MultiMedia Systems Minor – II

Time - 1 Hr

Max Marks - 20

What are the problems of designing coding and compression schemes for video of depth information required for depth image based rendering in 3D TV? Suggest a compression scheme that does not distort depth discontinuity.

(1+3)

Q2. What is Memory Endurance? Reducing process geometry has what effect on memory endurance and why?

(1+3)

3. Define Code Rates. Higher Code rates lead to weaker correction capability. Explain.

(1+1)

Q4. OSP data path design requires Shifters and Guard Bits. Why? How does this help.

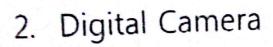
(1.5+1.5)

Q4 (b) Saturation is a key support needed in DSP design. Why? Explain with context how saturation is important for DSP operations.

(2)

Ø5. Pick any two-multimedia applications form the list below and give Block Diagram of the SOC required for each one of them – clearly demarcating the reason for picking up the blocks for each one of those. The differences and similarities (if any) need to be clearly highlighted.

Cell phone



- 3. Video Security
- 4. Medical Imaging
- 5. Automotive Vision