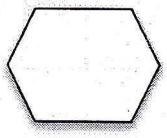
K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

June 2025
~~Nov – Dec 2024~~

(B. Tech.) Program: AIDS Scheme IIB:____
Carry – on Regular Examination: TY Semester: V
Course Code: AIDLC5052 and Course Name: Image and Video Processing
Date of Exam: 02/07/25 Duration: 02.5 Hours Max. Marks: 60

Instructions:
(1)All questions are compulsory.
(2)Draw neat diagrams wherever applicable.
(3)Assume suitable data, if necessary.

Q. No.	Question	Max. Marks	CO	BT level
Q 1	Solve any **two** questions out of three: (05 marks each)	10		
a)	Explain TIFF file format and mention application of it.		CO1	U
b)	What are the properties of good quality image?		CO2	U
c)	Explain importance of I , P and B frames in video .		CO5	U
Q 2	Solve any **two** questions out of three: (05 marks each)	10		
a)	Apply Run length coding on given data and explain how the compression is obtained using this method 1 1 1 1 1 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 0 0 0 1 1 1 1 1 1 0 0 0 0 0 1 1 1		CO4	Ap
b)	Apply chain code to find shape number of the object 		CO3	Ap
c)	Apply gray level slicing on image with r1=3 and r2=5 with background and without background 1 4 2 7 5 3 2 4 5 2 2 6 5 7 0 4 6 6 5 1 0 2 3 2 1		CO2	Ap
Q.3	Solve any **two** questions out of three. (10 marks each)	20		

K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

June 2025

~~Nov – Dec 2024~~

(B. Tech.) Program: AIDS Scheme IIB:____

Carry-on Regular Examination: TY Semester: V

Course Code: AIDLC5052 and Course Name: Image and Video Processing

Date of Exam: 02/07/25 Duration: 02.5 Hours Max. Marks: 60

a)	Explain region growing method used in segmentation with diagram		CO3	
b)	Explain log transformation and power low transformation and its application		CO2	
c)	Explain spatial segmentation and its importance in video processing.		CO6	
Q.4	Solve any **two** questions out of three. (10 marks each)	20		
a)	Apply Huffman coding on given image and comment on average length per symbol. 7 7 3 1 1 6 2 3 1 1 4 3 0 0 7 3 4 3 3 4 5 5 6 2 2		CO4	Ap
b)	Apply contrast stretching on given image with values r1=3 r2=5, s1=2 s2=6 4 3 2 2 3 6 4 7 2 2 6 5 7 6 4 1		CO2	Ap
c)	Apply hough transform show that the following points are collinear also find the equation of the line (1,2) (3,3) (3,4)		CO3	Ap

****