STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 600 086
(For candidates admitted during the academic year 2015 – 16 and thereafter)

SUBJECT CODE: 15CS/MC/CC24

B. C. A. DEGREE EXAMINATION, APRIL 2017
SECOND SEMESTER

REG. NO. _____

COURSE : MAJOR CORE
PAPER : COMPUTER CONCEPTS
TIME : 30 MINUTES **MAX. MARKS: 20**

SECTION A
TO BE ANSWERED ON THE QUESTION PAPER ITSELF

ANSWER ALL QUESTIONS: **(20 X 1 = 20)**
Choose the best answer:

1. Napier's Bones, a mechanical device built for the purpose of _____.
   (a) Multiplication (b) Addition (c) Modulo division (d) Logical Operator

2. The computation time of fourth generation computers was in _____.
   (a) nano seconds (b) micro seconds (c) minutes (d) pico seconds

3. _____ records the location of each file and status of each sector.
   (a) File Allocation Table (b) Stack (c) Queue (d) Register

4. _____ use the typewriter approach of physically striking a typeface against the paper and inked ribbon.
   (a) impact printers (b) laser printers (c) deskjet printers (d) scanner

5. The _____ is a diagram madeup of squares, with each square representing one minterm.
   (a) gate (b) map (c) circuit diagram (d) block diagram

6. Binary information in digital computers is stored in _____.
   (a) Interrupts (b) Memory (c) File Allocation Table (d) Instruction

7. The stack pointer points at the _____ of the stack
   (a) top (b) bottom (c) middle (d) boundary

8. One-address instructions use an implied _____ register for all data manipulation.
   (a) B (b) HL (c) accumulator (d) data

...2

9. A wireless LAN uses _____waves to connect devices such as laptop to the internet.
   (a) infra red (b) ultra violet (c) spectrum (d) radio

10. In _____ connection the data flows in only one direction.
   (a) duplex (b) half duplex (c) full duplex (d) simplex

Fill in the blanks:

11. _____ is an example of an analog computer.

12. _____ memory of the computer is used to store the data and instructions during execution of the instruction.

13. _____ memory chip is used for main memory.

14. _____ is used to store data and instructions during the operation of computer.

15. The input-output relationship of the binary variables for each gate can be represented in tabular form by a _____.

16. The map method is also known as _____.

17. The register that holds the address of the stack is called _____.

18. The collection of all status bit conditions in CPU is called a _____ .

19. Internal interrupts are also called as _____.

20. Parallel transmission is used for _____ distance communication

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SECTION B

ANSWER ALL THE QUESTIONS: **(5 X 2 = 10)**

1. Define clock speed of a CPU.
2. Define Access time.
3. What is the purpose of Boolean algebra?
4. What are the most common fields found in instruction formats?
5. Write any two types of Internet Connection.

SECTION C

ANSWER ANY EIGHT OF THE FOLLOWING QUESTIONS: **(8 X 5 = 40)**

6. List the advantages of first generation computer.
7. What is Bus? Write its features and functionalities.
8. What are the features of Magnetic tape?
9. Explain the working of I/O System.
10. Simplify the Boolean function using four-variable map.
    $F(A,B,C,D) = \sum(3,7,11,13,14,15)$
11. Show the value of all bits of a 12-bit register that hold the number equivalent to decimal 215 in
    (a) Binary
    (b) Binary –coded octal
    (c) Binary-coded hexadecimal
    (d) Binary-coded decimal (BCD)
12. What is reverse polish notation? Evaluate (3*4)+(5*6) using RPN.
13. What are the characteristics of RISC processor?
14. What are the importance of Networking?
15. What are the uses of Internet?

...2

SECTION D

ANSWER ANY THREE OF THE FOLLOWING QUESTIONS: (3 X 10 = 30)

16. List and explain the components of computer hardware.
17. Explain the working of magnetic disk with a neat diagram.
18. Define Error Detection Code. Explain error detection code in detail.
19. Explain the various addressing mode formats.
20. Explain the internet architecture

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