

**Unit Test I**

Bharati Vidyapeeth's college of engineering for women,Pune-43.

Academic year 2011-12

**SUB-DELD**

Class- SE

**Marks 30**

**\*Instructions to candidates.**

- 1) Q.1 is compulsory.
- 2) Solve any 1 from Q.2 & Q.3
- 3) Neat diagrams must be drawn whenever necessary.

**Q.1)**

A) Minimize the following logic function using K-map & verify the answer using Quine-McCluskey method.

$$Y(A,B,C,D) = \sum m(0,1,2,3,5,7,8,9,1,14)$$

**8M**

B) Design & explain 16:1 MUX using 4:1 MUX.

**8M**

**Q.2)** What is difference between multiplexer & demultiplexer.

**OR**

**8M**

**Q.3)** Convert the following octal nos. into it's equivalent Hexadecimal , binary , & decimal numbers.

i)  $(76)_8$

ii)  $(0.7634)_8$

iii)  $(1567)_8$

**8M**

**Q.4)** Solve any **ONE**.

**6M**

a) Implement full adder using demultiplexer.

b) Simplify the following equation using K-map & realize the minimized expression using basic gates.

$$Y = \sum m(1,5,7,9,11,13,15).$$

\*\*\*\*\* ALL THE BEST \*\*\*\*\*

**Bharati Vidyapeeth's College of Engg. For Women, Pune-43**  
**Computer Engineering Department**  
**UNIT TEST -I**

**Class:** S.E. Computer  
**Date:** 8/8/2011

**Sub:** DSA  
**Marks:** 30

**Instructions:** All questions are compulsory

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**Q1.** a) Write a C function for Factorial of given number using Recursion. (6)  
b) Write Definition of Recursion. (2)

**Q2.** What is Array? Explain Row major and Column major with example. Write Functions For Same. (8)

**Q3.** a) What is Stack? (2)  
b) Write a program for Reverse given string using Stack data Structure. (8)

**Q4.** Write Program for String operations (Any 4 operations)

**OR**

Write Program for Transpose of Given Matrix. (4)

Bharti Vidyapeeth's college of  
Engineering for women, Pune-43.

UNIT TEST - ~~A~~ I

Subject - HSS

Marks 50.

S.E. computer

Date -

Time

Q.1 a) What is Eco-System. Explain need & importance  
of conservation of Eco-System? - 8 Marks

b) what are different sources of non-  
conventional energy. Explain in detail? - 8 Marks

c) Define following terms

1) IMR (Instant Mortality Rate)

2) zero population group

- 2 Marks

Q.2. a) What is pollution? what are the steps  
Taken by leading IT Industries for  
Pollution control. 10 Marks

b) what is Global warming? Explain effect  
of global warming in detail. - 6 Marks

OR

Q.3 a) What is Economics, state the nature &  
scope of economics. - 6 Marks

b) Explain NPP - 2000

- 6 Marks

c) what are the functions of planning  
commission? - 1 Marks

Q.4 a) Explain the terms Demand & Supply. what  
is the law of demand & Supply?

- 8 Marks

b) write a short note on

1) Food chain

2) Food web

- 8 Marks

XOX