

- Q.7 The Race condition exists in _____ sequential circuits.
- a) Synchronous b) Asynchronous
c) Both d) None
- Q.8 The class B & c machines are also called
- a) Mealy Machine b) Moore Machine
c) Finite State Machine d) None
- Q.9 IC 74181 belongs to which family
- a) TTL b) ECL
c) CMOS d) IIL
- Q.10 Fuzzy sets can be expressed in _____ ways.
- a) 3 b) 4
c) 2 d) 6

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Expand CMOS.
- Q.12 Which type of Circuit used in dual slop A/D converter for generating ramp type voltage?
- Q.13 MSI Stands for _____
- Q.14 Define Volatile memory.
- Q.15 How many variables are eliminated using octal in K-map?
- Q.16 How many types of Sequential circuits are there?

- Q.17 Expand ALU.
- Q.18 Define Fuzzification.
- Q.19 IC 74181 is used for _____
- Q.20 FPGA stands for _____

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Define Noise margin and Noise Immunity.
- Q.22 Write any five performance characteristics of D/A converter.
- Q.23 Explain in brief about SRAM.
- Q.24 Differentiate between a synchronous and asynchronous sequential circuit.
- Q.25 Explain Moore machine.
- Q.26 Draw the pin description of IC 74181.
- Q.27 Explain function of ALU.
- Q.28 Explain NOR Gate using CMOS.
- Q.29 List any five characteristics of A/D converter.
- Q.30 Explain tri state inverter circuit.
- Q.31 List five advantages of DRAM over SRAM.
- Q.32 Design a Mod-6 counter using JK flip flop.
- Q.33 Explain defuzzification.
- Q.34 Define fuzzy logic.
- Q.35 Write the basic rule of subtraction.