

B.C.A. DEGREE EXAMINATION – NOVEMBER 2008
THIRD SEMESTER

REG. NO.: _____

COURSE : MAJOR CORE
PAPER : COMPUTER ORGANIZATION
TIME : 20 MINUTES

MAX. MARKS: 20

SECTION – A
ANSWER ON THE QUESTION PAPER ITSELF:

ANSWER ALL THE QUESTIONS:

20X1=20

Choose the correct answer:

1. System software is a collection of programs that are executed as needed to perform function such as
 - a) Receiving and interpreting user command.
 - b) Entering and editing application programs and storing them as files in secondary storage device.
 - c) Managing the storage and retrieval of files.
 - d) All of the above
2. Multiprogramming is
 - a) Operating system can load the program to be executed.
 - b) Operating system can print simultaneously.
 - c) Operating system manages the concurrent execution of several application program.
 - d) All of the above
3. A processor register usually called Accumulator use
 - a) one address instruction
 - b) two address instruction
 - c) three address instruction
 - d) zero address instruction
4. Stack operation function as
 - a) Last in last out
 - b) Last in first out
 - c) First in first out
 - d) First out first in
5. Cache memory is used to reduce the access instruction _____ and data in main memory.
 - a) movement time
 - b) wait time
 - c) process time
 - d) ready time
6. A typical organisation called _____ that implement virtual memory.
 - a) Memory Master Unit
 - b) Main Memory Unit
 - c) Main Master Unit
 - d) Memory Management Unit
7. All input devices are connected
 - a) online
 - b) serial communication link
 - c) off line
 - d) (a) and (b) only

8. A communication link can be operated according to
a) Simplex transmission b) Half duplex c) Full duplex d) All of the above
9. When I/O devices and the memory share the same address space, the arrangement is called
a) Memory mapped I/O b) I/O mapped
c) Device Memory mapped d) None of the above
10. The routine executed in response to an interrupt request is called
a) Interrupt service routine b) Interrupt request line
c) Interrupt acknowledge d) None of the above

Fill in the blanks:

11. An _____ takes advantage of various features of the target processor to reduce the product $N \times S$.
12. A complete set of mnemonics, symbolic names and rules for user constitute a programming language is referred to as _____.
13. Techniques that automatically move program and data block into the physical main memory when they are required for execution are called _____.
14. A _____ is a switching device used to direct transferring of data in a data network.
15. A transfer of a block of data directly between an external device and the main memory without continuous intervention by the processor is called _____.

State True or False:

16. RISC stands for Reduced Instruction system Computer.
17. Queue is FIFO.
18. Each virtual address generated by the processor is called virtual page number.
19. The scheme for serial communication is asynchronous transmission using a technique called start stop.
20. Read/write bit determines the direction of transfer.

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2007-08)

SUBJECT CODE : CS/MC/CO34

B.C.A. DEGREE EXAMINATION – NOVEMBER 2008
THIRD SEMESTER

COURSE : MAJOR CORE
PAPER : COMPUTER ORGANIZATION
TIME : 2 HOURS & 40 MINUTES

MAX. MARKS: 80

SECTION – B

ANSWER ANY EIGHT QUESTIONS: 8X5=40

1. Write a note on basic functional units of a computer.
2. Explain the characteristics of RISC Vs CISC.
3. Explain the types of instructions used in a basic computer.
4. Discuss the various addressing modes with suitable example.
5. What is pipelining? Demonstrate pipeline organization by means of an example.
6. Discuss the need for auxiliary storage device.
7. Write a short note of the working of keyboard.
8. Discuss the working of scanners.
9. What is memory mapped I/O.
10. Explain interrupt cycle.

SECTION – C

ANSWER ANY FOUR QUESTIONS: 4X10=40

11. Explain single bus structure in data.
12. Explain briefly the operation of a memory stack.
13. Differentiate asynchronous transmission and synchronous transmission.
14. Write a detailed note on cache memory.
15. Explain the DMA method of data transfer in detail.
16. Discuss the organization and working of associative memory
