

Seat No. : _____

ND-111

December-2015

B.C.A., Sem.-V

SEC-301(1) : Software Project Management

Time : 3 Hours]

[Max. Marks : 70

1. (a) Which are the activities covered by software project management ? Explain them in detail. **7**

OR

Define programme. Explain different forms of programmes.

- (b) Explain Cost-benefit analysis. **7**

OR

(i) Define Stakeholder and Deliverables. **3**

(ii) Give the difference between Software Project Management and Other types of Project. **4**

2. (a) Explain Incremental Delivery. **7**

OR

Explain reasons to follow software prototype.

- (b) Explain Atern Process Model. **7**

OR

(i) The project A has 10 inputs and 12 outputs. The new project B has 15 inputs and 18 outputs. Find out Euclidean Distance. **3**

(ii) Explain Albrecht Function Point Analysis. **4**

3. (a) Draw the Activity on Node network diagram for the following problem. Find out critical path and total duration. **7**

Activity	Duration (Days)	Precedents
A	4	–
B	6	A
C	3	A
D	6	B
E	14	D
F	5	C
G	2	E & F
H	2	G
I	3	G
J	4	H & I
K	2	J

OR

Explain labelling conventions of activity on node network.

- (b) Explain Risk Identification. 7
- OR**
- Explain Risk Planning.
4. (a) Explain Gantt chart. 7
- OR**
- Explain fixed price per unit delivered contract.
- (b) List out nature of resources and explain them in brief. 7
- OR**
- (i) Define 0/100, 75/25 and Milestone technique. 3
- (ii) Define Mandatory and Desirable requirements. 4
5. Answer the followings : 14
- (1) A _____ is a planned activity.
- (2) Forecasts of _____ rates tend to be uncertain.
- (3) An estimation is based on the advice of knowledgeable staff is _____ technique.
- (a) algorithmic models (b) analogy
- (c) price to win (d) expert judgment
- (4) An 'off-the-shelf' package is also known as _____.
- (a) Off-the-shelf (b) Customized-off-the-shelf
- (c) bespoke (d) None of above
- (5) $CPI = \frac{\text{_____}}{\text{_____}}$
- (a) EV, AC (b) AC, EV
- (c) AC, PV (d) EV, PV
- (6) A very jagged slip line indicates a need for _____ .
- (a) redrawing (b) rescheduling
- (c) recalculating (d) None of the above
- (7) The total service time divided by the number of failures is known as _____
- (a) Availability (b) Mean time between Failure
- (c) Failure on demand (d) Support Activity
- (8) PERT stands for _____.
- (9) Risk Exposure = _____ * _____.
- (10) WTO stands for _____.
- (11) Write down Brook's Law.
- (12) _____ is a method for calculating 'loss' in days rather than money.
- (13) Effort = _____ * _____.
- (14) Waterfall Model is expanded into _____ model.
- _____

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December-2015

B.C.A., Sem.-V**SEC-301(2) : Advanced Java****Time : 3 Hours]****[Max. Marks : 70**

1. (A) Answer the following. **8**
- (1) Give differences between serialization and deserialization. Explain methods of Scanner class.
- (2) What is stream ? Explain InputStream and OutputStream.
- OR**
- Explain following methods with example :
- (a) getName() (b) lastModified()
(c) canWrite() (d) getPath()
- (B) What is random access file? Explain read(), write(), and seek() methods. **6**
- OR**
- How can we reading and writing data to and from file ? Explain.
2. (A) Answer the following :
- (1) Write inheritance tree of JFrame class. Explain the constructors of the JFrame class. **5**
- (2) Explain the constructors of JCheckBox class. **3**
- OR**
- Answer the following :
- (1) Explain constructors of JLabel class. Explain setFont() method in detail. **5**
- (2) Explain the methods of JTextArea class. **3**
- (B) Explain the constructors and methods of JButton class. And also Write JButton class inheritance hierarchy. **6**
- OR**
- Explain setLocation() and setEnabled() methods. Explain any three methods of JComboBox class. **6**
3. (A) Answer the following. **8**
- (1) Write a short note on TCP/IP socket.
- (2) Define terms: Server, Client, IP Address, Port Number.
- OR**
- Answer the following : **8**
- (1) Write a short note on Datagram socket.
- (2) Explain java.net package with diagram.
- (B) Answer the following : **6**
- (1) Write a short note on FlowLayout.
- (2) Explain CardLayout.
- OR**
- Answer the following : **6**
- (1) Write a short note on BorderLayout.
- (2) What are event handlers ? Write listener and handlers of any two events.

4. (A) Answer the following :
- (1) Explain prepared statement and callable statement. **4**
- (2) Explain getConnection() method in detail. **3**
- OR**
- Write the steps for JDBC connection. Explain methods of connection interface. **7**
- (B) How a user can update data into database ? Explain with proper example. **7**
- OR**
- Explain types of JDBC driver.
5. Do as directed. **14**
- (1) The File class is provided by _____.
- (a) java.lang package (b) java.awt package
- (c) java.io package (d) None of the above
- (2) _____ method is used to remove components from applet.
- (3) We can use JPanel to increase the layout options. [T/F]
- (4) A group of characters that has meaning is a _____.
- (a) Field (b) Byte
- (c) Record (d) File
- (5) A Container object can be created using the add() method. [T/F]
- (6) Most streams flow _____.
- (a) in
- (b) out
- (c) Either in or out, but only in one direction
- (d) Both in and out concurrently
- (7) Layout manager is an object that controls the size and position of components inside container object. [T/F]
- (8) _____ causes the insertion point to appear within the JTextField.
- (a) setEditable() (b) requestFocus()
- (c) setText() (d) None of the above
- (9) Match the following :
- | | |
|---------------|-----------------------|
| I. Button | a. ItemListener |
| II. Scrollbar | b. ActionListener |
| III. Checkbox | c. AdjustmentListener |
- (a) I-a, II-b, III-c
- (b) I-b, II-c, III-a
- (c) I-c, II-a, III-b
- (d) I-b, II-a, III-c
- (10) The UDP stands for user datagram packet. [T/F]
- (11) For loading the JDBC-ODBC driver in the Java program, _____ method is used.
- (12) For database communication in a Java application or an applet, we should import the java.sql package. [T/F]
- (13) For extracting the host address, the _____ class is used.
- (a) ServerSocket (b) Socket
- (c) InetAddress (d) URL
- (14) The GridLayout is use when we need to add components from left to right. [T/F]