(136) SEAT No._____ No. of Printed Pages : 2

SARDAR PATEL UNIVERSITY
F.Y.B.B.A (ITM) Examination, Semester – I (CBCS) (New Course)
Computer Organization
UM01DBBI24

Date: Monday 29th October, 2018
Time: 02:00 p.m. to 04:00 p.m. **Total Marks:** 60

Q. 1 **[A]** Explain Binary Number System, Octal Number System and Hexadecimal Number system in detail. **[09]**

[B] Explain following in detail with suitable examples. **[06]**
1. Signed and Magnitude Method
2. 2's Complement Method

OR

Q. 1 **[A]** Solve the Following Problems: **[08]**
a) $(101)_8 = (?)_{10}$
b) $(101011)_2 = (?)_{10}$
c) $(2B)_{16} = (?)_8$
d) $(128)_{10} = (?)_2$

[B] List out various character codes. Explain ASCII code in brief. **[07]**

Q. 2 **[A]** Explain following in detail **[09]**
a) NAND Gate
b) OR Gate
c) XOR Gate

[B] Explain De Morgan's First Theorem in detail. **[06]**

OR

Q. 2 **[A]** Explain following in detail **[09]**
a) AND Gate
b) NOR Gate
c) XNOR Gate

[B] Explain De Morgan's Second Theorem in detail. **[06]**

Q. 3 Explain the following in detail: **[10]**
a) Pipeline Machine
b) Array Processor

[B] Explain Von Neumann Machine in brief. **[05]**

OR

Q. 3 **[A]** Write a note on: **[10]**
a) Direct Addressing
b) Immediate Addressing

[B] List out steps of Fetch Decode Cycle. **[05]**

(P.T.O.)

Q. 4	[A]	Define: Scanner. Explain various types of scanner in brief.	[10]
	[B]	Write a note on: Keyboard	[05]

OR

Q. 4	[A]	Define: Memory. Explain RAM and ROM in detail.	[10]
	[B]	Write a note on: Mouse	[05]

— X —

(2)