11-09-18

Time: 60 minutes   Maximum Marks:15

Attempt any two questions. Each question carries equal marks.

1. Convert following numbers from the given base to the indicated base in the table

Decimal	Binary	Octal	Hexadecimal
35.54	?	?	?
?	1101101.1101	?	?
?	?	242.45	?
?	?	?	D8.F3

2. Perform the subtraction with the following binary numbers using 1's complement. Check the answer by straight subtraction.

(i) 20.13 (ii) 2106 $(14)_8$ 2

3. (a) Add the following numbers in the given base without converting to decimal.

(i) 220_4 and $(113)_4$ (ii) $(172.2)_9$ and $(72.4)_9$

333 254.6

(b) Multiply the following numbers in the given base without converting to decimal.

(i) $(123)_5$ and $(232)_5$ (ii) $(243)_5$ and $(142)_7$

(4041) 41324

Course Code: CBCS11

Internal Assessment Test
2018(First)

Time: 1 hrs. (12 noon – 1 PM) Max Marks: 15

Note: Attempt All Questions.

Q1. a. Convert the following decimal number into binary, octal and hexadecimal number systems.

i) 23.5 (10111.1) $(27.4)_8$ $(17.8)_{16}$

ii) 90 $(1011010)_2$ $(132)_8$ $(5A)_{16}$

iii) 110 $(1101110)_2$ $(156)_8$ $(6E)_{16}$

b. Explain combinatory circuit and draw circuit diagram for Q=(A+B).(A.B).C

c. Explain XOR and NOR gates with the help of truth tables and suitable examples

Q2 a. Explain one's and 2's complements with the help of examples.

b. Von Neumann Architecture of Computer.

c. Write a note on Full adder.

A 10
B 11
C 12
d 13
e 14
F

CBSE12: Problem Solving and Programming in C

Max. Marks: 15   Time : 1 Hour

Answer any three questions.

1. What are the different Primary data-types available in C? Explain with examples.
2. Explain the precedence and associativity of relational operators and logical operators with examples.
3. Distinguish between while and do while loop. What are the roles of break and continue statements inside a loop? Write a C Program to generate the following output:

        1
       121
      12321
     1234321

4. Write a C Program to check whether a given number is prime or not. The program should also print all the prime numbers lying between 100 and 200.

Sessional Test-I, 2017-18

Course: MCA – I semester
Subject:
Subj. code: CSCC 14
Time: 1 Hr.
MM: 15

Note: Attempt any four questions and all questions carry equal marks.

Q1. Do the following:

i) Describe the sets and methods which are used to represent sets. 3.5/ 3.75

ii) Is collection of all rivers in India a set? Justify.

iii) {a, (0), (c}, {a, b, d}}, determine its cardinality? (4)

iv) Let A= {a, b, c, f} and B = {a, c, e, d, g), determine the symmetric difference between A and B. 1.5/3.75

Q2. Define relations and functions and also define their types and their properties with example.

Q3. Define the equivalence classes. If {{1, 3, 5}, {2, 4}, {6}} is the partition of the A = {1, 2, 3, 4, 5, 6}, determine its corresponding equivalence relation R. 3/4.3.75

Q4. What do you mean by the closure of a relation? Determine the transitive closure of relation R={(1,2),(2,1),(2,3),(3,4)} by using warshall's algorithm. (2,2)(4,1) (1,3) (2,4) (1,4) 2/3.75

Q5. Define the various types of lattices. For the following structures determine the kinds of them, if any with proper justification:

$x, y \in R$

$y \in X$

$y: y \in X$ $x (x \cdot y) \in R$.

$y: y \in X$

fig (1)   fig (2)   fig (3)   fig (4)
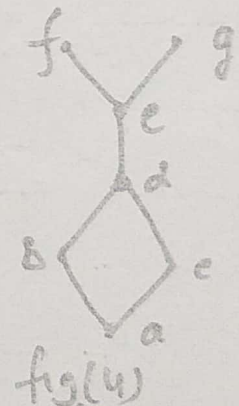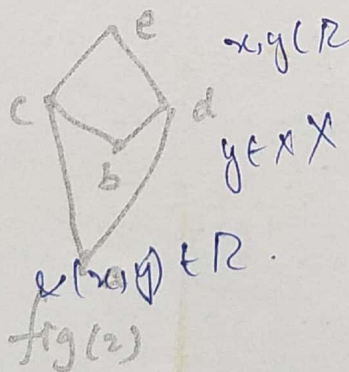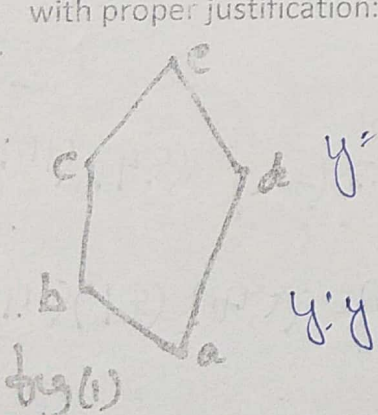
Q1 Discuss Process of Communication

or

→ Discuss Barriers to communication ←

Q2 Discuss Types of Business communication

or

Discuss 7 C's of communication

Time : 1 hr   <u>OB</u>   M.M: 15   12-09-18

Q1 Discuss ~~Entire~~ levels of management & skill required at different level

OR

Discuss Role of manager according to Henry minteberg

Q2 Explain any three:
1) Division of work
2) Unity of command
3) Unity of direction
4) Scalar chain

Internal Assessment Test
Course title: Computer Fundamental
Course Code: CBCS11
(2nd Test): 2018 (12.11.2018)

MM: 15
Date: 12/11/18

Note: Attempt all the Questions:
Time: 1 hr.

Q1. Discuss the following:-

   i.   Switch, Bridge and, Router
   ii.   Internet and intranet
   iii.   Internet topologies.

Q2. Explain the following:
   i.   Multithreading vs Multiprogramming
   ii.   Process and Process State
   iii.   What is Firewall?

Q3 a. Write short note on PLP.
     b. Explain HTML and XML
     c. What is search Engine? Give Examples.
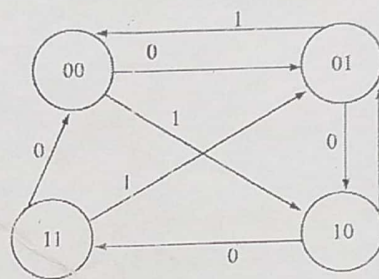
Max Marks: 15

Time: 1 Hour
- Write your Roll No. on the top immediately on receipt of the question paper.
- Attempt any TWO questions in all.

1. Design a combinational circuit that convert BCD code to excess-3 code — $\Sigma(0,11,12,13,14,15)$

2. What is counter? Design a sequential circuit with the following state diagram.

$$T_A = A'B + AB' + XA$$

$$T_B = B' + XA' + X'A$$

PS			NS			
A	B	X	A	B	T_A	T_B
0	0	0	0	1	0	1
0	0	1	1	0	1	0

3. What is T gate? Find the Boolean function from the following threshold gate. — P.no 245 Exd/0/

$$F(a_1, a_2, a_3) = \Sigma(1,3,4,5,7)$$

3 C.
5 e.

4. $\dfrac{50 \%}{100}$

$\dfrac{n+B}{2}$
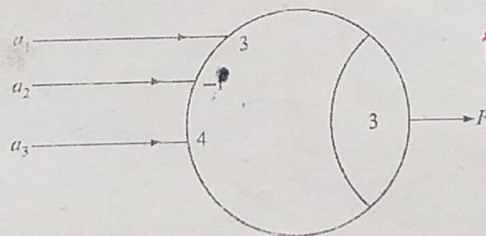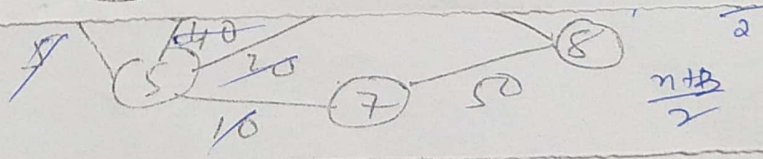
DEPARTMENT OF COMPUTER SCIENCE, JMI, NEW DELHI

[Q1]. There are 6 books on mathematics, 3 on computer science, and 5 on electronics. In how many ways can these be placed on shelf if books on the same subject are to be together?

[Q2]. Translate any four the following in the symbolic/sentence form:
  i)   No student loves Bill
  ii) Bill has no sister
  iii) Every student loves some student.
  iv) Everything is on something
  v) $\exists x \, \forall y.\text{bought}(x, y)$

[Q3]. What do you mean by the next larger r-permutation and next larger r-combination? Determine the next larger permutation of 1356 and next large combinations of 2356 in a set of elements $\{1, 2, 3, 4, 5, 6\}$.

[Q4]. Define the general term and middle term of binomial expansion with example.

[Q5]. Attempt any on any two: [optionl]
  i)   Planar, bipartite, and regular graph, tree
  ii) Define rank and nullity of a graph
  iii) Spanning tree of the following graph:
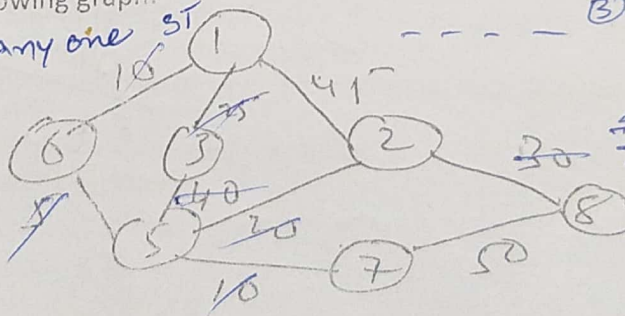
2ND SESSIONAL TEST- MCA I SEMESTER
Professional and Business Communications (CSCC15)
Attempt any two questions select one question from each unit.

Section A

Q1: You are Regional Head –Sales in ICICI Prudential, the performance of entire North region was very poor in terms of sales for the last quarter (July-Aug-Sept 2018). You want to call a meeting of all Branch Managers/ unit Head on November 17, 2018. To discuss the following issues:
1. Reasons for low sales
2. Do we need to give training to our sales people?
3. Firing of responsible people.
4. Any other issue.

The meeting is scheduled to be at Regional Office of ICICI Prudential, XYZ Buildiding, Tollstroy Marg, and Connaught Place, New Delhi 110001.Time: 10:30AM.

You draft a Notice for the above meeting and attached the agenda for the meeting.

Assume the meeting is over, you draft a minute of the meeting.

Q2: You are Project Manager (Purchase) in ABCD Ltd, your company is in interior decoration business. A company Geo Illumination Ltd. Whose Sale manager is Mr. Arun Gupta, you had a casual discussion regarding business in a Trade show (which was held in New Delhi in September 2018). Now you write a letter to Mr. Arun Gupta in which you show your interest to order their "XETA Light" in silver and Grey color 1000 units each. Request him to send the goods on 50 % cash and 50% 45 days credit. The address of Geo Illuminations Ltd is Xeta House, Capt Sher Singh Marg, and New Delhi 110097.

Section B

Q3: You are called for an interview in TCS for the post of Software Engineers. Prepare list of at-least ten questions which you think may be asked in the interview. Also mention what shall be your response to these questions.

Q4: What is corporate communication? Discuss the role and importance of Corporate communication in today's dynamic business scenario.

Q5: Does differences in cultures play a role in communication. Discuss with some examples.

Q6: What is international Business Negotiation Skills. Discuss its importance.

2ND SESSIONAL TEST- MCA I SEMESTER
ProPriciples Of Mgt & OB (CSCC16)
Attempt any two questions select one question from each unit.

Section A

Q1: What is SWOT analysis and PEST analysis.

Q2: What is the implications of Steve Covey's Time management Techniques/concept.

Q3: What is Organizational Behaviour? What is the practical implication of OB knowledge for a manager.

Section-B:

Q4: What is Learning ? Compare and contrast the classical Learning theory with Operant Learning Theory.

Q5: Do Emotions have any role in an organization? Discuss the issue with some examples.

Q6: Write a note of Benchmarking or JIT.

MCA (SEM-I) Minor Test-II, 2018

CBSE12: Problem Solving and Programming in C

12·4-18

Time: 1 Hour

Max Marks: 15

- Attempt any _three_ questions. All questions carry equal marks.

1. Distinguish between Call-by value and Call-by-reference with an example. Can a function in C return multiple values of different types? Write a function to merge the elements of two one-dimensional arrays of integers being passed as parameters.

2. Distinguish among _auto, static_ and _external_ storage classes of C language with suitable examples.

3. What are the advantages of pointers? Write a function in C to copy one string onto another using pointer.

4. Define s structure data type _TimeStruct_ containing three data members (fields) called hour, minute and second. Write a program that would assign values to the individual members (fields) and display the time in the form 16:40:30.

```
struct time {
    int hh, mm, ss;
}

void main(){
    struct time t1;
    Printf("\n enter hours\t");
    Scanf("%d", t1.hh);
    Scan
```

mon -lab test 10.10PM

wed thru thur →