

B.E. (Computer Engineering) Third Semester (C.B.S.)
Concepts of Computer Engineering Paper – III

P. Pages : 2

Time : Three Hours



TKN/KS/16/7337

Max. Marks : 80

- 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) Explain OCR and Bar coding? 7
- b) Differentiate between 6
- i) Impact printer and non-impact-printer.
- ii) Graphic terminal and graph plotter.
- OR**
2. a) What is memory cell? Explain memory organization. 7
- b) Explain compact disk read only memory (CD-ROM) in detail. 6
3. a) Explain different generation of computer in detail. 9
- b) What is Moore's law? What are limitation of Moore's law in development of computer technology. 5
- OR**
4. a) Explain the term single address instruction, two-address instruction, three – address instruction and four – address instruction. 6
- b) Draw and explain HYPCOM processor. 8
5. a) Why there is a need of programming languages. Explain characteristics of a good programming languages? 5
- b) Define algorithm and flow chart? Write an algorithm to find smallest among 10 numbers. Also draw the flow-chart for the same. 8
- OR**
6. a) Differentiate among machine level language, assembly level language middle, level language and high level language. 6
- b) Explain HTML and python languages. 7

7. a) What is software? Explain types of computer software in detail? 8
b) Explain various steps used in problem solving? 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? Why it is needed? Explain various types of operating system. 7
b) Explain the following. 6
i) UNIX
ii) MAC O.S
iii) LINUX (UBUNTU & FEDORA)

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. a) Explain the different steps involved while capturing a moving image with a video camera. 7
b) Why it is necessary to compress digital video data? Explain briefly the principle of the method used for MPEG 2 compression. 7

OR

12. a) Explain audio signal processing? 5
b) Explain speech processing? What is speech recognition? What are its application. 9
