Q.25 Differentiate between embedded system and general purpose system.

Q.26 What do you mean by general purpose system? Explain.

Q.27 How the transfer C or ASM code in micro controller?

Q.28 Name various software used in micro controller?

Q.29 Discuss the steps involved in interfacing of LED.

Q.30 List any 5 applications of embedded system.

Q.31 What are the different type of processors used in embedded system?

Q.32 Write a short note on compiler.

Q.33 Differentiate between 8051 and PIC micro controller.

Q.34 What are the programming concepts of microcontrollers.

Q.35 List any 5 applications of AVR.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Draw block diagram of PIC and explain function of each block.

Q.37 Draw architecture of embedded system and explain function of each block.

Q.38 Draw the block diagram of AVR and explain function of each block.

Roll No. .....

6th Sem / Branch : Eltx.
Sub.: Embedded Systems

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 Which of the following helps in reducing the energy consumption of the embedded system?

a) Emulator b) Debugger
c) Simulator d) Compilers

Q.2 A computer that uses the same memory space for both data and program instructions is classified as _____.

a) Memory architecture
b) Von Neumann architecture
c) Harvard architecture
d) None of the above

Q.3 Which of the following can make the application program hardware independent?

a) Software b) Application manager
c) Operating system d) Kernel

Q.4 RTOS stands for _____.

a) Real time output system

b) Real time operating system
c) Rare time operating system
d) None

Q.5 Into how many parts does the interrupt can split the software?
a) 2 b) 3
c) 4 d) 5

Q.6 Which of the following is the pin efficient method of communicating between other devices?
a) Memory port b) Peripheral port
c) Parallel port d) Serial port

Q.7 AVR is a family of _____ which was developed by Atmel Company
a) Microprocessors b) Microcontrollers
c) Bit processors d) Amplifiers

Q.8 Which of the following unit protects the memory?
a) Memory management unit
b) Peripheral unit
c) Execution unit
d) Bus interface unit

Q.9 An embedded system is a combination of _____.
a) Software b) Hardware
c) Both A & B d) Devices

Q.10 Which of the following designed system factors are optimized or enhanced for an embedded application?

a) Performance b) Reliability
c) Efficiency d) All the above

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Give one characterstics of embeded system.

Q.12 Name one software used in microcontroller.

Q.13 AVR Microcontroller has a _____ architecture. (Von-Neumann/ Harvard)

Q.14 What is cross compiler?

Q.15 PIC is based on RISC architecture. (True/False)

Q.16 What is timer?

Q.17 AVR stands for_____.

Q.18 What do you mean by memory leak?

Q.19 Expand EPROM.

Q.20 What is embedded system?

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Write any 5 features of embedded system.

Q.22 What do you mean by Real time operating system?

Q.23 What do you mean by reliability of embedded system.

Q.24 Explain functional structure of embedded system.