

Subject : Software Project Management

32

Day : Thursday

Date : 07/11/2013



Time : 02.00 PM TO 05.00 PM

Max Marks : 70 Total Pages : 1

N.B.:

- 1) **Q. No. 1 is COMPULSORY.**
- 2) Attempt any **FOUR** questions from **Q. No. 2 to Q. No. 7.**
- 3) Each question carries **14** marks.

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- Q.1** Calculate the function point value from the following information (for all the three complexities and consider $f_i = 1$). (14)
Number of programmers - 10
Number of Inputs - 12
Number of algorithms - 17
Number of enquiries - 16
Number of internal files - 9
Number of External files - 3
- Q.2** What is project management? Explain the phases of it. (14)
- Q.3** Describe stepwise project planning with activities involved in each step. (14)
- Q.4** Discuss function point analysis model of cost estimation with example. (14)
- Q.5** Describe the process of risk management in software project management. (14)
- Q.6** What are different software quality standards? Explain in detail SEI - CMM and its significance with software project? (14)
- Q.7** Write short notes on any **TWO** of the following: (14)
a) Organizational structure
b) PMBOK
c) PERT

Subject : Data Warehousing & Data Mining

33

Day : Saturday

Date : 09/11/2013



Time : 02.00 PM TO 05.00 PM

Max Marks : 70 Total Pages : 1

N.B.:

- 1) **Q. No. 1 is COMPULSORY.**
- 2) Attempt any **FOUR** questions from **Q. No. 2 to Q. No. 7.**
- 3) Each question carries **FOURTEEN** marks.
- 4) Use of non programmable **CALCULATOR** is allowed.

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- Q.1** Explain Apriori algorithm for association rule mining with an example.
- Q.2** Explain star, snowflake and fact constellation schema for data Warehouse.
- Q.3** What are the basic methods used for data cleaning?
- Q.4** Differentiate between:
i) Supervised Vs Unsupervised learning
ii) OLTP Vs OLAP
- Q.5** Explain how data mining can used in retail industry?
- Q.6** Explain K-Means, K-Medoids hierarchical method used for clustering.
- Q.7** Write short notes on any **TWO** of the following:
a) OLAP Server
b) Data Marts and types of data Marts
c) Data Mining Architecture

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Subject : Data Structures

34

Day : Tuesday

Date : 12/11/2013



Time : 02.00 PM TO 05.00 PM

Max Marks : 70 Total Pages : 1

N.B.:

- 1) Q. No. 1 is **COMPULSORY**.
- 2) Attempt any **FOUR** questions from Q. No. 2 to Q. No. 7.
- 3) Each question carries 14 marks.

-
- Q.1** a) Write a 'C' language program for implementation of a stack using array. (07)
b) Consider the following unsorted array and sort this array using selection sort method. (07)
45 25 75 15 65 55 95 35
- Q.2** Describe the concept of Abstract Data Type with suitable example. (14)
- Q.3** What is queue? Explain various types of queues with their merits and demerits. (14)
- Q.4** Discuss basic types of operations performed on linked list. (14)
- Q.5** What is quick sort? Discuss the quick sort algorithm with help of suitable example. (14)
- Q.6** Explain binary search algorithm. Compare it with linear search algorithm. (14)
- Q.7** Write short notes on any **TWO** of the following: (14)
a) Software characteristics
b) Tree traversals
c) Dynamic memory allocation
d) Recursion.

Subject : Management-VI (Management Support Systems)

35

Day : Friday



Time : 02.00 PM TO 05.00 PM

Date : 15/11/2013

Max Marks : 70 Total Pages : 1

N.B.:

- 1) Q. No. 1 is **COMPULSORY**.
- 2) Attempt any **FOUR** questions from Q. No. 2 to Q. No. 7.
- 3) Each question carries 14 marks.

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- Q.1** Discuss the following terms in detail. (07)
- a) Organizational structure and functions (07)
 - b) Information needs of managers at different levels. (07)
- Q.2** List and discuss the different types of information in detail. Also provide appropriate examples to support your discussion. (14)
- Q.3** How the structure of MIS is influenced by management activity and function? Illustrate in detail. (14)
- Q.4** a) What is sensitivity analysis? (07)
- b) How operations research techniques are used in decision making. (07)
- Q.5** Discuss an information system for personnel functional area in detail. (14)
- Q.6** Compare and differentiate between the conventional system and expert system in detail. (14)
- Q.7** Write short notes on any **TWO** of the following (14)
- a) Simulation in decision making
 - b) Executive Information System (EIS)
 - c) Decision Support System (DSS)
 - d) Feedback control.

Subject : Management-VII (e-Business Applications)

36

Day : Monday

Date : 18/11/2013



Time : 02.00 PM TO 05.00 PM

Max Marks : 70 Total Pages : 1

N.B.:

- 1) **Q. No. 1 is COMPULSORY.**
- 2) **Attempt any FOUR questions from questions Q. No. 2 to Q. No. 7.**

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- Q.1** a) What is e-commerce? Elaborate the broad goals of e-commerce. (07)
b) Discuss the various segments of e-commerce with suitable examples. (07)
- Q.2** Explain in detail the following: (14)
i) B2C e-commerce ii) Value chain in e-commerce
- Q.3** Describe the technical architecture of e-commerce. (14)
- Q.4** What are the different types of Electronic Data Interchange? Also state the advantages of EDI. (14)
- Q.5** What is meant by cryptography? Discuss symmetric and asymmetric cryptography. (14)
- Q.6** What is firewall? Describe the components of a firewall. (14)
- Q.7** Write short notes on Any **TWO** of the following: (14)
a) Secure socket layer
b) Cookies
c) Electronic or digital cash
d) e-branding

Subject : Software Project Management 91

Day : Monday
Date : 28/04/2014



Time : 02.00 PM TO 05.00 PM
Max Marks : 70 Total Pages : 1

- 1) Q. No. 1 is **COMPULSORY**.
- 2) Attempt any **FOUR** questions from Q. No. 2 to Q. No. 7.
- 3) Each question carries 14 marks.

a) Draw the activity network diagram and calculate critical path. (10)

Activity	Description	Predecessors	Time (in days)
A.	Select steering committee	-	15
B	Develop requirement list	-	40
C	Develop system size estimates	-	10
D	Determine vendors	-	2
E	Form evaluation team	A	5
F	Issue request for proposal	B, C, D, E	4
G	Bidders conference	F	1
H	Review submissions	G	25
I	Select vendor short list	H	3
J	Check vendor reference	I	3
K	Vendor demonstration	I	20
L	User's site visit	I	3
M	Select vendor	J, K, L	3
N	Volume sensitive test	M	10
O	Negotiate contracts	M	10
P	Cost Benefits Analysis	N, O	2
Q	Obtain Board of directors approval	P	5

b) Explain various factors affecting software cost. (04)

Explain the term project management and elaborate project management life cycle. (14)

Describe COCOMO model of estimation with suitable example. (14)

What is risk management? List various types of risks in software projects. (14)

c) Define software quality. Explain McCall's quality factors. (07)

d) Explain various software team structures with their merits and demerits. (07)

What is work breakdown structure? Why is it necessary? How does it help to allocate resources? (14)

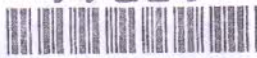
Write short notes on any **TWO** of the following: (14)

- ISO standards
- PMBOK
- Role of Project Manager

Subject : Data Warehousing & Data Mining

92

Day : Wednesday
Date : 30/04/2014



18044

Time : 02.00 PM TO 05.00 PM
Max Marks : 70 Total Pages : 1

N.B.:

- 1) Q. No. 1 is COMPULSORY.
- 2) Attempt any FOUR questions from Q. No. 2 to Q. No. 7.
- 3) Each question carries FOURTEEN marks.
- 4) Use of non programmable CALCULATOR is allowed.

Q.1 Define Data Warehouse. Explain the architecture of data warehouse.

Q.2 What are multidimensional databases? Explain the various OLAP operations that can be performed on multidimensional database.

Q.3 What are the different data preprocessing techniques in Data mining?

Q.4 Explain the terms confidence and support with respect to association rules. Support your answer with an example.

Q.5 What is clustering? Explain the different clustering methods.

Q.6 Explain how data mining is useful in financial data analysis.

Q.7 Write short notes on any TWO of the following:

a) Need for Data Mining

b) Evolution of database technology

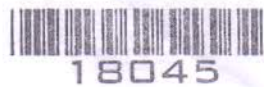
c) OLAP V/s OLTP

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Subject : Data Structures

93

Friday



Time : 02.00 PM TO 05.00 PM

02/05/2014

Max Marks : 70 Total Pages : 1

- 1) Q. No. 1 is **COMPULSORY**.
- 2) Attempt any **FOUR** questions from Q. No. 2 to Q. No. 7.
- 3) Each question carries 14 marks.

a) Consider the following unsorted array and sort it using quick sort method. (07)
 24 56 47 35 10 90 82 31

b) Write a C language program for implementation of linear queue using array. (07)

What is stack? Describe basic operations performed on stack. Give the application of it. (14)

Explain the concept of tree traversal with suitable example. (14)

What do you mean by linked list? Discuss types of linked list with their merits and demerits. (14)

Describe selection sort algorithm with suitable example. (14)

Define data structure. Describe various abstract data structures with suitable example. (14)

Write short notes on any **TWO** of the following: (14)

- a) Linear search
- b) Recursion
- c) Circular queue
- d) Binary Tree.

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