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 2018 SECOND SEMESTER

| CC PA TI | OURSE APER ME | : : | MAJOR CORE COMPUTER CONCEP 3 HOURS | TS | MAX. MARKS: 100 |
|----------------|---|-----------|--|-------------------------|-------------------------|
| | | | SECT | TON A | |
| | | _ | ESTIONS: | | $(20 \times 1 = 20)$ |
| Cn | oose the b | est ans | wer: | | |
| 1. | Punch care | d syster | n was developed by | · | |
| | a. Edmund | d Gunte | b. Blasie Pascal | c. Jacquard | d. Charles Babbage |
| 2. | | | guage uses mnemonic code | | Č |
| | | | b. Assembly | | d. Intermediate |
| 3. | | | igh speed memory between | | |
| | a. Cache | | b. Secondary | c. Primary | d. All the mentioned |
| 4. | An examp | le of In | put devices is b. scanners | • | |
| | a. Joy stic | k | b. scanners | c. web camera | d. All the mentioned |
| 5. | Gray code | is also | known as co | ode. | |
| | | | b. parity code | | d. none |
| 6. | is called weighted code. a. 8421 b. 2423 c. 2421 d. excess 3 | | | | |
| | a. 8421 | | b. 2423 | c. 2421 | d. excess 3 |
| | | | ield is used to locate the op | | |
| | a data | | b mode | c operand | |
| 8. | The overflow bit is represented by the symbol a. O b. E c. S d. V | | | | |
| | a. O | | b. E | c. S | d. V |
| 9. | Applications which require bidirectional data transfer simultaneously is called | | | | |
| | | | | | |
| 10. | · | _ servi | b. half duplex ce enables a group of Intern | net users to exchange t | heir views, ideas on |
| | common | | | | |
| | a. Email | - | b. FTP | c. Telnet | d. Usenet |
| | | | | | |
| Fil | l in the bla | nks: | | | |
| 11 | Δ | tran | nslates high level program i | nto machine language | |
| | | | ne first mechanical calculat | | |
| | | | contains the address of the | | |
| | | | are used for direct data entr | | |
| | | | of the function $F = AB + C$ | | em are caned |
| 16 | The 2 's comp | omnlen | nent of the number 11010 is | | |
| 17 | The regist | er that l | nolds the address for the sta | , ock is called | |
| | | | | ion is cuited | · |
| 19 | Twisted n | air is al | so known as | | |
| | | | process of moving a file from | m a remote computer t | o one's own computer |
| | | mi | | i ciiio co coiiipatei t | o one o o min compater. |

SECTION B

ANSWER ALL THE QUESTIONS:

 $(5 \times 2 = 10)$

- 21. What are called instructions and write its format?
- 22. What are called Input devices e? Give an example.
- 23. Write the symbol for NAND gate and its truth table.
- 24. What is an Interrupt? Explain its types.
- 25. Define FTP.

SECTION C

ANSWER ANY EIGHT OF THE FOLLOWING QUESTIONS:

 $(8 \times 5 = 40)$

- 26. Explain the Characteristics of Computer.
- 27. With a neat diagram, explain about Instruction Cycle.
- 28. Write notes on Optical Disk.
- 29. Explain about any three output devices.
- 30. Simplify the following Boolean function $F(A,B,C,D) = \sum (0,1,2,6,8,9,10)$ using map method.
- 31. Subtract 72532 13250 using 10's complement.
- 32. How will you evaluate Arithmetic expression using stack pointer?
- 33. Explain the uses of logical and Bit Manipulation Instructions.
- 34. Write short notes on any data transmission media.
- 35. Explain the uses of Internet.

SECTION D

ANSWER ANY THREE OF THE FOLLOWING QUESTIONS:

 $(3 \times 10 = 30)$

- 36. Explain in detail about the generations of computers.
- 37. Discuss about the different types of memory.
- 38. Discuss in detail about the Error detection codes.
- 39. Explain in detail about the various addressing modes available with an example.
- 40. Discuss in detail about the various topology available in networks.
