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BACHELOR OF SCINCE (B. SC.) MEDIA GRAPHICS IN ANIMATION AND VFX
EXAMINATION: MAY - 2025
SIXTH SEMESTER

Sub.: Introduction to Motion Capture (Th) (BSGV-22-605)

Date: 8/05/2025

Total Marks: 20

Time: 2.00 pm to 3.00 pm

Instructions: All questions are compulsory.

Q. 1. Multiple choice questions (10)

1. Which software is commonly used in conjunction with motion capture data for animation?
a) Microsoft Word b) Adobe Photoshop c) Autodesk Maya d) VLC Media Player
2. Which of the following statements about inertial motion capture is true?
a) It requires multiple external cameras to function b) It uses GPS technology to track motion c) It relies on accelerometers and gyroscopes to capture motion data d) It cannot be used outdoors
3. What is the main advantage of inertial motion capture over optical motion capture?
a) It is more expensive b) It requires a controlled studio environment c) It can be used in outdoor and uncontrolled environments d) It offers higher accuracy for facial expressions
4. Which part of the human body is typically the most challenging to capture accurately using motion capture?
a) Legs b) Torso c) Facial expressions and fingers d) Shoulders
5. What does the term "retargeting" refer to in motion capture?
a) Replacing reflective markers after damage b) Applying captured motion data to a different character or model c) Re-shooting a motion capture session d) Adjusting the lighting for better capture
6. Which famous movie was a pioneer in using advanced motion capture techniques for character animation?
a) The Matrix b) Avatar c) Titanic d) Jurassic Park
7. What is the frame rate commonly used in motion capture to ensure smooth and accurate data?
a) 10 frames per second (fps) b) 24 frames per second (fps) c) 60 frames per second (fps) or higher d) 5 frames per second (fps)
8. Which of the following challenges is commonly associated with magnetic motion capture?
a) Interference from metal objects and magnetic fields b) Requirement of extensive lighting setups c) Limited portability due to large camera arrays d) Low battery life of reflective markers
9. What is a significant disadvantage of optical motion capture systems?
a) They are inexpensive b) They require a direct line of sight and can suffer from marker occlusion c) They do not require calibration d) They only work in outdoor environments
10. Which of the following is a common use of motion capture in the medical field?
a) Analyzing patient movement for rehabilitation b) Designing surgical tools c) Creating hospital architecture d) Managing patient records

Q. 2. Write short notes on. (Any two)

(10)

1. What role does Motion Capture play in medical and sports applications, and what are its benefits?
 2. What are the limitations and challenges faced by Motion Capture technology in real-world applications?
 3. How has Motion Capture influenced the evolution of character animation in film and gaming?
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