (a) List out techniques of steganography.	<b>03</b>
(b) what is cryptapix?	<b>04</b>
(c) Explain spatial domain methods.	<b>07</b>
<b>OR</b>	
<b>Q.3</b> (a) Write down types of steganography	<b>03</b>
(b) List some sregnographic software.	<b>04</b>
(c) Explain algorithms used in steganography.	<b>07</b>
<b>Q.4</b> (a) Write short notes on various watermarking attacks.	<b>03</b>
(b) List out advantage and disadvantages of digital water marking.	<b>04</b>
(c) Explain Least bit significant bit embedding with example.	<b>07</b>
<b>OR</b>	
<b>Q.4</b> (a) Differentiate public and invisible watermarks.	<b>03</b>
(b) Write short note on digital watermarking process(life cycle).	<b>04</b>
(c) Can audio files data be watermarked? Justify your answer.	<b>07</b>
<b>Q.5</b> (a) Write down some applications of digital water marking.	<b>03</b>
(b) List out types of watermarking?	<b>04</b>
(c) What is Watermarking? Differentiate between steganography and watermarking in detail with suitable examples.	<b>07</b>
<b>OR</b>	
<b>Q.5</b> (a) What are the recent trends in watermarking?	<b>03</b>
(b) Explain Fragile watermarking.	<b>04</b>
(c) Explain in detail about watermark security and authentication.	<b>07</b>