

Total No. of Questions : 12]

SEAT No. :

**P1024**

**[4661]-41**

[Total No. of Pages : 2

**S.Y. M.C.A. (Engineering Faculty)**

**SOFTWARE ENGINEERING**

**(Semester - IV) (2008 Pattern) (610909) (Theory)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) Answer three questions from Section - I and three questions from Section - II.*
- 2) Answers to the two sections should be written in separate answer books.*
- 3) Neat diagrams must be drawn wherever necessary.*
- 4) Figures to the right indicate full marks.*
- 5) Assume suitable data, if necessary.*

**SECTION - I**

- Q1)** a) What is the role of modeling & construction in software process models? [6]  
b) Explain all levels of CMMI. [6]

OR

- Q2)** a) What do you understand by Evolutionary model? Draw and explain any evolutionary model. [6]  
b) Explain the concept of process pattern with example. [6]

- Q3)** a) What is software process model? Explain personal and team process models. [6]  
b) Explain prototype model? What are the advantages of this model over other models. [6]

OR

- Q4)** a) Explain the importance of coding principles and concepts. [8]  
b) Explain Hatley-Pirbhai Modeling with an example. [4]

- Q5)** a) What are the importance of software principles and practices? Explain any two practices. [8]  
b) Draw a Swim lane diagram for railway reservation systems. [3]

OR

- Q6)** a) Describe the Class Responsibility collaboration model with example. [8]  
b) Explain the Scenario-based Analysis for requirement engineering. [3]

**P.T.O.**

## **SECTION - II**

- Q7)** a) What are the goal of requirement engineering? What do you mean by functional and non functional requirements? [6]
- b) Explain Golden Rules for Interface Design. [6]

OR

- Q8)** a) Explain the following of The Design Model:
- i) Architectural design elements [3]
- ii) Interface design elements [3]
- b) What do you mean by modularity? What is its contribution towards achieving a good quality software? [6]

- Q9)** a) List all software testing methods. Explain any one in brief. [6]
- b) Explain in brief verification and validation. [5]

OR

- Q10)** a) Explain the two ways of system testing. [6]
- b) How the software testing can be carried out by using object oriented approach? Explain its various methods. [5]

- Q11)** a) Write a note on: [6]
- i) Orthogonal Array testing
- ii) Basic path testing
- b) What is the main aim of software maintenance? Explain with software metric for maintenance. [6]

OR

- Q12)** a) What do you mean control structural testing? Explain its various types. [6]
- b) What are the attributes of effective software metric? Explain measure, measurement and metrics. [6]



Total No. of Questions : 12]

SEAT No. :

**P1025**

**[4661]-42**

[Total No. of Pages : 3

**S.Y. M.C.A. (Engineering)**

**WEB TECHNOLOGY**

**(Semester - IV) (610910) (2008 Pattern)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *From Section - I, answer (Q1 or Q2), (Q3 or Q4), (Q5 or Q6).*
- 2) *From Section - II, answer (Q7 or Q8), (Q9 or Q10), (Q11 or Q12).*
- 3) *Answers to the two sections should be written in separate answer books.*
- 4) *Neat diagrams must be drawn wherever necessary.*
- 5) *Figures to the right indicate full marks.*
- 6) *Make suitable assumptions, wherever and relevant.*

**SECTION - I**

**Q1) a)** State whether the following are true or false: **[2]**

- i) The IP Address consists of two parts Network number and host number.
- ii) All web servers use port 80 to listen for server response.

**b)** Comment on and explain: **[6]**

- i) Telnet can actually be used to send HTTP commands to a web server.
- ii) To improve the performance of HTTP Byte serving is used in it.

**c)** Explain the role of middleware in the web development models. **[4]**

OR

**Q2) a)** Differentiate between static & Dynamic web sites with a suitable example. **[6]**

**b)** Explain the execution of dynamic web pages stepwise in details with a suitable diagram. **[6]**

**P.T.O.**

- Q3)** a) Design an HTML form to generate an E-book. First the user should be the registered user of that web site. Then check whether the book is free to download. If not then proceed to purchase that book online. [7]
- b) Explain the syntax of a rule in CSS with a suitable example. [4]

OR

- Q4)** a) Explain how a web server can be made dynamic? [5]
- b) Explain the concept of classes in CSS with a suitable example. [6]

- Q5)** a) What is the Error object in VBScript? Explain its properties and methods. [4]
- b) Write a program in VBScript for designing a simple calculator. Assume appropriate data for the design. [8]

OR

- Q6)** a) Compare: [6]
- i) VBScript and JavaScript.
  - ii) ASP and JSP.
  - iii) For...Next and For...Each...Next statements in VBScript.
- b) Explain two kinds of procedures in VBScript. [6]

### **SECTION - II**

- Q7)** a) Explain the concept of DOM in Javascript with all objects & their important properties and methods with a suitable diagram. [8]
- b) Write a short note on Event handling in javascript. [4]

OR

- Q8)** a) What is cookie? How it is created and read? Describe difference between Cookie and session? [6]
- b) Explain Alert, confirm, and prompt functions in Javascript with a suitable example. [6]

- Q9)** a) Explain the client server communication of AJAX Technology. [6]  
b) Explain the various stages of Life cycle of JSP page. [5]

OR

- Q10)** a) What is JSP Directives? Explain the types of Directives. [6]  
b) What is AJAX? Explain the AJAX model & explain how it works. [5]

- Q11)** a) Explain the Framework of ASP .net. [6]  
b) Write Short note on: [6]  
i) View state  
ii) Compare ASP and ASP.Net

OR

- Q12)** a) Explain the types of ASP.net validation controls. [6]  
b) Explain the architecture of ADO.net. [6]

