



AL - 0524

B.C.A. (Part - I) Second Semester

Digital Techniques - II**Paper - 2 ST 3**

P Pages : 3

Time : Three Hours

Max. Marks : 60

- Note :
1. All questions are compulsory.
 2. Draw neat sketches wherever necessary.

Either :

1. a) Explain construction & working of bistable multivibrator using Transistor. **6**
b) Explain the construction, working & Truth table of clocked RS FF. **6**

OR

2. a) Draw & explain the working of SR flip flop using NOR gates. **5**
b) Draw & explain the construction & working of monostable multivibrator. **7**

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P.T.O.

Either :

3. a) What is modulus of counters ? Explain MOD-7 asynchronous counter. 6
- b) Draw pin & block diagrams of 7493 IC & explain. 6

OR

4. a) Draw & explain construction & working of 4-bit asynchronous counter. 8
- b) Define synchronous & asynchronous counters. 4

Either :

5. a) Explain construction & working of Johnson's counter. 6
- b) Draw & explain serial in parallel out 4-bit shift Register. 6

OR

6. a) State types & applications of shift Register. 4
- b) Draw & explain the construction & working of PIPO shift Register. 8

Either :

7. a) Explain Winchester disk. 4
- b) Explain various semiconductor memories. 8

OR

8. a) Explain the construction & working of CD. 4
- b) Give the classification of memories. 3
- c) Explain the construction & working of static RAM cell. 5

Either :

9. a) Explain the construction & working of R-2R ladder type D/A converter. 7
- b) Explain the counter type A/D converter. 5

OR

10. a) Explain construction & working of successive approximation A/D converter. 7
- b) Draw & explain block diagram of DAC 0808 IC. 5
