2107 M.C.A. sem-I Dec. 2007

VT Oct., 07 384

Introduction to web Technology.

Con/4988–07. BB–6216

(3 Hours) [Total Marks : 100

N.B. : (1) Question No. **1** is **compulsory**.
(2) Attempt any **four** questions from the remaining **six** questions.
(3) **All** questions carry **equal** marks.

Q1. a) Explain Types of Lists in HTML. Write HTML code to demonstrate it. 10

b) Write Java script to display maximum and minimum number amongst the excepted three numbers from the user. 10

Q2. a) Differentiate between any two of the following : 10
1) Client side Form validation and Server side Form validation
2) GET and POST Method
3) Query string and Form collection .

b) Write short note on DHTML. Write DHTML code to change the text color, font size and alignment if mouse is pointed over it. 10

Q3. a) Differentiate between language and scripting language. Explain features of JavaScript. 10

b) Explain different steps in web development life cycle. Differentiate between static and dynamic web pages. 10

Q4. a) Explain the Advantages and Disadvantages of using frames in web page. 10

b) Explain different types of web sites with suitable example. 10

Q5. a) Explain Built-in objects in ASP. Write ASP code to demonstrate Request and Response object. 10

b) What is Event and Event handlers in JavaScript? Write JavaScript to demonstrate events handling in JavaScript. 10

Q6. a) What is a recursive function in JavaScript? Write recursive function to print factorial of the accepted number. 10

b) What are different Built-in objects in JavaScript? Demonstrate Math and Date Object along with their methods. 10

Q7. a) Write short note on CSS. Write CSS to demonstrate different types of style sheets. 10

b) What are different ways to store the data in ASP? Explain when to use which method.

14/12/07 MCA Sem. I (Rev.) Oct 07

Principles of Economics & Managerial

VT Oct., 07 384

Con. 4985–07. BB–6213

(3 Hours) [Total Marks : 100

N.B. : (1) Question No. **1** is **compulsory**.
(2) Attempt any **four** questions from the remaining **six** questions.
(3) **All** questions carry **equal** marks.

Q 1.
(a) Describe the role and responsibilities of Managerial Economist. 10
(b) Explain the Maslow's theory of motivation. 10

Q 2.
(a) Explain Market Equilibrium with the help of Law of Demand and Supply 10
(b) Explain why MC cuts AC at the bottom of its U. Also trace the relationship between cost curves while explaining the law of variable proportion. 10

Q3.
(a) Elaborate the contribution of F.W. Taylor towards the development of management thoughts. 10
(b) Explain the nature of planning. 10

Q4.
(a) All organizations whether profit or non-profit organizations need marketing. Justify with relevant examples. 10
(b) Describe the positioning & marketing mix of a brand of your choice. 10

Q5.
(a) The nature and scope of the Human Resource Management Systems keeps on evolving with the changes in the external and internal environments of organizations. Elaborate on the same. 10
(b) Discuss the various types of interviews used in selecting employees. What are the pros and cons of interview as a selection procedure? 10

Q6.
(a) Explain Decentralization and delegation of authority. 10
(b) What are the different type of organizational structure. Explain any two with the help of examples. 10

Q7. Write short notes on : (4 x 5 = 20)

(a) Total Quality Management
(b) Preventive Maintenance
(c) Methods of Appraisal
(d) Blanchard's Situation leadership theory.

10/12/07 M.C.A. Sem I Computer organisation & Architecture

VI Oct. 07 385

Con/5111–07. (REVISED COURSE) BB–6207

(3 Hours) [Total Marks : 100

N.B (1) Question No.1 is compulsory.
(2) Attempt any FOUR from the remaining questions No.2 to 7.
(3) All questions carry equal marks.
(4) Figures to the right indicate marks.

1.(a) Obtain the canonical product-of-sum expression of (5)
Y(ABC) = (A+B) (B+C) (A+C)

(b) Draw Instruction cycle state diagram along with indirect Sub cycle. (5)

(c) List the characteristics of RISC with reference to RISC, Discuss the following: (5)
(i) One Instruction per cycle.
(ii) Register to register operations.

(d) Write short note on Full-adder. Draw the circuit. (5)

2.(a) Discuss the following addressing modes with diagrams: (5)
(i) Register indirect. (ii) Displacement.

(b) What are Flip-flops? Discuss their basic properties: (5)

(c) Explain the DMA method of I/O techniques: Diagrammatic. (10)

3.(a) Write a detailed note on 6-stage instruction pipeline and the effect Of conditional branches on the same operation. Diagrammatic: (10)

(b) (i) Write a short note on set-associative mapping function In cache memory. (5)

(ii) Write a short note on Associative memory. (5)

4. (a) Write short notes on **ANY TWO** of the following: (20)
(i) Micro-programmed Vs Hard-wired control.
(ii) RAID levels(any 2)
(iii) Clusters
(iv) Parallel organization.

5. (a) Discuss the categories of computer systems proposed by Flynn Along with the suitable diagrams: (10)

(b) (i) Explain the data path and control path with the help of diagram: (5)

(ii) Using K-map minimizes the following function: (5)
F(ABCD) SUM (0,1,2,3,5,7,8,9,11,14)

6 (a) Discuss the various super scalar instruction issue policies: (10)

(b) (i) Compare and contrast DRAM Vs SDRAM (5)

(ii) Discuss 4 to 1 multiplexer using truth-table: (5)

7. (a) Write short notes on interrupt-driven I/O. (5)

(b) Write a short note on decoder. (5)

(c) What are the types of parallel processing systems: (5)

(d) Explain memory hierarchy with diagrammatic explanation. (5)

M.C.A.Sem-I Dec.2007
Programming with "C"

Con/4971–07. **(REVISED COURSE)** **BB–6202**

(3 Hours) **[Total Marks : 100**

N.B. : (1) Question No. **1** is **compulsory**.
(2) Attempt any **four** questions from the remaining questions.

1. a) i. Why is the use of the goto statement generally discouraged? Under what conditions might the goto statement be helpful? What types of usage should be avoided and why? 10
ii. Illustrate the rule of data type promotion (type conversion) in an expression
d1 = (c * i) + (f / i) – (f + d) double d1, d; char c; int i; float f;
b) Write a program to read the records of 100 employees. Calculate salary of each employee. (Net salary = gross-deduction, gross= Basic+TA+DA+Allowances+HRA, deduction= PT+ IT. TA=10% of Basic, DA= 30 % of basic, HRA=20 %of basic, PT=200, IT=4% of basic 10

2. a) i. Explain enum with suitable example. 10
ii. What is stream? Describe two different methods of creating a stream oriented data file.
b) Write a program to convert number into words. (123= one two three) 10

3. a) What is meant by bitwise operations? What is the purpose of complement operator? To what types of operands does it apply? What is the precedence and associatively of this operator? How can the 2's complement of a decimal number be found? 10
b) Write a program to find n! using recursive function. 10

4. a) Find the output of following code 20

i.
```
int main()
{ char
A[]={'a','b','c','d','e','f',g','h'};
  char*p=A;
   ++p;
   while (*p !='e')
    printf("%c", *p++);
    return 0;
}
```

ii.
```
char funct(int val)
{char ch=val;
  return ch;
}
int main()
{float a=256.25;
 printf(%d",funct(a));
return 0;
 }
```

iii.
```
int main()
{char p[]="%d\n";
 p[1]='c';
 printf(p,65);
return 0;
 }
```

iv.
```
int funct2(int b)
{if(b==0)      return b;
 else          funct1(b--);
}
int funct1(int a)
 {if(a==0)     return a;
  else         funct2(a--);
 }
 int main()
 {int a=7;
  printf(%d",funct1(a));
return 0;          }
```

5. a) What are the different storage types supported by C language? Compare and contrast. 10
b) Write a program to declare pointer to array of pointers to integer(integer should be created at run time), sort the values in ascending order. 10

6. a) Differentiate following : 20
i. binary file & text file
ii. union & structure
iii. function & macro
iv. actual parameter & formal parameter
v. call by reference & call by value

7. a) Identify the following declarations. Ex. int i (integer variable) float a[10](array of 10 real nos) 10
i. int (*f()) ()
ii. int (*f()) []
iii. int f[] [] []
iv. int (*f[]) []
v. float **f
vi. void *f
vii. void *f()
viii. char *(*f) ()
ix. float (*f) [] []
x. int ******f
b) Write a program to print prime no in given range of number. 10

7/12/07

MCA — Sem I (Rev)
System Analysis Design.

Con. 5266-07. BB-6204

(3 Hours) [Total Marks : 100

N.B. (1) Question No.1 is compulsory.
(2) Answer any four from the remaining questions.

Q1. a) Draw an overall data flow diagram for the following application. A systems analyst selling professional time by the hour and paying Staff salaries. **10**

b) How does the work of systems analysts vary from organization to organization to organization? Why this difference exits? **10**

Q2. a) What is the purpose preliminary investigation ? What outcome is expected ? What carries out this investigation? On What basis is it initiated? **10**

b) How does structured English differ from the dicision tree & Decision Table ? What advantages does it offer over the other two methods. **10**

Q3. a) The RAD model is often tied to CASE tools research the literature and provide a summary of a typical CASE tool that support RAD. **10**

b) How easy is it to identify the costs and benefits of a system ?Give examples of costs that are not easily identifiable. **10**

Q4. a) What is implementation? How does it differ from conversion? Elaborate. **10**

b) Compare and contrast conventional testing and object oriented testing. **10**

Q5. a) How would one design data outputs on a CRT Screen. Illustrate. **10**

b) How the structure walkthrough conducted & what is is the role of the user in this activity. **10**

Q6. a) In what respect is interviewing an art? Explain. **10**

b) Describe role of data dictionary plays in the documentation & analysis of an existing system. **10**

Q7. Write a note on: **20**

1. Coupling and Cohesion
2. User Interface Design
3. Feasibility Study
4. Debugging

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