| Seat | |
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| No. | |

[5668]-193

S.E. (Computer) (II Semester) EXAMINATION, 2019 MICROPROCESSOR AND INTERFACING TECHNIQUES (2012 **PATTERN**)

Time: Two Hours Maximum Marks: 50 *N.B.* :— (i)Answer Q. Nos. 1 or 2, 3 or 4, 5 or 6 and 7 or 8. Neat diagram must be drawn wherever necessary. (ii)Figures to the right indicate full marks. (iii)(iv)Assume suitable data, if necessary. 1. Draw and explain block diagram of 8086 microprocessor. [6] (a)(*b*) Explain concept of DOS loadings. [6] Or2. (a)Draw and explain block diagram of 8237 DMA controller. [6] Draw and explain block diagram of 8259 PIC. (*b*) [6] Draw and explain block diagram of 8251. 3. (a) [6] (*b*) Explain the functional blocks of 8254 with a neat diagram. [6] OrExplain different operating modes of PPI 8255. (a)

- 4. [7]
 - Explain different operating modes of DMA controller 8237. [5] (*b*)

P.T.O.

| 5. | (<i>a</i>) | Draw and discuss block schematic of 8484 clock generator and |
|-----------|--------------|---|
| | | 8286 transreceiver. [7] |
| | (<i>b</i>) | Explain internal architecture of 8087. [6] |
| | | Or |
| 6. | (a) | Explain read cycle timing diagram for 8086 minimum |
| | | mode. [7] |
| | (<i>b</i>) | Explain status and control word of 8087 in detail. [6] |
| 7. | (a) | Draw block diagram of Intel X58 chipset. [6] |
| | (b) | List features of 8280 JIR I/O controller hub and explain its |
| | | block components. [7] |
| | | Or |
| 8. | (a) | Draw the block diagram of Intel JCHIO configuration and explain |
| | | it in detail. [7] |
| | (<i>b</i>) | Explain the following intel ® 82801 IJR I/O controller hub |
| | | capabilities: [6] |
| | | (i) Direct media interface |
| | | (ii) Serial ATA (SATA) controller. |
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