

Total No. of Pages: 1

**6407**

Register Number  
Name of the Candidate:

**M.Sc. DEGREE EXAMINATION, May 2015**

**(ELECTRONIC SCIENCE)**

**(FIRST YEAR)**

**520: ADVANCED DIGITAL ELECTRONICS**

Time: Three hours

Maximum: 100 marks

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**SECTION-A**

**(5×4=20)**

**Answer any FIVE questions**

1. Explain the importance of CMOS RAM.
2. List the general characteristic of memory.
3. What is FIFO? Where it is used?
4. Draw the circuit diagram for the CMOS shift register memory.
5. Explain how data are stored in a magnetic tape.
6. Explain the working principle of compact disk.
7. What is a BCD adder? How it is implemented?
8. Mention the principle of Hall effect transducer.

**SECTION-B**

**(5×16=80)**

**Answer any FIVE questions**

9. Explain the construction of ROM using diodes. How memory is addressed in a ROM?
10. Draw the circuit and the implementation of SRAM and DRAM.
11. Explain the construction and working of charge coupled device.
12. Describe the construction and working of magnetic bubble memory.
13. Using block diagram explain the function of content addressable memory.
14. Draw the logic circuit of binary divisor and explain its working.
15. Discuss the theory and construction of capacitance transducer.
16. Explain the working principle of Dual trace oscilloscope.

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