

BACHELOR OF COMPUTER APPLICATIONS
BCA (REVISED)
Term-End Practical Examination

00851

December, 2013

BCSL-058 : COMPUTER ORIENTED NUMERICAL
TECHNIQUES LAB

*Time allowed : 1 hour**Maximum Marks : 50*

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- Note :** (i) There are *two* questions in this paper, both are *compulsory*.
(ii) Each question carries **20** marks.
(iii) **10** marks are for *viva-voce*.
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1. Write a programme in C, to calculate the value of "cosx" by using its series expansion, 20
given below :

$$\cos x = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \frac{x^6}{6!} + \dots$$

Note : Evaluate Cosx only up to first three terms

Also find the value of cosx by using the inbuilt function in C.

Compare the results i.e the result produced by your programme for series and that produced by inbuilt function. Based on comparison, determine the error.

2. Write a programme in C, to find the root of equation $x^3 - 5x + 1 = 0$ by using "NEWTON RAPHSON METHOD". 20
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