- Why do we need Associate Memory ? Explain (b) with its pre-requisites
- Differentiate between internal & External Q.6 (a) Fragmentation
 - Differentiate between' Sum of –Product's and (b) 'Product- of-Sums' with an example.
- Explain Error Correction and Error Detection Q.7 (a) codes with one example of each
 - www.bhabhauniwer Explain Karnaugh Map (K-MAP) by one simple (b) example.
- Describe any four terms **O.8**
 - JK FLIP FLOP i)
 - Virtual Memory ii)
 - iii) Paging
 - ASCII iv)
 - Hamming Code V)
 - Parity Bit vi)

[Total No. of Questions: 8]

[Total No. of Printed Papers : 2]

Roll No.....

MCA-12

MCA-Semester Examination, Jan.- 2019 **Computer Organization & Architecture**

Time: Three Hours

Maximum Marks: 70

Attempt any five questions (each question carries equal Notec i) marks)

- Explain Von-Newman Model of a computer with (a) the help of a neat diagram.
- (b) Explain the need of floating –point representation
- Formally define De Morgan's Law. (a)
- Explain XOR GATE while taking example of truth (b) table of three inputs.
- Differentiate between Multiplexers & De (a) multiplexers with the help of an example.
 - Discuss Half –Adder in detail with an numeric (b) example.
- Define RS Flip Flop, with an example. **O**.4 (a)
 - Explain design procedure of counters. (b)
- Elaborate the Cache Memory organization and its Q.5 (a) utility.