Enroll. No._____

**MARWADI UNIVERSITY**

**Faculty of Technology**

**(Computer Engineering – Artificial Intelligence)**

**(B. Tech.) SEM: 7 MID-SEM. EXAM: I September: 2022**

**Subject: - (Computer Vision) (01AI0703)** **Date:-21-09-2022**

**Total Marks:-30** **Time: - 75 Minutes**

**Instructions:**

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

**Question: 1.** [6]

Write in your own words: (a) Digital image, (b) Pixel, (c) Aliasing, (d) Computer vision, (e) RGB model, (f) Quantization.

**Question: 2**. [12]

(a) Write essay on computer vision application, use graphics/block diagram in explanation. [6]

(b) Write an historical milestone in Computer Vision. [6]

**OR**

(b) Mention all preprocessing techniques and give a detailed description. [6]

**Question: 3**. [12]

(a) Write about color fundamental in details. Write about RGB Model as well. [8]

(b) Draw block diagram of the fundamental steps in digital processing. [4]

**OR**

(a) Highlight concrete distinction between quantization and sampling in digital image processing context. [8]

(b) Differentiate all level of image processing with examples. [4]

*---Best of Luck---*

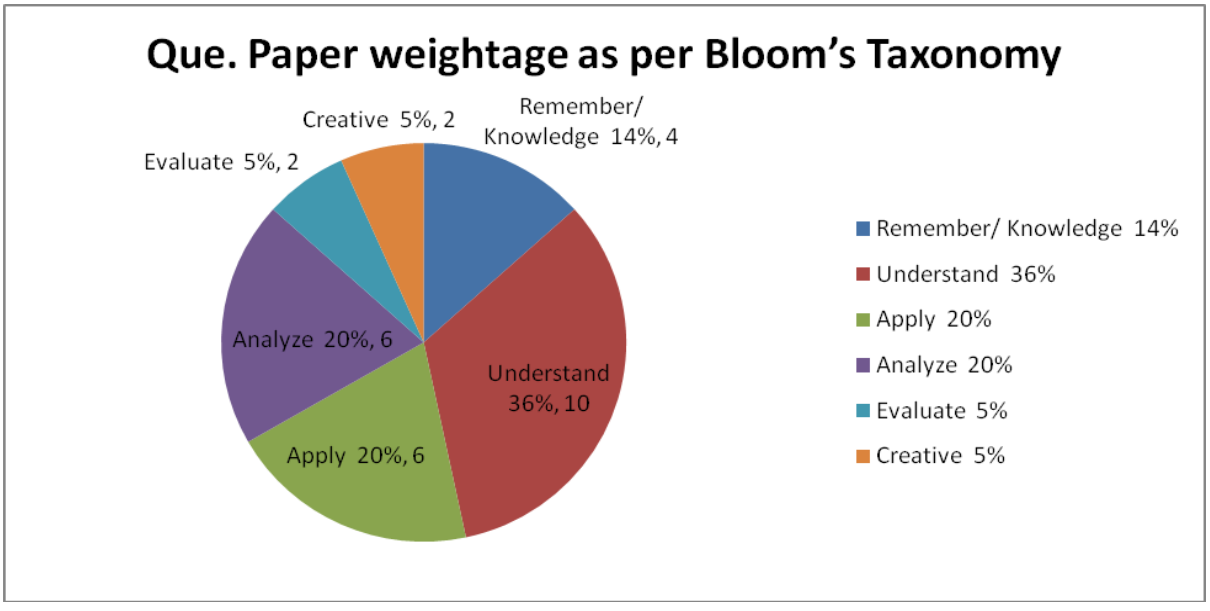
- **Bloom'S Taxonomy Report –**

**Sub:**
**Sem.**
**Branch:**

## Que. Paper weightage as per Bloom's Taxonomy

| LEVEL | % of weightage | Question No. | Marks of Que. |
|---|---|---|---|
| Remember/Knowledge | | | |
| Understand | | | |
| Apply | | | |
| Analyze | | | |
| Evaluate | | | |
| Higher order Thinking/ Creative | | | |

## Chart/Graph of Bloom's Taxonomy



# Course Outcome Wise Questions

| Subject Code | **01AI1703** | Subject | **COMPUTER VISION** |
|---|---|---|---|

| CO No. | Course Outcome |
|---|---|
| **CO1** | Appreciate the detailed models of image formation. |
| | **1(A)** |
| **CO2** | Analyze the techniques for image feature detection and matching. |
| | **1(A), 2(B-Or), 3(A)** |
| **CO3** | Apply various algorithms for object detection and recognition. |
| | **1(A), 2(A), 2(B), 3(A-Or), 3(B)** |
| **CO4** | Examine various face detection techniques. |
| | **1(A), 3(B-Or)** |
| **CO5** | Analyzing various applications using vision techniques. |
| | |

| Blooms Taxonomy | Question List |
|---|---|
| **Remember / Knowledge** | 1(A), 2(B) |
| **Understand** | 1(A), 2(A), 3(A), 3(A-Or) |
| **Apply** | 1(A) |
| **Analyze** | 1(A), 3(B) |
| **Evaluate** | 2(B-Or), 3(B-Or) |
| **Higher order Thinking / Creative** | 1(A) |