

**B.Tech. - VIEP - COMPUTER SCIENCE AND
ENGINEERING (BTCSVI)**

Term-End Examination

00484

June, 2017

BICS-013 : COMPUTER ORGANISATION

Time : 3 hours

Maximum Marks : 70

Note : Attempt any **seven** questions. All questions carry equal marks.

1. (a) Explain the concept of decimal and alphanumeric representation. 5
- (b) What is complement ? Explain $(r - 1)$'s and r 's complement. 5
2. (a) Explain decimal fixed-point representation. 5
- (b) Explain gray codes and decimal codes. 5
3. (a) Explain the importance of registers and register organization. 5
- (b) Distinguish between register stack and memory stack. 5
4. (a) Explain addition and subtraction with signed magnitude data. 5
- (b) Explain Booth's algorithm. 5

5. (a) What is the importance of control unit? 5
(b) Explain various micro operations. 5
6. (a) What is address sequencing? 5
(b) What is control memory? 5
7. (a) Explain memory hierarchy. 5
(b) What is cache memory? 5
8. (a) What is auxiliary memory? 5
(b) What is virtual memory? 5
9. (a) What is the difference between Programmed I/O and Interrupt initiated I/O? 5
(b) Differentiate between synchronous and asynchronous communication. 5
10. Write short notes on any *two* of the following : $2 \times 5 = 10$
- (a) Direct Memory Access
 - (b) Stack Organization
 - (c) Floating Point
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