

# Web design (Principles of web design and web technologies)

QP Code : 04983

(2½ Hours)

[ Total Marks : 75 ]

10

- (1) All questions are compulsory.
- (2) Figures to the right indicate marks
- (3) Illustrations, in-depth answers and diagrams will be appreciated.
- (4) Mixing of Sub-questions is not allowed.

Attempt the following (any three)

15

- (a) Explain text based navigation in website. In what way it is better than graphics based navigation?
- (b) Explain the use of IMG tag of HTML. How can you create Image maps in HTML?
- (c) What factors you would consider for publishing a website?
- (d) Write a note on frame & frameset tag. Give example.
- (e) Write a HTML code to design form to accept name, password, gender & address from the user. [use different controls].
- (f) What is CSS? Explain any 2 types of CSS with example.

Attempt the following (any three)

15

- (a) What is XML? What are its advantages over HTML & SGML?
- (b) Write JavaScript code which will change the background color of body of HTML page on click of respective color buttons - Red, Blue & Green present on HTML form.
- (c) Write a note on document type definition.
- (d) Explain setTimeout & clearTimeout with example. How it is different from setInterval?
- (e) Write JavaScript code to input a number from the user and find sum of squares of odd numbers from 1 to given number.
- (f) What are well-formed & valid XML documents?

Attempt the following (any three)

15

- (a) Write a note on managed execution process.
- (b) What is the use of
  - (i) Dim,
  - (ii) CInt,
  - (iii) ByRef,
  - (iv) Single,
  - (v) Continue
- (c) Explain select... case construct with different types of case matching criteria. Give example.
- (d) Write a subroutine for button click event that reads a number present in the textbox, finds the factorial of that number & displays the answer as a message.
- (e) Explain StreamReader class with example.
- (f) Write a note on Exception Handling in VB 2008.



- (b) Explain the working of IC 555 timer as tone burst oscillator giving its circuit. What is the essential condition between the output frequencies of the two timers used in this case to see the action of Tone burst oscillator ? 7

OR

Draw the circuit diagram and explain the working of a second order active high pass filter to get output frequency of 2.5 KHz and gain of 1.5. 7

- (a) With a neat circuit diagram explain the working of constant current source with grounded load using op-Amp and p-n-p. transistor. Calculate load current if  $V_z = 6.4$  Volts and  $R_s = 50 \Omega$ . 8

OR

Draw the circuit diagram of regulator with current booster using three terminal fixed voltage regulator (78XX series). Explain its operations. Explain the role of current booster and short circuit protection. 8

- (b) Draw the circuit diagram of a bipolar voltage regulator. Explain its working. 7

OR

Differentiate between linear regulators and switching regulators. Explain any one switching regulator in brief. 7

5. Attempt any three :-

- (a) What is the principle of operation of a capacitive transducer ? Where is it used ? 5
- (b) What are the considerations to be made while selecting an electronic analog meter ? 5
- (c) Draw a neat labeled circuit diagram of a positive clipper using op-Amp. Trace the input and output waveform for  $V_{ref} = 1.5$  Volt. 5  
Given : input  $V_{p-p} = 4$  Volt.
- (d) Differentiate between band pass and band stop filter. Write one application of each. 5
- (e) What is the role of diodes and capacitors in voltage regulator circuit ? 5
- (f) Give a brief account of a applications of LVDT. 5

\*\*\*\*\*