Code: RR 100204

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B.Tech I Year (RR) Supplementary Examinations, May 2012

INFORMATION TECHNOLOGY AND NUMERICAL METHODS

(Common to EEE, ECE, CSE, EIE, BME, IT, E.Con.E, ECC, CSS, ICE and BT)

Time: 3 hours Max Marks: 80

Answer any FIVE questions

All questions carry equal marks

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1 (a) Discuss the block diagram of a computer with a neat sketch.
(b) Describe storage devices briefly.

2 (a) Explain different operating system in detail.
(b) Discuss structured and object oriented approaches briefly.

3 (a) Write applications of internet in today's technology.
(b) Explain the following:
(i) Network structure (ii) Network topologies.

4 (a) Write the features of power point 2000 briefly.
(b) Write short notes on:
(i) Word 2000 (ii) Office 2000.

5 (a) Find a real root of the equation $x^3 - 2x - 5 = 0$ by the method of false position correct to three decimal places.
(b) Find a root of the equation $x^3 - 4x - 9 = 0$ using the bisection method correct to three decimal places.

6 (a) Using Runge-Kulta method of order 4, find y (0,2) for the equation $\frac{dy}{dx} = \frac{y-x}{y+x}$, y(0) = 1, take h= 0.2.
(b) Using Euler's method, find an approximate value of y corresponding to x= 1, given that $\frac{dy}{dx}$ = x + y and y=1 when x=0.

7 (a) Integrate numerically $\int_0^{\pi/2} \sqrt{\cos\theta}\, d\theta$.
(b) Calculate the value of $\int_0^{\pi/2}$ sinx dx by Simpsons' rule using 11 ordinates.

8 Write short notes on:
(a) Windows NT
(b) Optical devices
(c) Networking.

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