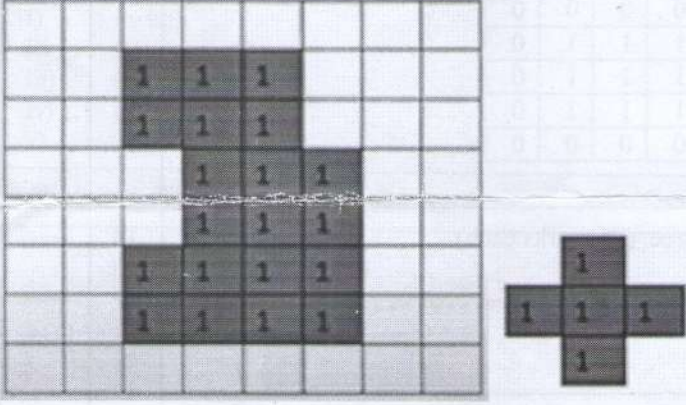




**K. J. Somaiya Institute of Technology, Sion, Mumbai-22**  
**(Autonomous College Affiliated to University of Mumbai)**

Nov – Dec 2024  
 (B. Tech) Program: AIDS      Scheme: IIB  
 Regular Examination: TY Semester: V  
 Course Code: AIDLC5052 and Course Name: Image and Video Processing  
 Date of Exam: 2/12/24      Duration: 02.5 Hours      Max. Marks: 60

a)	What is hough transform? how to use it for edge detection explain in detail with neat diagrams.		CO3	U																									
b)	Explain smoothing sharpening and median filtering of image with example		CO2	U																									
c)	Discuss the techniques involved in shot boundary detection and tracking.		CO6	U																									
Q.4	Solve any <b>two</b> questions out of three. (10 marks each)	20																											
a)	Explain predictive coding in detail with block diagram		CO4	Ap																									
b)	Apply Histogram equalization method on given image <table border="1" style="margin: 10px auto;"> <tr><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td></tr> <tr><td>3</td><td>4</td><td>5</td><td>4</td><td>3</td></tr> <tr><td>3</td><td>5</td><td>5</td><td>5</td><td>3</td></tr> <tr><td>3</td><td>4</td><td>5</td><td>4</td><td>3</td></tr> <tr><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td></tr> </table>	4	4	4	4	4	3	4	5	4	3	3	5	5	5	3	3	4	5	4	3	4	4	4	4	4		CO2	Ap
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3	4	5	4	3																									
4	4	4	4	4																									
c)	Apply hit and miss transform on image I using structuring element B 		CO3	Ap																									

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