Engineering and Technology			
Ramaiah University of Applied Sciences			
Department	Computer Science and Engineering	Programme	B. Tech.
Semester/Batch	7th/2017		
Course Code		Course Title	Computer Vision
Course Leader(s)	Dr. Divya BS, Dr. Subarna Chatterjee and Dr. Aruna Kumar S V		

Questions		Marking Scheme	Marks		
			Max Marks	First Examiner Marks	Moderator
1					
	1	Executive summary	3		
	2	Background and Objectives	4		
	3	Comparative analysis of state-of-the-art methods	7		
	4	Conclusion and Recommendations	**6**		
	5	Presentation	**5**		
		Max Marks	**25**		
Total Assignment Marks			**25**		

Course Marks Tabulation				
Question	**First Examiner**	**Remarks**	**Moderator**	**Remarks**
1				
Marks (Max 10)				

Signature of First Examiner **Signature of Moderator**

Please note:

1. Documental evidence for all the components/parts of the assessment such as the reports, photographs, laboratory exam / tool tests are required to be attached to the assignment report in a proper order.
2. The First Examiner is required to mark the comments in RED ink and the Second Examiner's comments should be in GREEN ink.
3. The marks for all the questions of the assignment have to be written only in the Component – CET B: Assignment table.
4. If the variation between the marks awarded by the first examiner and the second examiner lies within +/- 3 marks, then the marks allotted by the first examiner is considered to be final. If the variation is more than +/- 3 marks then both the examiners should resolve the issue in consultation with the Chairman BoE.

Assignment

Instructions to students:

1. The assignment consists of **1** question.
2. Maximum marks is **25**.
3. The assignment has to be neatly word processed as per the prescribed format.
4. The maximum number of pages should be restricted to **15**.
5. The printed assignment must be submitted to the course leader.
6. **Submission Date: 28th November 2020**
7. **Submission after the due date is not permitted.**
8. **IMPORTANT**: It is essential that all the sources used in preparation of the assignment must be suitably referenced in the text.
9. Marks will be awarded only to the sections and subsections clearly indicated as per the problem statement/exercise/question

Preamble

Computer vision is one of the hottest research fields in the data science world. Moreover, it has become a part of our personal lives. Recent developments in deep learning approaches and advancements in technology have tremendously increased the capabilities of visual recognition systems. As a result, computer vision has been rapidly adopted by companies. Successful use-cases of computer vision can be seen across the industrial sectors leading to widening the applications and increased demand for computer vision tools.

Some of the fields where computer vision has been adopted are as follows:

1. Healthcare
2. Abnormal Event Detection
3. Biometric System
4. Detection of Food Adulteration
5. Military Application
6. Object Detection in Aerial Images
7. Agriculture
8. Industry Automation
9. Bioinformatics

Question-1

Students need to select one application of their interest as case study and perform following task:

1. Executive summary 3 Marks
2. Background and Objectives 4 Marks
3. Comparative analysis of state of the art methods 7 Marks
    a. Compare the existing state-of-the-art methods and discuss the results.
4. Conclusion and Recommendation 6 Marks
5. Presentation 5 Marks