

# ASSIGNMENT-1

BRANCH: CSE

SEM: 4<sup>TH</sup>

LAST DATE OF SUBMISSION: 19/02/2015

IES COLLEGE OF TECHNOLOGY, BHOPAL

B.E. (4th SEM) ASSIGNMENT-1

ENGINEERING MATHEMATICS (BE -401)

DATE OF ASSIGN: 02/02/2015

DATE OF SUBMISSION: 19/02/2015

Q.1	a) Define Limit. (b) What is Analytic function? (c) If $f(z)$ be regular function of $z$ , prove that $\left\{\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2}\right\} f(z) ^2 = 4 f(z) ^2$ or (c) show that $\int_0^{2\pi} \frac{d\theta}{a+b \cos\theta} = \int_0^{2\pi} \frac{d\theta}{a+b \sin\theta} = \frac{2\pi}{\sqrt{(a^2-b^2)}}$ where $a > b > 0$	
Q.2	a) Define Harmonic function. b) Determine whether $\frac{1}{z}$ is analytic or not. (c) Find poles and order of poles and residues	
Q.3	Define contour integrations.	
Q.4	Prove that Cauchy Riemann equation and define residues formula.	

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CS. (IVth SEM) Assignment Paper-1

CSO (CS-402)

Date of Assignment: - 02/02 /2015

Submission Date: - 19/02 /2015

Q.1	Explain Different types of Register related to the CPU; Also explain functionality of special purpose register.
Q.2	Explain different types of addressing modes of registers.
Q.3	Differentiate between RISC & CISC.
Q.4	Explain basic model of computer with subsystem work.
Q.5	What are the no of stages & operations involved in instruction execution?
Q.6	Explain 8085 pin Diagram of microprocessor.

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CS. (IVth SEM) Assignment Paper-1

OOT (CS-403)

**Date of Assignment: - 02/02 /2015**

**Submission Date: - 19/02 /2015**

Q1	What is the abstract data type? Give example in C++	2
Q2	What is object? Explain with example?	3
Q3	What is class? explain with example	3
Q4	What do you mean by local and global object? Give example?	2
Q5	Give the difference between static and dynamic object?	3
Q6	What do you mean by attribute and method?	2
Q7	Give difference between local and global object? Example with example	7
Q8	What do you mean by Modeling? Explain with example	7

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B.E. (4<sup>th</sup> SEM) Assignment -1

Analysis & Design of Algorithm (CS-404)

**Date of Assignment: - 02/02 /2015**

**Submission Date: - 19/02 /2015**

Q.1	What do you mean by performance analysis of an algorithm? Explain DEC-2014	2
Q.2	What are the different asymptotic notations used? Explain DEC-2014	3
Q.3	Explain any one application that can be solved by divide and conquer .DEC-2014	3
Q.4	Write down Stassen's algorithm for multiplication? DEC-2014	7

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B.E. (4<sup>th</sup> SEM) Assignment -1

ADC (CS-405)

**Date of Assignment: - 02/02 /2015**

**Submission Date: - 19/02 /2015**

Q.1	What are the merits of the Fourier transform.	2
Q.2	What are the limitations of the Fourier transform.	3
Q.3	Discuss the Parseval's theorem.	3
Q.4	Show that unit impulse response of an ideal low pass filter in non - causal.	7

