

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. - SEMESTER – III • EXAMINATION – SUMMER • 2013****Subject code: 730406****Date: 15-05-2013****Subject Name: Peripheral System Design and Interfacing****Time: 10.30 am – 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Write the application of following bus in brief. **07**
S-100 bus, STD bus, Multi bus, GPIB, RS-232, Current loop, PCI bus.
- (b) Explain the function of each pin in detail of RS-232 9 pin connector. **07**
- Q.2** (a) Draw and explain the block diagram of 8257 DMA Controller. **07**
- (b) Write a short note on: Cross Compiler and In Circuit Emulator. **07**
- OR**
- (b) Write a short note on : Microprocessor Development Tools. **07**
- Q.3** (a) Explain RS – 449 communication interface in detail. **07**
- (b) Give the advantage and disadvantage of serial port communication over parallel port communication. **07**
- OR**
- Q.3** (a) 1. Explain centronics handshaking with necessary diagram. **07**
2. Explain bi directional mode of operation of parallel port.
- (b) Write a short note on parallel port mode in BIOS. **07**
- Q.4** (a) What is Transparent addressing in CRT Controller? How it is implemented? **07**
- (b) Which different memory contention schemes are used in CRT Controller? Explain any two in detail. **07**
- OR**
- Q.4** (a) Draw and explain Block diagram of 8279 Keyboard/ Display interface. **07**
- (b) Write a short note on PID controller. **07**
- Q.5** (a) Classify the GPIB bus configuration and explain in detail. **07**
- (b) 1. Briefly explain the methods of data message termination in GPIB. **07**
2. Explain serial and parallel method of polling in GPIB.
- OR**
- Q.5** (a) Write a short note on: Data acquisition system. **07**
- (b) Write a short note on: Programmable Logic Controller. **07**
