Total No. of Questions : 12]

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Nov-16

[5061]-503

SEAT No. :   1364
[Total No. of Pages : 2

T.Y.M.C.A.(Engg)
SOFTWARE ENGINEERING
(2013 Course)(Semester-V)(510903)

Time :3Hours]   [Max. Marks : 50

Instructions to the candidates:
1) *Neat diagrams must be drawn wherever necessary.*
2) *Figures to the right side indicate full marks.*
3) *Assume suitable data if necessary.*

Q1) a) Explain in detail Spiral Model of Software Development.   [6]

  b) Write a short note on: Personal Process Model   [3]

OR

Q2) a) Explain in detail all the levels of CMMI with key process area.   [6]

  b) Write a short note on: Critical Software.   [3]

Q3) a) What is Gantt Chart? Explain in brief.   [5]

  b) Write a short note on Risk Identification.   [3]

OR

Q4) a) What do you mean by Work Breakdown Structure(WBS)?   [5]

  b) Explain any 3 Tools for managing project.   [3]

Q5) a) What are the various factors for estimation of software cost?   [4]

  b) Write a note on : Process Improvement   [4]

OR

Q6) a) What are the various project constraints in project mangement?   [6]

  b) What is Validation?   [2]

Q7) a) Draw a diagram and explain the process of security risk assessment.[4]

  b) What are the principle properties of Dependability?   [4]

OR

Q8) a) Write basic terminologies of Reliability? Explain with example. [4]

b) What is Hazard Identification and Hazard Assessment? [4]

Q9) a) What is mean by Service Engineering? [4]

b) Write the concept of SOA. [4]

OR

Q10) a) What do you mean by SAAS model? What are the benefits of SAAS Model? [4]

b) Explain the term: Client Server Computing [4]

*Q11)*a) Draw a diagram and Explain McCall's quality factors that affect the software quality. [6]

b) Define the following terms: [3]

   i)   Measure

   ii) Measurement

   iii) Metric

OR

*Q12)*a) Explain the metrics for source code. [6]

b) What is the purpose of Software Maintenance? Explain the maintenance metric. [3]

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Total No. of Questions : 12]

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SEAT No. : 1364

Nov-16

[Total No. of Pages : 2

[5061]-501

T.Y.M.C.A. (Engg.)
RECENT TECHNOLOGIES IN IT
(2013 Course) (Semester-V) (510901)

Time : 3 Hours]   *[Max. Marks : 50*

Instructions to candidates:

1) Attempt Q1.or Q2, Q3 or Q4, Q5or Q6, Q7or Q8, Q9or Q10, Q11or Q12.
2) Figures to the right indicate full marks.
3) Neat diagrams must be drawn wherever necessary.
4) Assume suitable data if necessary.

Q1) a) What is LAMP? Explain the characteristics and advantages of LAMP.[6]

b) Write a short note on Configuring Apache web server. [3]

OR

Q2) a) Explain the process of installation and configuration of LAMP stack.[5]

b) Differentiate between Static and Dynamic contents. [4]

Q3) a) Explain the concept of RDBMS Technology with a suitable example.[4]

b) Explain how MYSQL database is managed? [4]

OR

Q4) a) Explain and differentiate between GET and POST methods. [4]

b) Design a Form which accepts the input from the user for online Railway reservation system. [4]

Q5) a) Write PHP code to accept Passport registration information from the Customer, store it into the database and display the customer information. [6]

b) Explain Array_sum & Array_flip functions in PHP. [2]

OR

Q6) a) Explain the concept of Splitting and merging of Array with a suitable example. [6]

b) Explain any 2 Data and Time Functions in PHP. [2]

P.T.O.

Q7) a) Explain the life cycle of a function in PHP. **[4]**

b) Write a short note on object constructors and destructors. **[4]**

OR

Q8) a) Explain the concept of class inheritance with a suitable example. **[4]**

b) Explain the concept of abstract classes with a suitable example. **[4]**

Q9) a) Explain how a file is created, read and deleted with a suitable example. **[4]**

b) Explain the operations of a file Opening writing with suitable example. **[4]**

OR

Q10) a) Explain the file connections HTTP fopen() and FTP fopen() **[4]**

b) Explain the concept Socket functions in detail. **[4]**

Q11) a) How a session is created and Handled? How does a session works? **[5]**

b) Explain in detail setcookie() function with a suitable example. **[4]**

OR

Q12) a) Explain how the session variables are encoded and decoded? **[5]**

b) Write a short note on Cookie handling. **[4]**

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Q8) a) What is integration testing? Explain its types. [5]

b) Write note on Regression testing. [3]

Q9) a) Explain Developer/Tester support for Defect Repository. [5]

b) Explain defect classes. [3]

Issume suitable data, if necessary.

Q1) Explain Quality, Quality Assurance and Quality Control. [8]

OR

Q2) What is process improvement? Explain Six sigma. [8]

Q3) Write test plan for coffee vending machine. [8]

OR

Q4) Explain test case with example. [8]

Q5) a) Explain with suitable example code complexity testing. [5]

b) Explain positive and negative testing. [4]

OR

Q6) a) Explain with suitable example boundary value analysis and equivalence partitioning. [6]

b) Write note on unit testing. [3]

Q7) a) What is usability and accessibility testing? [4]

b) Explain scenario testing. [4]

OR

P.T.O.

Q8) a) What is integration testing? Explain its types. [5]

b) Write note on Regression testing. [3]

Q9) a) Explain Developer/Tester support for Defect Repository. [5]

b) Explain defect classes. [3]

OR

Q10) a) What is defect? Explain origins of defect. [5]

b) Write note on defect repository. [3]

Q11) a) Differentiate between manual testing and automated testing. [5]

b) Write note on Selenium IDE. [4]

OR

Q12) What is automation testing? Explain different automation tools for software testing. [9]

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Total No. of Questions : 12]

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Nov-16

[5061]-503

SEAT No. :

1364

[Total No. of Pages : 2

T.Y.M.C.A.(Engg)
SOFTWARE ENGINEERING
(2013 Course)(Semester-V)(510903)

Time :3Hours]   *[Max. Marks : 50*

Instructions to the candidates:

1) Neat diagrams must be drawn wherever necessary.

2) Figures to the right side indicate full marks.

3) Assume suitable data if necessary.

Q1) a) Explain in detail Spiral Model of Software Development.   [6]

    b) Write a short note on: Personal Process Model   [3]

OR

Q2) a) Explain in detail all the levels of CMMI with key process area.   [6]

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    b) Write a note on : Process Improvement   [4]

OR

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    b) What is Validation?   [2]

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OR

P.T.O.

Q8) a) Write basic terminologies of Reliability? Explain with example. [4]

b) What is Hazard Identification and Hazard Assessment? [4]

Q9) a) What is mean by Service Engineering? [4]

b) Write the concept of SOA. [4]

OR

Q10) a) What do you mean by SAAS model? What are the benefits of SAAS Model? [4]

b) Explain the term: Client Server Computing [4]

Q11) a) Draw a diagram and Explain McCall's quality factors that affect the software quality. [6]

b) Define the following terms: [3]

i) Measure

ii) Measurement

iii) Metric

OR

Q12) a) Explain the metrics for source code. [6]

b) What is the purpose of Software Maintenance? Explain the maintenance metric. [3]

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Total No. of Questions :12]

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Nov-16

[5061]-504

SEAT No. :

[Total No. of Pages : 2

T.Y.M.C.A. (Under Engineering Faculty)
DATA WAREHOUSING DATA MINING BUSINESS INTELLIGENCE
(2013 Pattern) (Semester - I)

Time : 3 Hours]   *[Max. Marks : 50*
Instructions to the candidates:
1) *Neat diagrams must be drawn wherever necessary.*
2) *Assume suitable data, if necessary.*

Q1) a) Discuss the purpose of data warehouse. Also explain the 3 models of data warehouse based on architecture. **[6]**

b) What is data cleaning? **[3]**

OR

Q2) a) Explain data pre processing in detail. **[6]**

b) Differentiate between facts and dimensions. **[3]**

Q3) a) Explain the applicability of data mining in various fields. **[6]**

b) What are data objects and attribute types? **[2]**

OR

Q4) a) Explain data visualization. **[6]**

b) What is meant by data similarity? **[2]**

Q5) Explain the concept of classification with proper example. **[8]**

OR

Q6) Explain apriori algorithm with the help of an example. **[8]**

Q7) a) Explain various components of BI. [4]

b) Differentiate between OLTP and OLAP. [4]

OR

Q8) a) Explain the various components of a warehouse. [6]

b) What is analytical user requirements? [2]

Q9) a) Explain the various BI Architectures. [6]

b) Differentiate between ROLAP and HOLAP. [3]

OR

Q10) a) Explain data architecture strategy. [6]

b) Differentiate between MOLAP and ROLAP. [3]

Q11) Write a note on BIRT. [8]

OR

Q12) Explain the various layout in BIRT. [8]

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T.Y.M.C.A.(Faculty of Engineering)
MOBILE COMPUTING
(2013 Course)(Semester-V) (510905)

Time :3Hours]   *[Max. Marks : 50*

Instructions to the candidates:

1) *Solve either of Question 1 or 2, 3 or 4,5 or 6,7 or 8,9 or 10,11 or 12 in same answer sheet.*
2) *Neat diagrams must be drawn wherever necessary.*
3) *Figures to the right side indicate full marks.*
4) *Assume suitable data if necessary.*

SECTION-I

Q1) Differentiate between 1G,2G and 3G technologies.   [9]

OR

Q2) What is the concept of cell broadcast service? Explain the concept of Handover.   [9]

Q3) Explain the concept of Wireless LAN   [8]

OR

Q4) Explain the concept of Data broadcasting.   [8]

Q5) a) Explain CODA File System and its features.   [4]

   b) Explain how the channel access scheme and acknowledgement for Datagram are used in mobile wireless network   [4]

OR

Q6) a) Explain Quality of Service(QoS) in mobile wireless networks.   [4]

   b) *Disconnected operation* is the solution to the Disconnected Client in distributed system. Explain.   [4]

SECTION-II

Q7) a) Explain MIDlet lifecycle in J2ME.   [4]

   b) What are the Application components provided in Android OS?   [4]

OR

P.T.O.

Q8) **a)** What is the Record Management System? How the records are handled in J2ME? [4]

b) Explain about UI Layouts of Android. State the types of Layouts. Explain in brief any two of them. [4]

Q9) a) Explain File System Structure in Android. [4]

b) Define Dialogs, their use. How Dialogs are structured? [4]

OR

Q10) a) Explain Location Based Service. [4]

b) Write a program for accessing user's Current Location. (Assume *GPSTracker. java* file is available with you.) [4]

Q11) Write a short note on Content Provider. How can one store data in Android? [9]

OR

Q12) Explain SQLite Database. Create database for Student Details and perform following operations on it- [9]

a) *insert*

b) *delete()* &

c) show()

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Total No. of Questions :12]

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Nov-16

[5061]-502

SEAT No. :

[Total No. of Pages :2

T.Y.M.C.A. (Under Engineering Faculty)
SOFTWARE TESTING AND QUALITY ASSURANCE
(2013 Course) (Semester - V) (510902)

Time : 3 Hours]   *[Max. Marks :50*

Instructions to the candidates:

1) *Neat diagrams must be drawn wherever necessary.*
2) *Figures to the right side indicate full marks.*
3) *Use of probability table, electronic pocket calculator is allowed.*
4) *Assume suitable data, if necessary.*

Q1) Explain Quality, Quality Assurance and Quality Control.   **[8]**

<div align="center">OR</div>

Q2) What is process improvement? Explain Six sigma.   **[8]**

Q3) Write test plan for coffee vending machine.   **[8]**

<div align="center">OR</div>

Q4) Explain test case with example.   **[8]**

Q5) a) Explain with suitable example code complexity testing.   **[5]**

  b) Explain positive and negative testing.   **[4]**

<div align="center">OR</div>

Q6) a) Explain with suitable example boundary value analysis and equivalence
          partitioning.   **[6]**

  b) Write note on unit testing.   **[3]**

Q7) a) What is usability and accessibility testing?   **[4]**

  b) Explain scenario testing.   **[4]**

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b) Write note on Selenium IDE. [4]

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Q12) What is automation testing? Explain different automation tools for software testing. [9]

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