B.E. (Computer Engineering) Third Semester (C.B.S.)
Concepts in Computer Engineering

P. Pages : 2   **NRT/KS/19/3334**
Time : Three Hours   *0200*   Max. Marks : 80

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Notes : 1. All questions carry marks as indicated.
2. Solve Question 1 OR Questions No. 2.
3. Solve Question 3 OR Questions No. 4.
4. Solve Question 5 OR Questions No. 6.
5. Solve Question 7 OR Questions No. 8.
6. Solve Question 9 OR Questions No. 10.
7. Solve Question 11 OR Questions No. 12.
8. Due credit will be given to neatness and adequate dimensions.
9. Assume suitable data whenever necessary.
10. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Differentiate between read only memory and serial access memory.   6

    b) Explain:-   7

        i)   MICR

        ii) OCR

        iii) Inkjet Printers Vs Laser Printers.

OR

2. a) What is memory cell? Explain memory organization in brief.   7

    b) Explain keyboard and flat panel Display.   6

3. a) Explain five generation of computers in detail.   9

    b) Write a machine language program for HYPCOM to find the smallest of three numbers.   5

OR

4. a) Explain MOOR's law.   7

    b) Explain HYPCOM processor.   7

5. a) Write an algorithm to check the number is even or odd. Also draw a flow chart for the same.   6

    b) Explain various generations of programming languages.   7

OR

6. a) Explain characteristics of a good programming language. **6**

b) Explain HTML and python language. **7**

7. a) What is computer software? Explain various types of computer software's **8**

b) Explain various system development programs. **5**

OR

8. a) Explain system management program. **5**

b) Explain the following:- **8**

    i) Language translator

    ii) Linker

    iii) Debugger

    iv) Editor

9. a) What is operating system? Explain various types of operating system. **7**

b) Explain: **6**

    i) FOSS

    ii) GNU project.

OR

10. a) What is open source? What are the open source software development phases? **7**

b) Differentiate between proprietary and open source licensing method. **6**

11. Explain the following:

    i) Capturing a moving image with camera. **5**

    ii) MPEG compression standard **5**

    iii) Speech processing. **4**

OR

12. a) Explain acquiring & storing audio signals. **8**

b) Representation of images. **6**

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