

Seat No. : _____

NM-121

November-2017

BCA., Sem.-V

SEC-301 : (1) Software Project Management

Time : 3 Hours]

[Max. Marks : 70

1. (A) List out steps of project planning. And explain step-2 (Identify project infrastructure) in detail. 7

OR

Define Management. Also explain activities covered by software project management.

- (B) Differentiate software project v/s other type project. Also explain categories of stakeholders. 7

OR

What is programme ? Explain different forms of programme.

2. (A) Explain basis for software estimating. Also explain shortcomings of SLOC measure. 7

OR

Write a short note on Incremental delivery.

- (B) Explain software effort estimation techniques. 7

OR

- (i) The following details are about previously developed software modules.

Module	Inputs	Outputs
A	3	3
B	4	3

A new module C has 5 inputs and 4 outputs. Which of the modules (A or B) is the closest analogy in terms of Euclidean Distance ? 3

- (ii) Explain waterfall model. 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	3	—
B	2	A
C	2	A
D	4	B
E	1	C
F	2	C
G	4	D, E
H	3	F, G

OR

Define activities. Also explain rules for formulating network model.

- (B) What is Risk ? Also explain categories of risk. 7

OR

Explain key elements of risk. Also explain methods used for risk identification.

4. (A) Explain methods for visualizing progress. 7

OR

Explain nature of resources.

- (B) Explain stages in contract placement. 7

OR

What is earned value analysis ? Also explain methods of assigning earned value.

5. Do as directed :

- (A) Fill in the blank. 7

- (1) Waterfall model can be expanded into _____.
- (2) SDLC stands for _____.
- (3) A very jagged slip line indicates need for _____.
- (4) _____ is the working model of projected system.
- (5) The activities which have zero duration but are assumed to start at the same time is called _____.
- (6) Each loop of the spiral is called _____.
- (7) KLOC stands for _____.

- (B) True or False : 7

- (1) Waterfall model is also called One-shot/once-throw model.
- (2) The people who has stack/interest in project is called stakeholders.
- (3) Staff cost includes cost of operating the system after installation.
- (4) Money is main resource.
- (5) An uncertain event or activity that has positive or negative effect is called risk.
- (6) Later increments might require modification to earlier increments. This is known as software breakage.
- (7) The total service time divided by the number of failures is called availability.

Seat No. : _____

NM-121

November-2017

BCA., Sem.-V

SEC-301 : (2) Advanced Java

Time : 3 Hours]

[Max. Marks : 70

1. (A) Write a code to create Item class with class members as Item_code and Item_name. 7
Write object of Item class to a file (Item_detail.dat) and read from that file.

OR

List various stream classes and explain DataInputStream class with example.

- (B) Answer the following :

- (1) Explain in brief any three classes available for file I/O. 4
(2) How can we write binary data to a file ? Explain. 3

OR

Answer the following:

- (1) Explain file class in detail.
(2) Explain how to read data from file.

2. (A) Write a code to create JApplet that contains JLabel and JButton. When the user clicks, the JButton called "Greetings", the JLabel should display "Welcome to all". 7

OR

Explain JCheckBox and JComboBox classes with any three methods of each.

- (B) Answer the following :

- (1) What is the use of JFrame's setDefaultCloseOperation() method ? 4
(2) Explain in brief any three Listeners with its events. 3

OR

Answer the following :

- (1) Explain with example : JScrollPane class.
(2) What is the use of getContentPane() method ?

3. (A) Explain Grid Layout with example. Also write a short note on TCP/IP socket. 7

OR

Explain java.net packet with diagram. Also write a short note on InetAddress class.

- (B) Answer the following :
- (1) Explain ActionPerformed() method in depth. 4
 - (2) Define : Server, Event Handler, IPAddress. 3
- OR**
- Answer the following:
- (1) What are event handlers ? Write listener and handlers of any two events.
 - (2) Define : Client, Event, Event Listener
4. (A) Write the steps for JDBC connection. Explain methods of connection interface. 7
- OR**
- Explain types of JDBC driver.
- (B) Answer the following :
- (1) Explain ExecuteQuery with example. 4
 - (2) List the Steps for JDBC connection. 3
- OR**
- Answer the following :
- (1) Explain query for data update into database with example.
 - (2) Explain CreateStatement with example.
5. Do as Directed : 14
- (1) _____ method returns file's path.
 - (2) PrintStream is the child of _____ .
 - (3) _____ method creates JApplet.
 - (4) A _____ is a type of component that holds other components so that a user can create a group of them as a single entity.
 - (5) _____ is set of rules, required for communication between two machines.
 - (6) _____ is default manager class for all content pane.
 - (7) For getting database result, _____ object is required.
 - (8) RandomAccessClass contains search() method. (True/False)
 - (9) Connecting a DataOutputStream to FileOutputStream is known as chaining the stream objects. (True/False)
 - (10) "Text is entered" is an example of ActionListener. (True/False)
 - (11) getSelectedIndex() method returns the currently selected item. (True/False)
 - (12) To add components from left to write, Grid Layout is used. (True/False)
 - (13) For accessing the resources on the Internet, the URL class is used. (True/False)
 - (14) The java.sql package is required for database communication. (True/False)