

Code :RAIT1024

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II B.Tech I Semester(R09) Supplementary Examinations, May 2011
INFORMATION TECHNOLOGY & NUMERICAL METHODS

(Computer Science & Engineering, Information Technology)

(For students of R05,R07 regulation readmitted to II B.Tech I Semester R09)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

1. (a) Why have I/O devices presented a bottle neck to efficient use of the computer?
 (b) How does an ink jet printer create characters on a print page? What are advantages and disadvantages of ink jet printers.
2. (a) Give type of operating systems that came into existence. Describe the most popular operating systems.
 (b) Describe the components of any operating system along with their function.
3. (a) What is meant by 'portability' in computer languages.
 (b) Distinguish between third generation and fourth generation languages.
4. (a) How does transformation of analog to digital telephone line affect the users?
 (b) What are the different kinds of digital services offered by phone companies? Explain briefly.
5. Describe the Standard Toolbar of Office - 2000
6. (a) Give the algorithm for Bisection method to find the roots of the equation
 (b) Find the roots of the equation
 $x^2 - 4x - 10 = 0$
 using bisection method.
7. (a) Explain Newton's causal difference interpolation method.
 (b) Determine the piecewise quadratic fit $p(x)$ to $f(x) = (1 + x^2)^{-1/2}$ with knots at -1, -1/2, 0, 1/2, 1.
8. Solve $y' = 4-2x$, $y(0) = 2$, with $h = 0.5$
 Using
 - (a) Improved Euler method and
 - (b) Modified Euler method
 - (c) compare the results with the theoretical values.
