UNIVERSITY OF CALICUT

THENHIPALAM, CALICUT UNIVERSITY P.O

DEGREE OF
BACHELOR OF VOCATIONAL STUDIES (B.VOC)
IN
SOFTWARE DEVELOPMENT

QUESTION BANK – 5th semester
(FOR THE STUDENTS ADMITTED FROM THE ACADEMIC YEAR 2014-15 ONWARDS)

UNDER THE
BOARD OF STUDIES IN COMPUTER SCIENCE (UG)
THENHIPALAM, CALICUT UNIVERSITY P.O
KERALA, 673635, INDIA

Syllabus

Semester 5

C. No	Course Code	Course Name	Credit	Marks			Hrs/wk		
				Int	Ext	Tot	T	P	Tot
5.1	GEC5HR13	BC5B09 Human Resource Management	4	20	80	100	4		4
5.2	SDC5IT17	.Net and Database Administrator	4	20	80	100	4		4
5.3	GEC5LS15	(S04B.06) Life Skill Development	4	20	80	100	4		4
5.4	SDC5IT18 (E1/E2)	Python Programming and Mobile Web / J2EE	4	20	80	100	4		4
5.5	SDC5IT19 (E3/E4)	Mobile Software Development using Android / Programming Mobile Application	5	20	80	100	5		5
5.6	SDC5IT20	Net and Database - Lab	4	20	80	100		4	4
5.7	SDC5IT21(P)	Android and Python Programming	5	20	80	100		5	5
		Semester V Total	**30**			**700**	**21**	**9**	**30**

SDC5IT17 - .Net and Database Administrator

Course Outline

Unit 1 (15 Hours)
The origins of the .NET technology .net framework, Features of .net, architectures of C#.net. Introduction to visual studio,.net IDE interface and event driven programming. The common language runtime, The Just-In-Time Compiler visual studio, . NET Framework class library introduction.NET languages, benefits of the .NET approach, C# and .NET.

Unit 2 (15 Hours)
Basic classes, declarations, conditionals, loops, arrays, strings, enumerations, Windows Forms and Controls, Menus, Image List, Tree Views, List Views, Toolbars, Status Bar and Progress bars. Object Oriented Programming in c# .NET, Class and Object, Properties, methods and events. Constructors and Destructors, Method overloading, Inheritance,

Unit 3 (15 Hours)
Database: Connected and disconnected mechanism, Connection Objects, Command Objects, Data Adapters, Dataset Class, Data binding with controls like Text Boxes, List Boxes, Data grid. Exception, structured exception handling using try, catch and final statements, and user defined exception

Unit 4 (15 Hours)
Oracle Database Architecture - Preparing the Database Environment and Creating Database - Managing the Oracle Instance - Configuring the Oracle Network Environment - Managing Database Storage Structures - Administering User Security - Managing Data and Concurrency - Managing Undo Data Module - Implementing Oracle Database Security - Database Maintenance - Performance Management - Intelligent Infrastructure Enhancements - Backup and Recovery Concepts - Performing Database Backups - Performing Database Recovery - Moving Data Module

Unit 5 (15 Hours)
Database Architecture and ASM - Configuring for Recoverability - Using the RMAN Recovery Catalog - Configuring Backup Specifications - Using RMAN to Create Backups and recover - Performing User-Managed Backup and Recovery - Using RMAN to Duplicate a Database - Performing Table space Point-in-Time Recovery - Monitoring and Tuning RMAN Module - Using Flashback Technology - Diagnosing the Database - Managing Memory - Managing Database Performance - Space Management - Managing Resources - Automating Tasks with the Scheduler - Administering the Scheduler.

PART A (1 Mark Questions)

UNIT 1

1. …………… is an integrated development environment from Microsoft.
2. What is the full form of CIL?
3. The process of converting intermediate language into machine language is called _____
4. .NET Framework class library is divided into _____and_____
5. CTS stand for _____
6. Sat true or false:- C# and C#.NET are same
7. CLS stand for _____
8. An assembly contains _____code.
9. CLR means _____
10. The acronym MSIL stands for_____
11. The acronym CTS stands for_____
12. The acronym CLS stands for_____
13. _____is the .NET Framework's runtime environment
14. _____is the byte code language used by the .NET Framework
15. _____is the built-in-class library for the .NET Framework
16.
17. Which serves as the execution engine of .net framework
    (a) Common Intermediate language
    (b) Common Language Infrastructure
    (c) Common language runtime
    (d) Common type system
18. Which is not the feature of .net?
    (a)Interoperability
    (b)Portability
    (c)Language independence
    (d)None of the above

18. Which language is not a true object-oriented programming language?
    (a) VB.NET
    (b) VB 6
    (c) C++
    (d) C#
19. Which of the following are NOT true about .NET Framework?
   (a) It provides a consistent object-oriented programming environment whether object code is stored and executed locally, executed locally but Internet-distributed, or executed remotely.
   (b) It provides a code-execution environment that minimizes software deployment and versioning conflicts.
   (c) It provides a code-execution environment that promotes safe execution of code, including code created by an unknown or semi-trusted third party.
   (d) It provides different programming models for Windows-based applications and Web-based applications.

20. Visual Studio .NET provides which feature:
    (a) debugging.
    (b) application deployment.
    (c) syntax checking.
    (d) All of the above.
21. What does IDE stand for?
    (a) Integrated Development Environment
    (b) Integrated Design Environment
    (c) Interior Development Environment
    (d) Interior Design Environment
22. The .Net class library:
    (a) contains over 25,000 classes.
    (b) uses namespaces to manage all of the classes.
    (c) has the System.Form namespace for classes used in Windows-based application.
    (d) All of the above.
23. Which property determines whether a control is displayed to the user?
    (a) Hide
    (b) Show
    (c) Visible
    (d) Enabled
24. Which of the following constitutes the .NET Framework?
    (a) ASP.NET Applications
    (b) CLR
    (c) Framework Class Library
    (d) WinForm Applications
25. An assembly is
    (a) A collection of files that appear to the programmer to be a single DLL or EXE.
    (b) properties of c#
    (c) events Of c#
    (d) declarative syntax of Java
26. What is boxing?
    (a) Encapsulating an object in a value type.
    (b) Encapsulating a copy of an object in a value type.
    (c) Encapsulating a value type in an object.
    (d) Encapsulating a copy of a value type in an object.
27. Which of the following characters ends every C# statement?
    (a) Period (.)
    (b) Colon (:)
    (c) Semicolon (;)
    (d) Comma (,)

UNIT 2

19. …………………..are special methods, used when instantiating a class
20. ……………….. is a property of label.
21. Say true or false: There can be more than one constructor defined.

22. A class that cannot be inherited is a …………….. class.
23. The default manner in which a parameter is sent into a function is …………….
24. Say true or false: Every c# class is provided with a default constructor
25. Polymorphism provide a way for a subclass to define its own version of a method defined by itsbase class, using a process called ……………..
26. Say true or false: Once you assign a string object with its initial value, the character data cannot be changed.
27. How do you declare array in C#?
28. _____method is the 'starting point ' for executing the program
29. State True or False: The Main method never returns any value
30. A class that cannot be inherited is what type of class?
> (a) Sealed
> (b) Static
> (c) Gather
> (d) None of these
31. Which method of a ListBox will remove just one item at a time?
> (a) Items.RemoveAt
> (b) Item.RemoveAt
> (c) Items.ClearAt
> (d) Item.ClearAt
32. Which two controls combined to form the ComboBox control?
> (a) ListBox and TextBox
> (b) ListBox and InputBox
> (c) ListBox and MsgBox
> (d) Label and TextBox
33. When a condition in an If…Then statements tests true:
> (a) the next Else statement is activated.
> (b) the next If statement is activated.
> (c) the next Then statement is activated.
> (d) the End If statement is activated.
34. The End If statement is required:
> (a) in all If…Then statements.
> (b) in all Multi-line statements with Else.
> (c) in Single Line statements.
> (d) Both a and b.
35. Which statements are optional in an If…Then statement?
> (a) If
> (b) Then
> (c) Else
> (d) Both a and b.
36. How many times is the test expression of a Select Case evaluated?
> (a) 0
> (b) 1
> (c) 2

(d) Once for each Case.
37. An Exception is another name for a:
     (a) compile error.
     (b) logic error.
     (c) runtime error.
     (d) superficial error.
     (e) syntax error.
38. What is the most number of states a CheckBox can have?
     (a) 0
     (b) 1
     (c) 2
     (d) 3
39. How many RadioButtons in a Group Box can be selected at the same time?
     a. 0
     (a) 1
     (b) 2
     (c) 3
40. Which event is activated when a RadioButton is selected?
     b. Checked
     (a) CheckedChanged
     (b) Selected
     (c) SelectedChanged
23. The scope of a variable refers to:
     (a) the length of the variable.
     (b) the name of the variable.
     (c) the accessibility of the variable.
     (d) the datatype of the variable.
24. Which method will return the number of elements in an array?
     (a) Dimension
     (b) Length
     (c) Number
     (d) Size
25. Which is not a standard dialog box?
     (a) ColorDialog
     (b) FontDialog
     (c) OpenDialog
     (d) All of these
26. Why are standard dialog boxes used?
     (a) They are easy to create.
     (b) They provide functionality familiar to users.
     (c) Developers can create their own versions of Dialog boxes.
     (d) Both a and b.
27. What is the method used to activate the color dialog box?

     (a) ActivateDialog

     (b) DisplayDialog

     (c) ExhibitDialog

     (d) ShowDialog

28. The name of the class used to programmatically create a color dialog box is:

     (a) Color

     (b) ColorBox

     (c) ColorDialog

     (d) ColorDisplay

29. The name of the class used to programmatically create a font dialog box is:

     (a) Font.

     (b) FontBox.

     (c) FontDialog.

     (d) FontDisplay.

30. Which database is the ADO.NET SqlConnection object designed for?

     (a) Access

     (b) Microsoft SQL Server

     (c) MySQL

     (d) Oracle

31. Which is not an ADO.NET DataAdapter Object?

     (a) OleDbDataAdapter

     (b) SQLDataAdapter

     (c) QueryDataAdapter

     (d) Both a and b.

UNIT 3

32. Which DataAdapter Query Type can be used with the Access database?

     (a) Use SQL statements.

     (b) Create new stored procedure.

     (c) Use existing stored procedure.

     (d) Both a and b.

33. Which is **not** an ADO.NET DataAdapter Object?

     (a) OleDbDataAdapter

     (b) SQLDataAdapter

     (c) QueryDataAdapter

     (d) Both a and b.

34. The first step of configuring a DataAdapter is to select:

     (a) an adapter object.

     (b) a connection object.

     (c) a database object.

     (d) a dataset object.

35. Which database is the ADO.NET SqlConnection object designed for?

(a) Access

(b) Microsoft SQL Server

(c) MySQL

(d) Oracle

36. MSIL stands for …………………

    (a) Microsoft Information Language

    (b) Most Intermediate Language

    (c) Microsoft Intermediate Language

    (d) None of these

37. Which of the following is not a member of ADO Command object

    (a) ExecuteScalar

    (b) ExecuteQuery

    (c) ExecuteNonQuery

    (d) ExecuteReader

38. Which of the following is not a member of ADO object?

    (a) Command

    (b) DataWrite

    (c) Connection

    (d) DataRead

39. Which method do you invoke on the SQLDataAdapter object to load your dataset wit data?

    (a) Update

    (b) Fill

    (c) Gather

    (d) Load

40. Which of the following is not true about ADO.NET?

    (a) ADO.NET enables to create distributed data sharing applications

    (b) ADO.NET uses XML to transfer data across applications and data source

    (c) ADO.NET doesn't support disconnected architecture

    (d) The classes of ADO.NET are defined in the System.Data namespace

41. Which of the following illustrates the benefit of ADO.NET?

    (a) Interoperability

    (b) It uses DataSet to represent data in memory that can store data from multiple tables and multiple sources

    (c) Disconnected data access

    (d) All of above

42. Which of the following is the object of .NET data provider?

    (a) Connection

    (b) Command

    (c) Data Reader

    (d) All of above

43. Which of the following is not true for ADO.NET DataSet?

    (a) DataSet provides a disconnected view of a data source

    (b) DataSet enables to store data from multiple tables and multiple sources

    (c) We can create relationship between the tables in a DataSet

(d) All of above are true

44. Which of following method of the command object is best suited when you have aggregate

45. functions in a SELECT statement?
   (a) ExecuteScalar
   (b) ExecuteReader
   (c) ExecuteNonQuery
   (d) ExecuteQuery

46. Which of the following is not the method of DataAdapter?
   (a) Fill
   (b) FillSchema
   (c) ReadData
   (d) Update

47. Which of the following namespaces contains the definition for Connection object?
   (a) System.Data.Interfaces
   (b) System.Data.Common
   (c) System.Data
   (d) System.Data.Connection

48. The ……………. holds the SQL commands and connection object for reading and
   a. writing data
   (a) SqlDataAdapter
   (b) Data set
   (c) SqlDataReader
   (d) Execute Reader

49. Which method do you invoke on the sql Data Adapter object to load data set with data
   (a) Update
   (b) Fill
   (c) Gather
   (d) Load

50. CTS stands for............
   (a) Common Type Software
   (b) Common Type System
   (c) Current type System
   (d) None of these

51. ADO.NET implements connection-oriented data access through_____

52. ADO.NET implements disconnected data access through_____

53. The acronym ADO stands for_____

54. The _____ object of the ADO.NET provides connectivity to a data source

55. The _____object of the ADO.NET enables access to SQL commands

56. The _____ object of the ADO.NET provides fast read-only, forward-only access to the data retrieved from an SQL query

57. The _____ object of the ADO.NET provides fast read-only, forward-only access to the data retrieved from an SQL query

58. The_____object of the ADO.NET can be used to fill a DataSet with information extracted from a data source
59. The _____object of the ADO.NET provides a connection-oriented data access architecture
60. The _____method of the ADO.NET provides a disconnected data access architecture
61. The _____method of the ADO.NET Command object enables you to execute SELECT commands
62. A ………… is an in-memory data store that can hold numerous tables.
63. A …………………object allows you to specify what type of interaction you want to perform with a database.
64. The purpose of creating a ………….object is so you can enable other ADO.NET code to work with a database
65. Try and catch is used for……………..
66. Say true or false: Data adapters are associated with connected database mechanism
67. Say true or false: Try and catch should be followed by a final statement
68. Say true or false: statement with a try block can trigger numerous possible exceptions.
69. The----------- object is used to establish a session with data source

UNIT 4

70. SGA stands for...............

    (a) Software Global Area
    (b) System Global Area
    (c) Software Grid Array
    (d) System Grid Array

71. Data stored in oracle in form of ……….
    (a) Data block
    (b) File
    (c) Extends
    (d) None of these
72. Extends are formed by combing adjacent ………..
        a) Blocks
        b)Files
        c)Records
        d)None of these
73. The level of logical database storage greater than an extent is called ………
        a) Extends
        b)segment
        c)block
        d)file
74. This portion of the data block contains information about the actual rows in the block.

(a) Table Directory

(b) Row Directory

(c) Row data
(d) None of these

75. Which are the mapping methods supported by oracle net:
    (a) Local Naming
    (b) Directory naming
    (c) External naming
    (d) All the above
76. _____strategy is to protect the database against data loss
77. _____strategy is to reconstruct the database after data loss
78. A _____ is a copy of data of a database that you can use to reconstruct data
79. RMAN means_____
80. _____ stores only blocks changed since a previous backup

81. DBCA stands for………………
82. A ………… is a logical structure, created by Oracle database server in which database objects are stored.
83. ………………….. is a process that listens for client connection requests
84. A …………..is a set of memory structures that manage database files.
85. SGA stand for…………
86. …………………. writes contents of database buffers to datafiles.
87. …………………..is used to hold data blocks read from datafiles by serverprocesses.

UNIT 5
88. RMAN stands for ………
    (a) Recovery Manipulation
    (b) Recovery Manager
    (c) Recovery Maintenance
    (d) None of these

89. .... is an essential part of any backup system.
    (a) Filter
    (b) Recovery
    (c) Security
    (d) Scalability
90. For a backup/restore system, ... is a prerequisite for service in a enterprise.
    (a) Filter
    (b) Recovery
    (c) Security
    (d) Scalability

91. The .... consists of the various applications and database that play a role in a backup and recovery strategy.
   (a) Recovery Manager environment
   (b) Recovery Manager suit
   (c) Recovery Manager file
   (d) Recovery Manager database

92. A ....is a block of Recovery Manager(RMAN)job commands that is stored in the recovery catalogue
   (a) recovery procedure
   (b) recovery block
   (c) stored block
   (d) stored script

93. In log based recovery, the log is sequence of ....
   (a) filter
   (b) records
   (c) blocks
   (d) numbers

94. .... is an alternative of log based recovery.
   (a) Disk recovery
   (b) Shadow paging
   (c) Dish shadowing
   (d) Crash recovery

95. .... systems typically allows to replace failed disks without stopping access to the system.
   (a) RAM
   (b) RMAN
   (c) RAD
   (d) RAID

96. An .... is an exact copy of a single datafile, archived redo log file, or control file.
   (a) image copy
   (b) datafile copy
   (c) copy log
   (d) control copy

97. The simplest approach to introducing redundancy is to duplicate every disk is called .....
   (a) mirroring
   (b) imaging
   (c) copying
   (d) All of the above

98. ASM stands for_____

98. ASM uses _____ to store datafiles

99. ASM uses_____ feature to simplify database file management

100. _____is the fundamental unit of allocation within a disk group

101. RMAN stands for_____

102. OMF means _____

103. _____ command is used to view the RMAN configurations

104. _____ command is used to change the RMAN configurations

105. Oracle uses _____system to obtain metadata and historical data for transactions.
106. RMAN stand for …………………
107. ASM uses …………..to store datafiles.
108. ASM stand for………………
109. RMAN keeps an extensive record of metadata about backups, archived logs, and its own activities, known as the ……………………
110. …………………….. is a group of Oracle Database features that that let you view past states of database objects or to return database objects to a previous state without using point-in-time media recovery.

PART B (2 Mark Questions)

UNIT 1

1. Listfeatures of .net?
2. List benefits of .net?
3. What is visual studio?
4. What is event driven programming?
5. What is Just in time compiler?
6. Define the term CLR.
7. What is .net IDE interface?
8. Define .net framework class library?
9. List .net languages?
10. What is pre-Jit Compilation?
11. Differentiate between managed and unmanaged code?
12. What is garbage collection?
13. What is Difference between NameSpace and Assembly?
14. What is Microsoft Intermediate Language (MSIL)?
15. What is Common Language Specification (CLS)
16. What is the role of the JIT compiler in .NET Framework?
17. Describe the roles of CLR in .NET Framework?
18. What is C#?
19. What are the namespaces used in C#.NET?
20. What are the characteristics of C#?
21. What are the different categories of inheritance?
22. What is the difference between public, static and void?
23. What are the types of access modifiers in C#?
24. Define destructors?
25. Define Constructors?
26. What is ENUM?
27. What is a data set?
28. What is the difference between private and public keyword?

29. What is Delegates?
30. What is a data type? How many types of data types are there in .NET ?
31. State the features of an interface.
32. What is a namespace?
33. What is CTS, and how does it relate to the CLS?
34. What is IL?
35. What does 'managed' mean in the .NET context?
36. What is an assembly?
37. What is the difference between a private assembly and a Shared assembly?
38. How does assembly versioning work?
39. What is garbage collection?
40. What is GAC?
41. What is Boxing and unboxing?
42. What is JIT and how isworks?
43. What is portable executable (PE)?
44. What is global assembly cache?
45. What is difference between shared and public assembly?
46. What is MSIL?
47. What are the types of assemblies?
48. What are Jit compilers?
49. What are the main components of .NET Framework?
50. What is Common Type System?
51. What is Manifest?
52. Explain the role of assembly in the .Net Framework?
53. What are the uses of delegates in C#?
54. What is a class?
55. What is Difference between NameSpace and Assembly?
56. What is .NET Framework?
57. What are the main components of .NET Framework?
58. What is an IL?
59. What is JIT compiler?
60. What is BCL?
61. What is the functions of CLR?
62. What is Common Type System ?
63. What is a namespace? Give examples
64. What is Difference between NameSpace and Assembly?
65. What is Microsoft Intermediate Language (MSIL)?
66. What is Common Language Specification (CLS)?

UNIT 2

67. How to sort an array in C#?
68. What is a enumeration in C#?
69. What is inheritance?
70. What is polymorphism?
71. How C# supports static polymorphism?
72. What is function overloading?

73. What is a sealed class in C#?
74. What is an interface?
75. How C# supports static polymorphism?
76. Describe the accessibility modifier "protected internal".
77. What are delegates?
78. How do you inherit a class into other class in C#?
79. How to show message box in C#
80. What is tree view?
81. Explain text box Control?
82. What are the properties of text box Control
83. Explain Combo box Control with example?
84. Explain List box Control with example?
85. Explain Constructor?
86. Explain Constructor and destructor?
87. List important properties of text box control?
88. List important properties of label control?
89. What are the different types of button in C#?
90. What is the important of submit button?
91. Define Enumeration?
92. What are the different conditional statements in C#?
93. Define array in C#?
94. What is Inheritance?
95. What is Status bar?
96. Write a short note on Image list?.
97. Write a short note on strings in C#?
98. What is Destructor?
99. What is List view?
100. What is Method overloading?
101. Describe the structure of typical C# program
102. What is the importance of the Main method in a C# program?
103. Describe the difference between two styles of comments used in C#
104. List the five types of tokens available in C#
105. What do you mean by scope of a variable?
106. What is boxing?
107. What is unboxing?
108. What are the special operators available in C#?
109. How do you convert a string to a number?
110. What is a break statement? How and when a break is typically used?
111. How do we invoke a method in C#?
112. Why do we use static variables?
113. What is an interface?
114. What is operator overloading?
115. What is delegate?
116. What is an event?

UNIT 3

117. What is ADO.NET?
118. What are the ADO.NET components?

119. How can you define the DataSet?
120. What is the differences Between DataReader and DataSet?
121. What is SqlCommand Object?
122. What is the difference between ADO and ADO.NET?
123. What is the DataAdapter Object in ADO.NET?
124. Describe the System.Data Namespace Class?
125. What is DataTable in ADO.NET?
126. What is the DataReader in ADO.Net?
127. What is ExecuteScalar method in ADO.NET?
128. What are the methods of DataSet?
129. What are Parameters in ADO.NET?
130. What is the difference between DataSet and DataReader?
131. ExplainExecuteNonQuery Method?
132. What are the important classes in ADO.NET?
133. What is DataAdapter and its property?
134. Which namespaces are used for data access?
135. Explain the properties and methods of Command Object.
136. Explain the ExecuteReader method:
137. What is CLR?
138. What is Data reader object?
139. Describe Data Adapter object?
140. What is CTS?
141. Describe MSIL?
142. What is Managed Code?
143. What is Unmanaged Code?
144. What is the difference between Managed Code and Unmanaged Code?
145. What is CLS?
146. How t o create message box in C# dot net?
147. What is Data reader?
148. Explain exception handling?
149. What is a DataSet?
150. Name four data providers of ADO.NET
151. What is meant by connection-oriented data access?
152. What are the advantages and disadvantages of connection-oriented data access?
153. What is meant by disconnected data access?
154. What are the advantages and disadvantages of disconnected data access?
155. Differentiate between connection-oriented and disconnected data access
156. What is a connection string? Give example
157. What is the function of the ADO.NET Connection object?
158. What is the function of the ADO.NET Command object?
159. What is the function of the ADO.NET DataReader object?
160. What are the important properties of ADO.NET Command object?
161. What are the important methods of ADO.NET Command object?
162. Explain the function of the ExecuteNonQuery() method of the ADO.NET Command object
163. Explain the function of the ExecuteScalar() method of the ADO.NET Command object
164. Explain the function of the ExecuteReader() method of the ADO.NET Command object
165. What is the function of an ADO.NET DataSet object?
166. What is the function of an ADO.NET DataAdapter object?

167. How can you fill an ADO.NET DataSet?
168. What is meant by data binding ?
169. What is exception?
170. Write the connection string statement?
171. What is Data Adapter?
172. What is disconnected mechanism?
173. Write note on data binding?
174. What do you mean by throwing an exception?
175. What are the tasks followed for filling the data set?
176. What is Connection object?
177. Give two examples of exception?
178. Give any 4 predefined exceptions in C#?
179. What is connected mechanism?

UNIT 4

180. What is Oracle SGA?
181. What is data block in Oracle?
182. What is Extent in oracle?
183. Describe about Data dictionary?
184. What is Tablespace?
185. Describe Control files in Oracle?
186. Describe Data files in Oracle?
187. What are the oracle security methods?
188. What is concurrency?
189. How backup and recovery is done in Oracle?
190. Explain Oracle basic memory architecture?
191. What is System Global Area?
192. What is Program Global Area?
193. What are the most important SGA components?
194. What is redo log file?
195. What is redo log buffer?
196. What are the features of oracle database?
197. How recovery is done in Oracle?
198. Explain Data block format in Oracle?
199. What is an oracle database?
200. What is meant by physical database structure?
201. What are the datafiles?
202. What is control file?
203. What is redo log file?
204. What are backup files?
205. What is meant b y logical database structures?
206. What is tablespace?
207. What is a data block?
208. What is an extent?
209. What is a segment?

210. What are the different type of segments?
211. What is an instance?
212. What is RMAN?
213. What is meant by concurrency?
214. What is flash back technology?
215. What is data recovery advisor?
216. Define Performance management?
217. What is undo data module?
218. What is Database maintenance?
219. How to manage oracle instance?
220. Which are the database storage structures?

UNIT 5

221. What is Oracle Automatic Storage Management?
222. What is ASM instance?
223. What is Metadata?
224. What is RMAN?
225. What is RMAN recovery catalog?
226. How recovery is done using RMAN?
227. What are the features of RMAN?
228. How recovery is done using RMAN?
229. What is Flashback Technology?
230. How database can duplicate with RMAN?
231. How ASM disk groups are created?
232. What is ASM in oracle?
233. Explain RMAN recovery catalog?
234. How recovery is done using RMAN?
235. What are the features of RMAN?
236. How recovery is done using RMAN?
237. Explain about Flashback Technology?
238. How database can duplicate with RMAN? Explain?
239. How ASM disk groups are created?
240. What is Oracle Automatic Storage Management?
241. Describe RMAN?
242. What are the components of disk group
243. What is ASM?
244. What is the disk group in ASM?
245. What is AU
246. What is ASM instance?
247. What are ASM files?
248. What are the purposes of ASM Striping?
249. What is RMAN?
250. What is the purpose of SHOW and CONFIGURE commands for RMAN environments?
251. How to change the RMAN configured default device for backups?
252. What is RMAN Channel?
253. What is a Flash Recovery Area?
254. What is ADR?

255. What is Flash back technology?
256. Define ASM.
257. What is Flashback technology?
258. What is Space management?
259. What is memory management?
260. What is tuning RMAN module?

PART C (4 Mark Questions)

UNIT 1

1. Write short note on .net IDE interface.
2. What are the features of .net?
3. Differentiate c# and .net?
4. Write short note on .NET framework class library introduction?
5. Define Event driven programming?
6. Write note on .net languages?
7. Define Common Language runtime?
8. What is visual studio?
9. Write a note on origins of .net technology?
10. Write a note on Just-In Time compiler?
11. What is garbage collection?
12. What is GAC?
13. What is Boxing and unboxing?
14. What is JIT and how is works?
15. What is portable executable (PE)?
16. What is global assembly cache?
17. What is difference between shared and public assembly?
18. What is MSIL?
19. What are the types of assemblies?
20. What are Jit compilers?
21. What are the main components of .NET Framework?
22. What is Common Type System?
23. What is Manifest?
24. Explain the role of assembly in the .Net Framework?
25. Explain the features of C#?
26. List some of the advantages of C#?
27. Explain the types of comments in C#?
28. Why to use "using" in C#?
29. How the exception handling is done in C#?
30. Why to use "finally" block in C#?
31. What is the difference between "finalize" and "finally" methods in C#?
32. List out two different types of errors in C#?
33. What is Difference between NameSpace and Assembly?
34. What is the difference between int and int32.

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35. Explain the origins of .NET technology
36. Explain the benefit of C#
37. Explain the features of .NET
38. Differentiate between managed and unmanaged code
39. What is the role of the JIT compiler in .NET Framework?
40. Explain CLR, CTS, CLS under .NET Framework?
41. What are the main components of .NET Framework?
42. Describe the roles of CLR in .NET Framework.
43. Explain the .NET Framework Class Library

UNIT 2

44. Explain Constructor and destructor with example?
45. Explain constructor over loading in C# with example?
46. What is Inheritance? How to implement multiple inheritance?
47. What is method overloading?
48. Explain method overloading with example?
49. Explain class in C#?
50. Explain OOPs concepts in C#?
51. What is tree view?
52. Explain text box Control?
53. What are the properties of text box Control?
54. Explain Combo box Control with example?
55. Explain List box Control with example?
56. Explain radio button and check box Control with example?
57. Design a login form in C#?
58. Describe picture box control?
59. How set progress bar in C#?
60. What is Tree view control? Explain with example?
61. Implement date time picker?
62. What is font dialogue box? Explain with example?
63. What is color dialogue box? Explain with example?
64. Explain keyboard events in C#?
65. Explain mouse events in C#?
66. List important properties of text box control?
67. List important properties of label control?
68. What are the different types of button in C#?
26. What is the important of submit button?
27. How t o create message box in C# dot net?
28. When will you use the conditional operator ?: compared to if…..else statements?
29. What is the sequence of execution of switch statements?
30. What are the basic steps in the looping process?
31. What are nested loops? Give an example where a nested loop is typically used?
32. Give an example of typical use of variable size arrays
33. Explain the difference between classes and structs
34. What is enumeration? Explain
35. What is the diference between a static method and a n instance method?
36. Explain the difference between abstract class and interface
37. Explain delegates and event

38. What are constructors?
39. What is Method overloading?
40. What is status bar?
41. What is Image list?
42. What is Inheritance?
43. What is enumeration?
44. What is List view?
45. What is Progress bars?

UNIT 3

46. What is the difference between Managed Code and Unmanaged Code?
47. Explain the ExecuteReader method:
48. Explain the properties and methods of Command Object.
49. ExplainExecuteNonQuery Method?
50. What are the important classes in ADO.NET?
51. ExplainDataAdapter Object in ADO.NET?
52. What is the differences Between DataReader and DataSet?
53. What are the ADO.NET components?
54. Explain CLR with diagram?
55. Explain DataAdapter and its property?
56. Explain DataSet?
57. Explain ExecuteScalar method in ADO.NET?
58. Explain exception handling?
59. How t o create message box in C# dot net?
60. Describe the procedure involved in ADO.NET disconnected data access
61. List and explain important properties and methods of Connection object
62. Describe the components of ADO.NET DataSet object
63. Describe the components of ADO.NET DataReader object
64. List and explain important methods of ADO.NET DataReader object
65. What is databind? Explain
66. What is exception? Explain
67. What is meant by structured exception handling?
68. What is connection objects?
69. What is Data set?
70. What is disconnected mechanism?
71. Define User defined exception?
72. What is data binding?
73. Give a short note on connected mechanism?
74. Give a short note on Exception handling?
75. Define data adapters?

UNIT 4

76. What are the features of oracle database?
77. Explain System Global Area?
78. What is the relationship between data block and extent in Oracle?
79. What are the components of oracle architecture?
80. How backup and recovery is done in Oracle?

81. Explain Control file, redo log file and data file?
82. What are the most important SGA components?
83. Explain Oracle basic memory architecture?
84. Explain oracle database architecture
85. Explain the physical database structure
86. Explain the logical database structure
87. What are the components of physical database structure? Explain
88. What are the components of logical database structure
89. Explain oracle database instance
90. What is RMAN? Explain
91. How to manage data and concurrency in oracle
92. What is Oracle flashback technology?
93. How to configure the oracle network environment?
94. How to manage oracle instance?
95. How to administer user security?
96. How to manage undo data module?
97. How to perform database recovery?
98. Give a note on Database maintenance?
99. How to move data module?

UNIT 5

100. What are the features of RMAN?
101. How recovery is done using RMAN?
102. Explain about Flashback Technology?
103. What is RMAN?Explain?
104. What is Oracle Automatic Storage Management?
105. How database can duplicate with RMAN? Explain?
106. How ASM disk groups are created?
107. What is ASM? Explain
108. What is meant by ASM instance?
109. What is ASM disk group? Explain
110. Explain ASM file components
111. How to view or change your RMAN configurations?
112. Explain the files in the Flash recovery area
113. What is ASM?
114. Define Space management?
115. Write a short note on Flashback technology?
116. Write a short note on managing database performance?
117. Write a short note on diagnosing the database?
118. Write a short note on managing memory?
119. How to automate tasks with the scheduler?

PART D (15 Mark Questions)

UNIT 1

1. Explain architecture of c#.net?
2. Explain Just-in-Time compiler?
3. Explain features and benefits of .net?
4. Explain .net framework?
5. Explain Common Language runtime?
6. Explain architecture of dot net framework?
7. Explain the working of CLR?
8. Explain the following
   a. CLR
   b. CTS
   c. JIT compiler
   d. MSIL
9. What is an assembly?What is difference betweenshared and public assembly?
10. What are the main components of .NET Framework?
11. Explain dot net IDE?
12. Explain the main components of .NET Framework?
13. Explain the benefit of .net technology
14. Explain .NET IDE interface and the concept of event driven programming
15. Explain the architecture of .NET Framework

UNIT 2

16. Explain Combo box Control with example?
17. Explain List box Control with example?
18. Explain basic windows form controls?
19. Implement date time picker with example?
20. What is font dialogue box? Explain with example?
21. What is color dialogue box? Explain with example?
22. Explain OOPs concepts in C#?
23. Explain Constructor and destructor with example?
24. Explain method overloading with example?
25. What is Inheritance? How to implement multiple inheritance in C#?
26. Create a bio-data using windows form control.
27. Create student registration form using form control?
28. Explain keyboard events in C#?
29. Explain mouse events in C#?
30. What is the difference between Key press, key up and key down events
31. What is method overloading? Give two examples where method overloading is applied
32. What is enumeration ? How is it useful in C# programming?
33. Explain inheritance
34. What is an interface ? Explain
35. How to manage errors and exceptions in C#? Explain
21. Explain Constructors and destructors?
22. Write notes on:
    (a) Image list
    (b) Tree views
    (c) List views

23. Explain Method overloading and inheritance with examples?
24. Explain Object oriented programming in c# .net?
25. Explain Loops, arrays and string?

UNIT 3

26. Explain CLR with diagram?
27. Explain architecture of ADO.NET?
28. Explain DataSet?
29. What are the ADO.NET components?
30. Explain ExecuteScalar method in ADO.NET?
31. What are the important classes in ADO.NET?Explain
32. What is the differences Between DataReader and DataSet?
33. Explain exception handling with example?Create a bio-data using windows form control.
34. Create student registration form using form control?
35. Explain keyboard events in C#?
36. Explain mouse events in C#?
37. What is the difference between Key press, key up and key down events
38. Describe Extends, Segment and data blocks in Oracle?
39. Describe the ADO.NET architecture
40. What is data binding? Explain
41. What is exception? Explain
42. Explain Exception handling with examples?
43. Explain the Data binding with controls?
44. Explain connected and disconnected mechanism?
45. Explain Connection object and command objects with examples?
46. Explain Data adapters and dataset class?

UNIT 4

47. Explain Oracle data base Architecture?
48. What are the most important SGA components?
49. What are the most important SGA components?
50. Explain System Global Area?
51. What are the features of oracle database?
52. What is the relationship between data block and extent in Oracle?
53. Explain Data block format in Oracle?
54. Explain physical and logical structure of database
55. Explain oracle database architecture
56. What is oracle database instance? Explain database instance structure
57. How to implement a database security in oracle? Explain
58. Explain Oracle Database architecture?
59. Explain Backup and recovery concepts?
60. How to configure oracle network environment?
61. Write note on Database storage structures?
62. How to manage Undo data module?

UNIT 5

63. Explain database recovery using RMAN?

64. Explain Oracle Automatic Storage Management?

65. Explain System Global Area (SGA)?

66. What is RMAN ? Explain?

67. How database backup and recovery is done using RMAN? Explain?

68. What is ASM? Explain

69. How to configure the environment for RMAN backups and recovery? Explain

70. What is RMAN? Explain

71. Explain the features of RMAN

72. What is Flashback technology? Explain

73. Explain ASM?

74. Explain how to create backup and recover using RMAN?

75. Explain Space management?

76. Explain Flash Technology?

77. What is Monitoring and tuning RMAN module?

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SDC5IT18 (E1/E2)   E1.   J2EE

Course Outline

Unit 1 (12 Hours)

Core Java EE: Platform Overview, Distributed Multi tiered Applications, Web & Business Components, services & types, Java EE Application Assembly & Deployment – Packaging Applications, Java EE modules, Getting Started with Web Applications, Model View Controller (MVC) Architecture.
Application deployment-Web application development and deployment Steps, Configuring Web application – Web application deployment descriptor (web.xml file)

Unit 2 (12 Hours)

SERVLETS: Servlet Overview, Life cycle of Servlet, Handling Client HTTP Request & Server HTTP Response, Initializing Parameters & ServletContext, Initializing a Servlet, initialization Parameters, ServletContext Attributes (Context binder), Session Management, Request Dispatcher & Redirecting.

Unit 3 (12 Hours)

JSP: Overview of JSP, JSP Architecture & life cycle, Components of Java Server Pages, Implicit Objects & Standard JSP Tags, Scope of JSP objects.

Unit 4 (12 Hours)

JDBC: JDBC Overview & Architecture, Step By Step Usage of JDBC API, Connecting to Database in Java, Prepared Statement & JDBC Transactions. Developing Web Application with MySQL Database by implementing Java Beans, DAO's & MVC Architecture.

Unit 5 (12 Hours)

Hibernate: Introduction to Hibernate, ORM Overview, Hibernate Environment, Hibernate Architecture & API, Hibernate Configuration, Hibernate Sessions, Persistent Class & Mapping Files, Building Hibernate application, Hibernate Query Language (HQL), Hibernate O/R Mappings – Collection & Association Mappings(Many-to-One, One-to-One, One-to-Many,Many-to-Many), Implementing Hibernate in Java Web Applications using Netbeans with MySQL.

Unit 6 (15 Hours)

Spring: Introduction to Spring Framework Architecture,Bean Definition, Bean Scopes & Bean Definition Inheritance, Spring IoC Containers, Understanding inversion of control (IoC) – Dependency Injection (DI), Spring Setter Injection, Spring Constructor Injection, Ioc in Action, Architecture of Spring Web MVC Framework, Spring MVC Getting Started – constructing web MVC application using Spring Framework, AbstractController in Spring MVC, Spring MVC Controllers hierarchy, SimpleFormController, Spring DAO design pattern, Building Spring MVC Framework Applications by using Netbeans.

PART A: (1 Mark Question)
UNIT-1

1. What did you mean by Legacy clients?

2. What did you mean by Multi-tired Architecture?

3. MVC stands for

4. J2EE - type of architecture

5. J2EE Stand for?

UNIT-2

6. When servlet object is created?

7. The lifecycle of a servlet is managed by

    a) Servlet context

    b) Servlet container

    c) The supporting protocol such as http

    d) All of the above

8. What is javax.servlet.Servlet?

    a) Interface
    b) abstract class
    c) concreate class
    d) None of the above.

9. - Which of the following code is used to get locale in servlet?

    a) request.getlocale()
    b) response.getLocale()
    c) New Locale()
    d) None of the above.

10. - Which of the following code retrieves name and version of the protocol?

    a) Header.getProtocol()
    b) response.getProtocol()
    c) request.getProtocol()
    d) None of the above.

11. - Which of the following code indicates whether the named response header has already been set?

a) response.containsHeader(headerName)
b) request.containsHeader(headerName)
c) Header.containsHeader(headerName)
d) None of the above.

7. Which of the following code can be used to write a cookie?

a) request.addCookie(cookie)
b) response.addCookie(cookie)
c) Header.addCookie(cookie)
d) None of the above.

8. - Which of the following code is used to get a HTTP Session object in servlets?

a) request.getSession()
b) response.getSession();
c) new Session()
d) None of the above.

9. Which of the following code is used to add an attribute in a HTTP Session object in servlets?

a) session.addAttribute(name,value)

b) session.setAttribute(name,value)

c) session.createAttribute(name,value)

d) None of the above.

10. - Which of the following code is used to get a particular attribute in servlet?

a) request.getAttribute(name)
b) response.getAttribute(name)
c) New attribute (name)
d) None of the above.

11. - Which of the following code retrieves the request header?

a) Header.getHeaderName(headerName)
b) response.getHeader(headerName)()
c) request.getHeader(headerName)
d) None of the above.

12. - Which of the following code encodes the specified URL for use in the sendRedirect method?

a) response.encodeRedirectURL(url)

b) request.encodeRedirectURL(url)
c) Header.encodeRedirectURL(url)
d) None of the above.

13. - Which of the following code can be used to set the length of content of body of the response?

a) request.setContentLength(length)
b) response.setContentLength(length)
c) header.setContentLength(length)
d) None of the above.

14. - What are Servlets?

a) - Java Servlets are programs that run on a Web or Application server.
b) B - Java Servlets act as a middle layer between a request coming from a Web browser or other HTTP client and databases or applications on the HTTP server.
c) C - Both of the above.
d) D - None of the above.

15. - Which of the following package contains servlet classes?

a) javax.servlet
b) B - javax.servlet.http
c) C - Both of the above.
d) D - None of the above.

16. - Which of the following is the correct order of servlet life cycle phase methods?

a) init(), service(), destroy()
b) B - initialize(), service(), destroy()
c) C - init(), execute(), destroy()
d) D - init(), service(), delete()

17. - Which of the following is true about init() method of servlet?

a) - The init() method simply creates or loads some data that will be used throughout the life of the servlet.
b) B - The init() method is not called again and again for each user request.
c) C - Both of the above.
d) D - None of the above.

18. - When service() method of servlet gets called?

a) - The service() method is called when the servlet is first created.
b) B - The service() method is called whenever the servlet is invoked.
c) C - Both of the above.
d) D - None of the above.

19. - Which of the following is true about service() method of servlet?

    a) <u>- The servlet container (i.e. web server) calls the service() method to handle requests coming from the client.</u>
    b) <u>B - Each time the server receives a request for a servlet, the server spawns a new thread and calls service.</u>
    c) <u>C - The service() method checks the HTTP request type (GET, POST, PUT, DELETE, etc.) and calls doGet, doPost, doPut, doDelete, etc. methods as appropriate.</u>
    d) <u>D - All of the above.</u>

20. - Which of the following is true about destroy() method of servlet?

    a) <u>After the destroy() method is called, the servlet object is marked for garbage collection.</u>
    b) <u>B - The servlet is terminated by calling the destroy() method.</u>
    c) <u>C - Both of the above.</u>
    d) <u>D - None of the above.</u>

UNIT-3

1- Which of the following method can be used to read parameters names?

    a) <u>request.getParameter()</u>
    b) <u>response.getParameter()</u>
    c) request.getParameterNames()
    d) <u>response.getParameterNames()</u>

2. - What happens when autoFlush is set to a value "false"?

    a) JSP container throws exceptionto indicate buffer overflow when buffer is filled.
    b) <u>JSP container flushed the buffered output when buffer is filled.</u>
    c) <u>Both of the above.</u>
    d) <u>None of the above.</u>

12. Which of the following is true about include directive?

    a) <u>The include directive is used to include a file during the translation phase.</u>
    b) <u>.include directive tells the container to merge the content of other external files with the current JSP during the translation phase.</u>
    c) Both of the above.
    d) <u>None of the above.</u>

4- Session is instance of which class?

    a) <u>Session</u>
    b) HttpSessi
    c) <u>HttpServletSession</u>
    d) <u>ServletSession</u>

5- Which of the following method can be used to read binary data stream coming from the client?

       a) request.getInputStream()
       b) response.getInputStream()
       c) request.getInputStreamData()
       d) response.getInputStreamData()

6. - This object can be used to access other implicit objects in JSP.

       a) request
       b) page
       c) context
       d) pageContext

7. - Which of the following do not supports JSP directly?

       a) Weblogic Server
       b) WebSphere Server
       c) Tomcat Server
       d) Apache HTTP Server

8. - Which of the following is not a jsp directive?

       a) include
       b) page
       c) scriptlet
       d) useBean

9. - pageContext is instance of which class?

       a) javax.servlet.ServletContext
       b) javax.servlet.ServletConfig
       c) javax.servlet.jsp.PageContext
       d) javax.servlet.Application

10. - Which of the following is true about Initialization phase in JSP life cycle?

       a) When a container loads a JSP it invokes the jspInit() method before servicing any requests.
       b) Container invokes _jspService() method during Initialization phase.
       c) Both of the above.
       d) None of the above.

11. - What is difference between <%-- comment --%> and <!-- comment -->?

       a) <%-- comment --%> is JSP comment. <!-- comment --> is an HTML comment.
       b) <%-- comment --%> is ignored by JSP container.
       c) <!-- comment --> is ignored by browser.

d) All of the above.

12. - What is the correct signature of _jspService() method of HttpJspPage class?

    a) void _jspService(HTTPRequest request, HTTPResponse response)
    b) void _jspService(HTTPRequest request, HTTPResponse response) throws
       ServletException, IOException
    c) void _jspService()
    d) void _jspService() throws ServletException, IOException

13. - Which of the following attributes are mandatory in <jsp:getProperty /> tag?

    a) name, property
    b) type, id
    c) name, type
    d) id, property

14. - Where filters are defined?

    a) Filters are defined in the deployment descriptor file web.xml.
    b) Filters are defined in the jsp pages.
    c) Both of the above.
    d) None of the above.

15. - What happens when autoFlush is set to a value "false"?

    a) JSP container throws exceptionto indicate buffer overflow when buffer is filled.
    b) JSP container flushed the buffered output when buffer is filled.
    c) Both of the above.
    d) None of the above.

16. - What JSTL stands for?

    a) JavaServer Pages Standard Tag Library
    b) JSP Tag Library
    c) Java Standard Tag Library
    d) None of the above.

17. - jspDestroy() method of HttpJspPage class can be overridden.

    a) True
    b) False

18. - Which of the following attributes are mandatory in <jsp:setProperty /> tag?

    a) name, property
    b) type, id
    c) name, type
    d) id, property

19. - request is instance of which class?

    a) Request
    b) HttpRequest
    c) ServletRequest
    d) HttpServletRequest

20. - pageContext is instance of which class?

    a) javax.servlet.ServletContext
    b) javax.servlet.ServletConfig
    c) javax.servlet.jsp.PageContext
    d) javasx.servlet.Application

21. - What is the correct signature of jspInit() method of HttpJspPage class?

    a) void jspInit(HTTPRequest request, HTTPResponse response)
    b) void jspInit(HTTPRequest request, HTTPResponse response) throws
      ServletException, IOException
    c) void jspInit()
    d) void jspInit() throws ServletException, IOException

22- This object can be used to access other implicit objects in JSP.

    a) request
    b) page
    c) context
    d) pageContext

23. - What happens when autoFlush is set to a value "false"?

    a) JSP container throws exceptionto indicate buffer overflow when   buffer is
filled.
    b) JSP container flushed the buffered output when buffer is filled.
    c) Both of the above.
    d) None of the above.

24. - Which of the following is an implicit object?

    a) pageContext
    b) servletContext
    c) httpContext
    d) sessionContext

25. - application is instance of which class?

    a) javax.servlet.ServletContext
    b) javax.servlet.HttpContext
    c) javax.servlet.Context

d) javax.servlet.Application

26- - What is the correct signature of jspDestroy() method of HttpJspPage class?

  a) - void jspDestroy(HTTPRequest request, HTTPResponse response)
  b) B - void jspDestroy(HTTPRequest request, HTTPResponse response) throws ServletException, IOException
  c) C - void jspDestroy()
  d) D - void jspDestroy() throws ServletException, IOException

27. - What is the correct signature of _jspService() method of HttpJspPage class?

  a) - void _jspService(HTTPRequest request, HTTPResponse response)
  b) B - void _jspService(HTTPRequest request, HTTPResponse response) throws ServletException, IOException
  c) C - void _jspService()
  d) D - void _jspService() throws ServletException, IOException

28. - _jspService() method of HttpJspPage class should not be overridden.

  a) True
  b)   False

29- - Which of the following is not a implicit object?

  a) request
  b) B - response
  c) C - cookie
  d) D - session

30- - request is instance of which class?

  a) Request
  b) HttpRequest
  c)   HttpServletRequest
  d)   ServletRequest

UNIT-4

36. Which of the following type of JDBC driver, talks with the server-side middleware that then talks to database?

  a) JDBC-ODBC Bridge plus ODBC driver

  b) Native-API, partly Java driver

  c) JDBC-Net, pure Java driver

  d) Native-protocol, pure Java driver

37. Which of the following is correct about SQL Warning?

a) A warning can be reported on a Connection object, a Statement object (including PreparedStatement and CallableStatement objects), or a ResultSet object.

b) Connection, Statement and ResultSet has a getWarnings method.

c) Both of the above.

d) None of the above.

38. Which of the following is correct about Statement?

a) Used for general-purpose access to your database.

b) Useful when you are using static SQL statements at runtime.

c) The Statement interface cannot accept parameters.

d) .All of the above

39. Which of the following type of JDBC driver, is also called Type 2 JDBC driver?

a) JDBC-ODBC Bridge plus ODBC driver

b) Native-API, partly Java driver

c) JDBC-Net, pure Java driver

d) Native-protocol, pure Java driver

40. Which of the following is correct about savepoint?

a) A savepoint marks a point that the current transaction can roll back to.

b) Instead of rolling all of the changes back, a savepoint can be choosen to roll back only some of them.

c) Both of the above.

d) None of the above

41. What JDBC stands for?

a) Java Database Connectivity
b) Java Driver for Basic Connection
c) Joint Database Connectivity
d) Joint Driver for Basic Connection

22. In which of the following type of ResultSet, the cursor can scroll forwards and backwards, and the result set is sensitive to changes made by others to the database that occur after the result set was created?

a) ResultSet.TYPE_FORWARD_ONLY
b) ResultSet.TYPE_SCROLL_INSENSITIVE
c) ResultSet.TYPE_SCROLL_SENSITIVE
d) None of the above.

23. Which of the following is correct about JDBC?

a) The JDBC API provides the abstraction and the JDBC drivers provide the implementation.
b) New drivers can be plugged-in to the JDBC API without changing the client code.
c) Both of the above.
d) None of the above.

24. - Which of the following executes the any kind of SQL statement?

a) boolean execute()
b) ResultSet executeQuery()
c) int executeUpdate()
d) None of the above.

25. - Which of the following is first step to create a JDBC application?

a) Import packages containing the JDBC classes needed for database programming.
b) Register the JDBC driver, so that you can open a communications channel with the database.
c) Open a connection using the DriverManager.getConnection () method.
d) Execute a query using an object of type Statement.

26. - Which of the following holds data retrieved from a database after you execute an SQL query using Statement objects?

a) ResultSet
b) JDBC driver
c) Connection
d) Statement

27. - Which of the following is used generally for reading the content of the database?

a) boolean execute()
b) ResultSet executeQuery()
c) int executeUpdate()
d) None of the above.

28. - Which of the following is correct about stored procedures?

a)   A stored procedure is a group of SQL statements that form a logical unit and perform a particular task.
b)   Stored procedures can be called using CallableStatement class in JDBC API.
c)   Both of the above.
d)   None of the above.

29. - When you say Class.forName() loads the driver class, does it mean it imports the driver class using import statement?

a)   true
b)   false

30. - Which of the following is correct about PreparedStatement?

    a) Used when you plan to use the SQL statements many times.
    b) The PreparedStatement interface accepts input parameters at runtime.
    c) Both of the above.
    d) None of the above.

31. - Which of the following step closes a connection with a database?

    a) Open a connection using the DriverManager.getConnection () method.
    b) Execute a query using an object of type Statement.
    c) Extract data from result set using the appropriate ResultSet.getXXX () method.
    d) Clean up the environment by closing all database resources relying on the JVM's garbage collection.

31. - Which of the following manages a list of database drivers in JDBC?

    a) - DriverManager
    b) JDBC driver
    c) Connection
    d) Statement

32. Which of the following encapsulates an SQL statement which is passed to the database to be parsed, compiled, planned and executed?

    a) DriverManager
    b) B - JDBC driver
    c) C - Connection
    d) D - Statement

UNIT-5

33. Which of the following is true about hibernate.dialect property in hibernate configuration?

a) This property makes Hibernate generate the appropriate SQL for the chosen database.

b) This property makes Hibernate generate the appropriate java code for the chosen database.

c) Both of the above.

d) None of the above.

34. Which of the following is true about INSERT CLAUSE in HQL?

    a) HQL supports INSERT INTO clause only where records can be inserted from one object to another object.

    b) HQL supports INSERT INTO clause without any restriction.

    c) Both of the above.

d) None of the above.

35. What is first level cache in hibernate?

   a) The first-level cache is the Session based cache.

   b) The first-level cache is the SessionFactory based cache.

   c) Both of the above.

   d) None of the above

36. Is SessionFactory a thread-safe object?

   a) True
   b) False

37. Which method is used to get a persistent instance from the datastore?

   a) Session.read()
   b) Session.get()
   c) Session.retrieve()
   d) Session.fetch()

38. What is the difference between get() and load() methods of session object?

   a) get() returns null if no data is present where as load throws ObjectNotFoundException exception in such case.
   b) get() always hits the database whereas load() method doesn't hit the database.
   c) get() returns actual object whereas load() returns proxy object.
   d) -All of the above.

39. Which of the following is true about INSERT CLAUSE in HQL?

   a) HQL supports INSERT INTO clause only where records can be inserted from one object to another object.

   b) HQL supports INSERT INTO clause without any restriction.

   c) Both of the above.

   d) None of the above.

40. How many types of association mapping are possible in hibernate?

   a) One to One
   b) One to Many
   c) Many to One
   d) Many to Many

41. Is it possible to perform collection mapping with One-to-One and Many-to-One?
42. Which method is used to remove a persistent instance from the datastore?

43. Which method is used to get a persistent instance from the datastore?
44. Which method is used to save the state of the given instance from the underlying database?
45. - What JDBC stands for?

   a) Java DB Connectivity
   b) B - Java Database Connectivity
   c) C - Java Data Bind Connect
   d) D - Java Data Bind Connector

46. - What ORM stands for?

   a) Object Relation Map
   b) B - Object Relational Mapping
   c) C - Object Record Mapping
   d) D - None of the above.

47. - Which of the following is not an ORM framework?

   a) Castor
   b) B - Spring DAO
   c) C - Hibernate
   d) D - NoSQL

48. - Which of the following object is used to create SessionFactory object in hibernate?

   a) Configuration
   b) B - Session
   c) C - SessionFactory
   d) D - Transaction

49. - Which of the following is true about Query object in hibernate?

   a) Query objects Hibernate Query Language (HQL) string to retrieve data from the database and create objects.
   b) B - Query objects SQL string to retrieve data from the database and create objects.
   c) C - A Query instance is used to bind query parameters, limit the number of results returned by the query, and finally to execute the query.
   d) D - All of the above.

UNIT-6

50. Which are the IoC containers in Spring?

   a) BeanFactory, ApplicationContext
   b) BeanFactory, ApplicationContext, IocContextFactory
   c) BeanFactory, BeanContext, IocContextFactory
   d) BeanFactory, ApplicationContext, BeanContext

51. - What is Pointcut?

a) This represents a point in your application where you can plug-in AOP aspect.
b) This is a set of one or more joinpoints where an advice should be executed.
c) This is used to inject values in objects.
d) This is invoked during program execution by Spring AOP framework.

52. What is a DispatcherServlet?

a) DispatcherServlet is used for transaction management.
b) DispatcherServlet is used for AOP.
c) DispatcherServlet handles all the HTTP requests and responses.
d) DispatcherServlet is used for Dependency injection.

53. Which are the modules of Data Access/ integration layer?

a) JDBC, ORM, OXM, JMS, Transactions
b) JDBC, ORM, OXM, JMS
c) JDBC, ORM, Web, Beans
d) JDBC, ORM, OXM, JMS

54. How before advice works?

a) Run advice before a class loads.
b) Run advice before a method execution.
c) Run advice before http response is to be returned.
d) .Run advice before http request is to be processed.

55. Which of the following is part of Data Access layer in Spring framework?
a) Beans
b) Aspects
c) JMS
d) Context

56. Which of the following class can be used to execute Sql queries in spring?

a) JDBCHelper
b) JdbcTemplate
c) DBHelper
d) DBTemplate

57. Which is the correct implementation class of BeanFactory?
a) XmlBeanFactory
b) ClassPathBeanFactory
c) FileSystemBeanFactory

d) AdvancedBeanFactory

58. What types of Dependency injection does spring supports?

    a) Constructor based, Setter based

    b) Constructor based, Setter based, Getter Based

    c) Setter based, Getter based, Properties based

    d) Constructor based, Setter based, Properties based

59. What is spring?

    a) Spring is an open source development framework for enterprise Java.
    b) B - Spring is a proprietary framework.
    c) C - Spring is a development framework for .Net applications.
    d) D - Spring is a development framework for PHP based applications.

60. - What is Dependency Injection?

    a) - It is a design pattern which implements Inversion of Control for software applications.
    b) B - It is one of the spring module.
    c) C - It is a technique to get dependencies of any project.
    d) D - It is used to promote tight coupling in code.

61. - What AOP stands for?

    a) Aspect Oriented Programming
    b) Any Object Programming
    c) Asset Oriented Programming
    d) Asset Oriented Protocol

PART B: (2 Mark Question)

UNIT-1

1. What is Multi-tired Architecture?

2. Explain web tier and client tier?

3. What are the tiers of distributed multi-tiered model?

4. Explain EIS tier and business tier

5. Define java EE modules

6. What is presentation tier

7. what is data storage

8. What is web resources

9. Define Three tier architecture

UNIT-2

10. When service() method of servlet gets called?

11. Explain HTTPServletRequest class and HTTPServletResponse class?

12. Explain doGet() method

13. Explain doPost() method

14. What are servlets and describe its purpose

15. Explain servlet life cycle?

16. What is the purpose of RequestDispatcher Interface?

17. What are Cookies in servlet?

18. Difference between forward() method and sendRedirect() method ?

19. Explain RequestDispatcher Interface?

20. What is difference between GenericServlet and HttpServlet?

21. When doPost() method of servlet to be called?

22. When doGet() method of servlet to be called?

23. When service() method of servlet gets called?

24. When init() method of servlet gets called?

25. When destroy() method of servlet gets called?

26. For what purpose init() method of a servlet is used?

27. For what purpose doGet() method of a servlet is used?

28. For what purpose doPost() method of a servlet is used?

29. How to read http header information in servlet?

30. What is HTTPServletRequest class?

31. What is HTTPServletResponse class?

32. How to write html contents using servlets?

33. How sendRedirect method works?

34. How sendError method works?

UNIT-3

35. How can we handle the exceptions in JSP ?

36. What are advantages of using JSP?

37. What are the advantages of JSP over Static HTML?

38. What is a sciptlet in JSP and what is its syntax?

39. What is autoFlush attribute?

40. What are JSP declarations?

41. What is a page directive?

42. What is a include directive?

43. What are JSP implicit objects?

44. What is a include directive?

45. What is a response object?

46. What is a request object?

47. How is JSP used in the MVC model?

48. How can we handle the exceptions in JSP ?

49. How can we forward the request from jsp page to the servlet ?

50. What is the difference between ServletContext and PageContext?

51. What are the life-cycle methods for a jsp?

52. What are the advantages of JSP over Server-Side Includes (SSI)?

53. What is a sciptlet in JSP and what is its syntax?

54. What are JSP declarations?

55. What are JSP comments?

56. What are JSP literals?

57. What is errorPage attribute?

58. What is session attribute?

59. What is a taglib directive?

UNIT-4

60. What is a JDBC DriverManager?

61. What is a JDBC Driver?

62. What is a statement?

63. What are ResultSet and jdbc connection?

64. What are JDBC driver types?

65. What is prepared statement?

66. What are the different types of JDBC Statements?

67. When should each of the JDBC driver type be used?

68. How do you register a driver?There are 2 approaches for registering the Driver

69. What do you mean by fastest type of JDBC driver?

70. What is JDBC?

71. Describe a general JDBC Architecture.

72. What is a ResultSet?

73. When should each of the JDBC driver type be used?

74. What are the different types of JDBC Statements?

75. How can you view a result set?

76. How do you update a result set?

77. What are SQL warnings?

78. What is a transaction?

79. Why do you have to close database connections in Java?

UNIT-5

80. What are the key components/objects of hibernate?

81. What is Hibernate?

82. What are the advantages of using Hibernate?

83. What are the advantages of ORM over JDBC?

84. What is the difference between first level cache and second level cache?

85. How many types of association mapping are possible in hibernate?

86. What is HQL (Hibernate Query Language)?

87. What is SessionFactory?

88. Which method is used to create a SQL query?

89. What is many-to-one association?

90. What is one-to-one association?

91. What is JDBC?

92. Name some of the ORM frameworks based on JAVA.

93. What are the key components/objects of hibernate?

94. What is a SessionFactory in hibernate?

95. What is Query in hibernate?

96. What is Criteria in hibernate?

97. What is the purpose of Session.beginTransaction() method?

98. Which method is used to create a HQL query?

99. Which method is used to create a SQL query?

100. Which method is used to get a persistent instance from the datastore?

101. Which method is used to update the state of the given instance from the underlying database?

102. What are persistent classes in hibernate?

103. Where Object/relational mappings are defined in hibernate?

104. Which method is used to save or update the state of the given instance from the underlying database?

UNIT-6

105. What is Dependency Injection?

106. What are the benefits of IOC?

107. What are the different types of IoC (dependency injection)?

108. Give an example of BeanFactory implementation

109. What does @Controller annotation and @RequestMapping annotation?

110. What is the difference between BeanFactory and ApplicationContext?

111. What are spring and describe its modules?

112. Which DI would you suggest Constructor-based or setter-based DI?

113. What is a DispatcherServlet?

114. What are the common implementations of the ApplicationContext?

115. What is Spring?

116. What are benefits of using spring?

117. What is Spring configuration file?

118. What are the different types of IoC (dependency injection)?

119. Which DI would you suggest Constructor-based or setter-based DI?

120. What are the benefits of IOC?

121. What are types of IoC containers? Explain them.

122. Give an example of BeanFactory implementation.

123. What are the common implementations of the ApplicationContext?

124. What is the difference between Bean Factory and ApplicationContext?

PART C: (4 Mark Question)

UNIT-1

1. Explain MVC Architecture
2. What is Distributed Multi-tiered Applications?
3. What is Web application deployment descriptor?
4. what is Ejb modules
5. What is Application client modules
6. What are the components of J2EE application?
7. What are the the types of J2EE modules?
8. What does web module contain?

UNIT-2

9. Explain the purpose of purpose doGet() and doPost() method

10. What is difference between PrintWriter and ServletOutputStream?

11. What is Session Tracking?

12. Explain session in servlet

13. What is difference between Cookies and HttpSession?

14. Explain getContextPath() funntion and its usage

15. Explain getHeader(),getParameter(),getProtocol() function

16. Explain difference between HTTPServletResponse class and HTTPServletRequest class?

17. How to read form data in servlet?

18. How to read http header information in servlet?

19. What are the major tasks of servlets?

20. How sendRedirect method works with in example?

21. How to send an authentication error from a servlet?

UNIT-3

22. Shortly explain about implicit object in jsp?

23. How do you set cookies in the JSP and read cookies with JSP?

24. What are cookies and How cookies work?

25. Explain page object and exception Object

26. What is the difference between config Object and pageContext Object??

27. Shortly explain jsp directives?

28. Explain jsp comment and directive tag with a simple example?

29. Explain jsp expression tag with a simple example?

30. Explain jsp scriplet tag with a simple example?

31. Explain jsp expression tag with a simple example?

32. How do you implement the auto refresh in JSP?

33. What is auto refresh feature?

34. How do you impement hit counter in JSP?

35. What is JSP page redirection with example?

36. How is Session Management done in JSP and How can you delete a session data??

37. How to delete cookies with JSP and how to set cookie in jsp?

38. How do you set cookies in the JSP and read cookies with JSP?

39. What are cookies and How cookies work?

40. What is the difference between JspWriter and PrintWriter?

41. Explain jsp session Object and application Object?

42. How can you read a request header information?

43. What is autoFlush attribute?

44. What are various attributes Of page directive?

45. What are the types of directive tags?

46. What are JSP comments with an example?

UNIT-4

47. Explain JDBC-ODBC bridge driver?

48. Explain JDBC driver manager?

49. Explain prepared statements and its methods?

50. Explain JDBC Transactions?

51. Explain result set with an example?

52. Shortly explain different types of JDBC Statements?

53. What are the basic steps to create a JDBC application?

54. How can I determine whether a Statement and its ResultSet will be closed on a commit or rollback?

55. How can you view a result set?

56. What are SQL warnings?

UNIT-5

57. What is the difference between get and load method?

58. What is the difference between session.save() and session.persist() method?

59. What is the difference between update and merge method?

60. What are the Advantages of Hibernate Framework

61. What is different between Session and Sessionfactory in Hibernate?

62. When do you use merge() and update() in Hibernate?

63. What is the difference between get() and load() methods of session object?

64. What is a SessionFactory in hibernate?

65. What is Transaction in hibernate and Session.beginTransaction()?

66. What is a configuration object in hibernate?

67. What is the purpose of Session.beginTransaction() method?

68. Which method is used to add a criteria to a query and explain the method?

69. Explain SQL query and HQL query?

70. Which method is used to remove a persistent instance from the datastore and explain with example?

71. Which method is used to create a HQL query SQL query?

UNIT-6

72. What are the common implementations of the ApplicationContext?

73. What are the different modules in Spring framework?

74. What are the different bean scopes in spring?

75. What are the types of IOC container in spring?

76. What are the advantages of spring framework?

77. What is IOC and DI?

78. What is the difference between Bean Factory and ApplicationContext?

79. What is Spring IoC container and explain the benefits of IOC?

80. What are types of IoC containers? Explain them.

81. Which DI would you suggest Constructor-based or setter-based DI?

82. What are the different types of IoC (dependency injection)?

83. Explain spring and Spring configuration file?

PART D: (15 Mark Question)

UNIT-1

1. Explain MVC Architecture?

2. Explain Distributed Multi-tiered Applications?

3. What is   J2EE and different Types of J2EE Clients?

4. Explain java EE modules

UNIT-2

5. Explain about Request Dispatcher & Redirecting?

6. Explain about Servlet and Life cycle of Servlet?

7. Explain the purpose of getParameter(),getParameterValues(),getParameterNames()?

8. What are Servlets? And explain its Architecture

9. Explain the purpose below the function

    1. getRemoteAddr()

    2. getRemoteHost()

    3. getRemoteUser()

    4. getServletPath()

11. Explain Servlet implicit object

12. How to read name of all parameters in servlet with example?

UNIT-3

10. Explain jsp implicit object and its value with example

11. Jsp conditional statement and loop statement

12. Explain jsp session Mangement

13. Explain jsp architecture and life cycle?

14. Explain JSP Directives and all types of directive tags?

UNIT-4

13. Explain JDBC driver and driver management?

14. Explain transaction management in JDBC?

15. What is a transaction?

16. What is the difference between execute, executeQuery, executeUpdate

17. What are the different types of JDBC Statements?

18. What are SQL warnings?

19. Explain the difference between statement and prepared statement?

20. Explain JDBC connections steps and explain all functions

UNIT-5

21. Explain Session Factory in hibernate?.

22. What are the three states of a Hibernate Persistence object can be? What is the difference between the transient, persistent and detached state in Hibernate?

23. What the key components/objects are of hibernate and explain it?

24. Explain configuration object in hibernate and Session Factory in hibernate?

25. What is Hibernate and advantages of Hibernate?

26. Explain Query, Transaction, Session in hibernate?

27. Explain hibernate mapping

28. What is the difference between save() and persist() methods of session object with example?

29. Explain first, second, Query level cache in hibernate?

UNIT-6

30. Explain Spring MVC Controllers hierarchy and SimpleFormController?

31. What are the advantages of Spring MVC ?What is Controller in Spring MVC framework?

32. Explain Spring Framework Architecture and its advantages?

33. Explain Spring IoC container and benefits of IOC?

34. Explain Dependency Injection and different types of IoC (dependency injection) with example

35. What are the different modules in Spring framework and explain it?

36. What is the difference between Bean Factory and ApplicationContext with example?

37. What are the common implementations of the ApplicationContext?

SDC5IT18 (E1/E2)   E2.   Python Programming and Mobile Web

Course Outline

Unit 1 (12 Hours)

Introduction to Python - Features, Python interpreter and Idle, data types, strings, variables, operators and expressions, control flow tools, loops, break, continue, data structures, Input and Output, functions.

Unit 2 (12 Hours)

Introduction to Object Oriented Concepts in Python- Class, class variable, data member, function overloading, instance variable, inheritance, instance, instantiation, method, object, operator overloading, exception handling.

Unit 3 (12 Hours)

Introduction to Mobile Web- Introduction to HTML, Basic formatting tags: heading, paragraph, underline break, bold, italic, underline, superscript, subscript, font and image. Different attributes like align, color, bgcolor, font face, border, size. Navigation Links using anchor tag: internal, external ,mail and image links. Lists: ordered, unordered and definition, Table tag, HTML Form controls: form, text, password, textarea, button, checkbox, radio button, select box, hidden controls, Frameset and frames.

Unit 4 (12 Hours)

Server side programming using Python- Server side scripting - CGI - role of Web server – XAMMPP /WAMP (choose any one of these servers) – Python server side script - XAMMPP/WAMP – capturing form data – validation – processing data – exchange of data between form and server .

Unit 5 (12 Hours)

Python- MySQLdb integration: Features of MySQL, data types, Introduction to SQL commands- SELECT, DELETE, UPDATE, INSERT. Python functions for

MySQLdb operations – database connection, selection, query, fetching results- Insertion and Deletion of data using Python- Displaying data from MYSQL in webpage.

PART A (1 Mark Questions)

UNIT 1

1. What is the output of print tinytuple * 2 if tinytuple = (123, 'john')?

    a. **A** - (123, 'john', 123, 'john') **B** - (123, 'john') * 2 **C** – Error **D** - None

2. Which of the following data types is not supported in python?

    a. **A** – Numbers **B** – String **C** – List **D** - Slice

3. Which of the following function convert a String to an object in python?

    a. **A** - repr(x) **B** - eval(str) **C** - tuple(s) **D** - list(s)

4. Which of the following function removes an object from a list?

    a. **A** - list.index(obj) **B** - list.insert(index, obj)   **C** - list.pop(obj=list[-1])
       D list.remove(obj)

5. What is the output of len([1, 2, 3])?

    a. **A** – 1 **B** – 2 **C** – 3 **D** - 4

6. State True or False: Python is a case sensitive language?

    a. **A** – true **B** - false

7. What is the output of [1, 2, 3] + [4, 5, 6]?

    a. **A** - [1, 2, 3, 4, 5, 6] **B** - [1, 2, 3],[4, 5, 6] **C** - [5, 7,9] **D** - 21

8. What is the output of print tuple[1:3] if tuple = ('abcd', 786 , 2.23, 'john', 70.2)?

    a. **A** - ('abcd', 786 , 2.23, 'john', 70.2) **B** – abcd **C** - (786, 2.23) **D** - None of the
       above

9. Which of the following function of dictionary gets all the values from the dictionary?
    a. **A** - getvalues() **B** - value() **C** - values() **D** - None of the above.

10. What is the output of ['Hi!'] * 4?

    a. **A** - ['Hi!', 'Hi!', 'Hi!', 'Hi!'] **B** - ['Hi!'] * 4 **C** – Error **D** - None of the above.

11. Which of the following function compares elements of both dictionaries dict1, dict2?

    a. **A** - dict1.cmp(dict2) **B** - dict1.sort(dict2) **C** - cmp(dict1, dict2) **D** - None of the
       above.

12. What will be the output of the following code:
    a. tup=(1,2,3)
    b. tup[0]='t'
    c. print tup

A-('t',1,2,3) B-('t',2,3) C-Error D-None

13. Given s="WELCOME", which of the following is incorrect?
    a. A-print(s[0]) B-print(s.lower()) C-s[1]='r' D-None

14. The keyword ____ is used to define a function
    a. A-fun B-def C-init D-class

15. To start Python from command prompt, use the _____ command.
    a. A-execute python B-run python C-python D-go python

16. The _____ function immediately terminate the program.
    a. A-sys.terminate() B-sys.halt() C-sys.exit() D-sys.stop()

17. Which of the following is a python set?
    a. A-[1,2,3] B-(1,2,3) C-{} D-{1,2,3}

18. What is the output of following:
    a. D={"John":40,"Peter":45}
    b. print(list(d.keys()))

A-["John","Peter":45] B-("John","Peter") C-(40,45) D-["John":40,"Peter":45]

19. What is the output:
        i. list1=['x','y']
        ii. list2=list1
        iii. list1[0]='z'
        iv. print(list2)
    b. A-['z','y'] B-['x','y'] C-['z','x','y'] D-['x','z']

20. Preference of operator from high to low:
    a. A-and,or,*,+ B-*,+,and,or C-*,+,and,or D-*,+or,and

21. State True or False: 'Python is case sensitive'

22. Which of the following operator performs exponential(power) calculation?

    A-is B-// C-** D-range

23. what is the output of L[-2], if L=[1,2,3]?

    A-1 B-2 C-3 D-None

24. What is the output of print str[2:5], if str="hello world" ?

    A-llo world B-llo C-l D-None

25. What will be the output of 3 in [1,9,3]?

    A-True B-False C-Error D-None

26. The output of cmp(8,4)will be?   A-0 B- -1 C-1 D-2

UNIT 2

27. What is a class?
28. What is an object?
29. What is the keyword used to define a class?
30. What is the keyword used to define a function?
31. What is inheritance?
32. What is a data member?
33. What is instantiation?
34. What is function overloading?
35. What is operator overloading?
36. What are class variable?
37. Give syntax of object creation.
38. What is __init__() in python?
39. How a python constructor written?
40. In python, type of a variable is defined explicitly. True or False?
41. In oop in python, all method have the first argument _____.
42. What is exception?
43. The exception is handled in _____ block.

UNIT 3

44. HTML stands for?
45. What is an anchor tag?
46. What is a navigation link?
47. What is a form?
48. How Table tag is used?
49. What are frames?
50. What are the formatting tags for subscript and superscript?
51. Give two attributes of Table tag.
52. Give the syntax of text box control.
53. What is the align attribute?
54. Give the syntax of submit button?

UNIT 4

55. What is the expansion of CGI?
56. State True or False: python used as server side script?
57. To write a server program, we need to import ____ in our python code.
58. The _____ method is used to capture the data from a form.
59. Web pages are located using an addressing system called_____.
60. The first portion of a URL contains the_____.

UNIT 5

61. Which of the following method used to open a database connection in python?
    A-commit () B-open() C-cursor() D-connect()
62.

63. Which of the following datatype store date and time in (YYYYMMDDHHMMSS) format?

A-DATETIME B-DATE C-TIMESTAMP D-TIME

64. BLOB stands for?
65. Which datatype is used to store large amount of binary data such as image?

A-ENUM B-BIGINT C-TINYINT D-BLOB

66. Which of the following method fetches all the rows in a result set?

A-rowcount B-fetchone () B-fetchall() D-rollback()

PART B (2 Mark Questions)

UNIT 1

1. Name any four data types in python with example?
2. What are the methods used for file open and close, give syntax?
3. List and explain the file-object attributes in python.
4. How a variable is defined in python?
5. List four features of Python.
6. Give the syntax of a function definition in python.
7.   Explain python Input and Output.
8. What are modules in python?

UNIT 2

9.   What is instantiation?
10. What is an Exception? Give syntax.
11. Explain class-variable and data-member.
12. What is function overloading?
13. What is an instance and instance variable?
14. What is operator overloading?
15. What is a method and object?

UNIT 3

16. What is a hidden control in HTML, give syntax?
17. What is HTML?
18. What is Internal Linking. Give example?
19. Explain External Linking with example.
20. Explain navigation links in html.
21. Explain lists in html.
22. What are the attributes of Form control in html?
23. What are the basic formatting tags?
24. Explain any four form controls.
25. Explain frames and frameset.
26. Explain Table tag in html?

UNIT 4

27. What is CGI?
28. Explain the 'method' attribute of form.
29. What is a url? what are its elements?
30. What is server side programming?
31. What is the use of Fieldstorage() and getvalue() method?

UNIT 5

32. Explain database connection in python.
33. What is cursor object?
34. How fetchone () function is used for displaying data from database?
35. What is rowcount attribute in READ operation of database?
36. What is fetchone () and fetchall() method?
37. How commit () and rollback() methods works?
38. Explain the Datetime data type in MySQLdb.
39. Explain the connect () method with syntax.

PART C (4 Mark Questions)
UNIT 1

1. What are the Conditional statements used in python? Give syntax.
2. Explain the loop statements in python.
3. What are the control statements in python.
4. Explain Number datatype in python.
5. Explain the Dictionary datatype in python.
6. Explain the Tuple datatype in python.
7. Explain the List datatype.
8. What are the operations on string datatype?
9. What are the operations on Tuple?
10. What are the operations on dictionary?
11. What are the operations on list?
12. How a Python Interpreter works?
13. What are modules in python? How they can be used in program?
14. What is a function? Give one example.
15. Explain with example, defining and calling of a function.

UNIT 2

40. Explain inheritance with example?
41. Discuss operator overloading and function overloading?
42. How exceptions are handled in python? Explain with example.
43. Demonstrate object oriented programming with simple example?

44. Explain briefly the features of object-oriented programming.
45. Explain instantiation. Give example?

UNIT 3

46. Differentiate internal and external linking.
47. Explain mail link and image link.
48. What is an anchor tag? How they used?
49. Explain form tag and its attributes.
50. What are the form controls? Explain with example.
51. How HTML is helpful in designing web pages?
52. Explain Lists in HTML with example?
53. Create a Login page using HTML.
54. Explain any four form-controls in html. Explain their attributes.
55. What is a table tag? Write an html code to create a table with two column and three rows.

UNIT 4

56. Differentiate get and post method in a form submission.
57. What is form? How form is submitted to the server?
58. What is form validation?
59. Illustrate capturing of form data using python script.
60. Explain CGI architecture.
61. Python can be used as a server side script, do you agree? State.
62. Explain the role of CGI in server programming.

UNIT 5

63. Explain MySQL data types.
64. Explain SQL commands with syntax.
65. What are the python functions to fetch data from database?
66. Explain python functions for database connection and fetching result?
67. Write a python programme to connect with a MySQLdb and create a table.
68. What is cursor object in python? How it used with select command?
69. What is a query? Give example for INSERT and UPDATE query.
70. What you mean by fetching result? What is the difference between fetchone() and fetchall()?
71. Explain some features of MySQL?
72. Explain connect(), commit () and rollback() methods?

PART D(15 Mark Questions)

UNIT 1

1. List and explain the features of python.
2. Discuss any five python data types and operations on them with example.
3. What are the python operators and expressions? Explain.
4. Explain with example , Loops and control-flow statements in python.
   Explain the syntax of conditional statements with example

UNIT 2

5. Discuss object-oriented concept of python. Explain the features.
6. What is an exception? Explain with example, how exceptions are handled in python.
7. List and explain major characteristics of object oriented concept in python. Give example for inheritance.

UNIT 3

8. Create an application form 8using HTML form controls.
9. Explain HTML form controls with example.

UNIT 4

10. Write a python script to create a web page to print "Hello World".
11. Create a web form to enter Name and Age using html. What is the python code to capture these form data?

UNIT 5

12. Explain MySQL database connection in python. How Insertion and Updation querry used in python.
13. Explain python-MySQL database operations with example.
14. Discuss the features of MySQL database. Explain the MySQL data type categories.
15. Explain the SQL commands with syntax. What are the python functions for database operations?
16. What are the datatype categories of MySQL? Explain the python functions for MySQLdb operations?

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SDC5IT18 (E3/E4)   (E3) Mobile Software Development using Android

Course Outline

Unit 1 (15 Hours)

Introduction & environment set up: Introduction to object oriented programming and java basics, introduction to android and smart phones, Android Architecture & Virtual Machine, Mobile Technology terminologies, setting up the environment, Setting up Emulators, android fundamentals - Activities and Applications Activity Life Cycles Activity Stacks, Activity States, introduction to manifest, resources & R.java , assets, Values – strings.xml

Unit 2 (15 Hours)

Basic UI design: Form widgets, views, Layouts & Drawable Resources - XML Layouts, Linear Layouts, Relative layouts, Table Layouts, android Widgets, UI XML Specifications Events, Bundles & Intents- Explicit Intents Implicit Intents Event Broadcasting with Intents Event Reception with Broadcast Receivers,

Adapters and Data Binding

Unit 3 (15 Hours)

Files, Content Providers, and Databases: Saving and Loading Files, SQLite Databases Android Database Design Exposing Access to a Data Source through a Content Provider Content Provider Registration Native Content Providers,

Android Debug Bridge (adb) tool, Linkify

Unit 4 (15 Hours)

Custom components, Threads & multimedia: Adapters and Widgets , Notifications , Custom components Threads running on UI thread, Worker thread Handlers & Runnable AsynTask(in detail), Playing Audio and Video, Recording Audio and Video, Using the Camera to Take and Process Pictures

Unit 5 (15 Hours)

Networking & Location based services: Live Folders, Using SD cards – Reading and writing, XML Parsing JSON Parsing Including external libraries in our application, Map-Based Activities, Maps via intent and Map Activity GPS, Location based Services configuration, Geo-coding, Accessing Phone services (Call, SMS, MMS) Network connectivity services, Using Wi-Fi & Bluetooth Action bar tabs and custom views on Action bars. Introduction to cross-platform application development tools like ruby on rail, phone gap etc.

ELECTIVE 2-(E3) MOBILE SOFTWARE DEVELOPMENT USING ANDROID

SECTION A
Very short answer questions(1 Marks)

UNIT 1

1. What is Android?

2. Who is the founder of Android Inc ?

3. Is it possible to run two different app with same package name? why ?

4. What is the use of AndroidManifest.xml file?

    a. It describe the components of the application

    b. It describes the minimum level of the Android API that the application requires

    c. All

    d. It facilitates to provide a unique name for application by specifying package name

5. What is Dalvik Virtual Machine ?

6. What is Emulators?

7. What is Open Handset Alliance?

8. Which kernel is used in android?

9. What is R.java ?

10. What is the use of string.xml ?

11. Which life cycle method will called when the activity will start interacting with the use ?

12. _____ represents a single user interface screen

    a. Content provider   c. Activity

    b. Service   d. Broadcast receiver

13. What is the use of AndroidManifest.xml file?

    a. It describe the components of the application

    b. It describes the minimum level of the Android API that the application requires

    c. All

    d. It facilitates to provide a unique name for application by specifying package name

14. Does Android support other language than java?

15. What is activity?

16. What you mean by assets in Android?

17. What is XML?

18. android:maxSdkVersion in Android Manifest.xml is not recommended?

    a. True   b. False

19. Which among the following is not a member of Open Handset Alliance?

    a. Apple   c. None of these

    b. Wipro   d. Samsung

20. Android is initially developed by

    a. Google Inc   c. Open Handset Alliance

    b. Apple Inc   d. Android Inc

21. Android is _____ based operating system

22. _____ represents a single user interface screen

    a. Content provider   c. Activity

    b. Service   d. Broadcast receiver

23. The root element of AndroidManifest.xml is

    a. Application   c. Activity

    b. Manifest   d. Action

24. Android does not provide a separate testcase class for

    a. Service   c. Broadcast receiver

    b. Activity   d. Content provider

UNIT 2

25. What is Bundle in an Android program?

26. What is implicit intent in android?

27. What are various types of layouts used in Android ?

28. What is broadcast receiver ?

29. What is FrameLayout ?

30. _____ is used to uniquely identify the framework API version of the Android platform?

    a. Version number   c. API level

    b. Code name   d. None of these

31. The basic building element of Android's user interface is called_____

    e. View   g. View Group

    f. Content Provider   h. Layout

32. Specify the directory name where the XML layout files are store?

    i. /assets   k. /es/values/

    j. /src   l. /res/layout/

33. Which attribute of the element <uses-sdk> is used to specify the minimum APILevel required for the application to run?

    m. android:targetSdkVersion

    n. android:minSdkVersion

    o. android:maxSdkVersion

34. A layout that arrange its children into rows and columns which is that?

35. Which is the layout that lets you specify exact locations (x/y coordinates) of its children?

36. Select the unit ,that is not recommended for specifying dimensions

    p. Points

    q. Scale Independent Pixels

    r. Density Independent Pixels

    s. Pixels

37. Which is the mandatory attribute for any view inside of a containing layout manager?

38. Is it possible to combine two different layouts in a single resources file?

39. _____ is a layout that places its children in a rectangular grid?

40. What is the layout is designed to display a single item at a time?

41. All layout classes are direct subclass of

    t. Android.widget.AbsoluteLayout

    u. Java.lang.Object

    v. Android.view.ViewGroup

    w. Android.view.View

42. What is intent?

43. What is layout in Android?

UNIT 3

44. What is the name of database used in android?

45. Which permission is needed to write to external storage ?

46. ADB stands for _____

47. What is AAPT?

48. What is NDK?

49. DDMS stands for?

50. What is file?

51. What is the use of ADB ?

52. Where is the data stored in Android?

53. What is AAPT?

54. How many ways data are stores in Android?

55. SDK stands for _____?

56. What is the APK format?

57. What is the purpose of DDMS?

58. ADB stands for_____?

UNIT 4

59. On which thread services work in android?

    a) A - Worker Thread

    b) B - Own Thread

    c) C - Main Thread

    d) D - None of the above.

60. On which thread broadcast receivers will work in android?

    a) A - Worker Thread

    b) B - Main Thread

    c) C - Activity Thread

    d) D - None of the Above

61. What is the difference between services and thread in android?

a) A - Services performs functionalities in the background. By default services run on main thread only

b) B - Thread and services are having same functionalities.

c) C - Thread works on services

d) D - None of the above

62. What is JNI in android?

a) A - Java network interface

b) B - Java interface

c) C - Image editable tool

d) D - Java native interface.

63. What is the use of Handler?

64. What is AsynTask ?

65. In which technique, we can refresh the dynamic content in android?

a) Java

b) Ajax

c) Android

d) None of the Above

66. How do you join two notifications in android?

a) Give same id for both notifications

b) Write notification code two times

c) It is not possible in android

d) a & b

e) a & c

67. What is bean class in android?

a) A class used to hold states and objects

b) A bean class can be passed from one activity to another.

c) A mandatory class in android

d) None of the above

68. What is sleep mode in android?

a) Only Radio interface layer and alarm are in active mode

b) Switched off

c) Air plane mode

d) None of the Above

UNIT 5

69. What are the JSON elements in android?

a) integer, boolean

b) boolean

c) null

d) Number, string, boolean, null, array, and object

70.   What is JSON in android?

a) Java Script Object Native

b) Java Script Oriented Notation

c) Java Script Object Notation

d) None of the Above

71.   What is the JSON exception in android?

a) JSon Exception

b) Json Not found exception

c) Input not found exception

d) None of the above

72.   What are the JSON elements in android?

a) integer, boolean

b) boolean

c) null

d) Number, string, boolean, null, array, and object

73.   Which method is used to find GPS enabled or disabled pro-grammatically in android?

a) finish()

b) getGPSStatus()

c) onProviderDisable()

d) getGPS().

74.   What is the package name of HTTP client in android?

a) com.json

b) org.apache.http.client

c) com.android.JSON

d) org.json

75.   Which is the accurate method to get current location ?

   a) GPS

   b) Network Provider

   c) WPS

   d) None of the above

76.   What is a GCM in android?

a) Goggle Could Messaging for chrome

b) Goggle Count Messaging

c) Goggle Message pack

d) None of the above

SECTION B
Very Short Answer Questions (2 Marks)
UNIT 1

1. What are the main application development components of android ?

2. Difference between a java program and an android program ?

3. What are theActivity States?

4. What are the code names of android ?

5. What are the life cycle methods of android activity?

6. How to start a new activity from current activity ?

7. What are theActivity States?

8. What are the methods to make user interfaces in android ?

9. What is context in an android program ?

10. What are the tools used for android development ?

11. Explain lifecycle methods of activity

12. What is values, and assets?

13. What is Logcat?

14. What is DDMS ?

15. What are main features of android?

16. What are the main applications given by Android?

17. What is service in android?

18. How to call another activity in android?

19. Is it possible to create a user interface without XML layout file?

20. What are the core building blocks of android?

21. Give the names of form widgets in android?

22. What is application activity life cycles activity stacks?

23. What is values, and assets?

24. Write a short note about the history of Android?

UNIT 2

25. What is explicit intent in android?

26. What is adapter ?

27. Advantages of relative layout .

28. Name some exceptions in android?

29. What is the purpose of AutoComplete Text View?

30. What you mean by layout in Android?

31. What is spinner?

32. What are android menu?

33. Explain difference types of dialogs in android

34. Write the code to show toast message.

35. What is fragment?

36. What is content provider?

37. What are the basic tools used to develop an android app?

38. Give the code for creating a toast?

UNIT 3

39. What is ANR?

40. What is DDMS?

41. Explain Folder, File & Description of Android Apps?

42. Write a program to create a file .

43. How can we access a data from a database?

44. In our device we store music in different folder, but in our music player we get all songs together as a list, how it is possible ?

45. What are the methods used for saving and loading files in android?

46. What is the purpose of SQLite data base?

47. What is SDK's purpose?

48. How can we insert a value to the data base? What is the query use for it?

49. What is the purpose of ADB tool in Android?

50. What you mean by AAPT?

UNIT 4

51. Define threads in Android?

52. What is the use of AsyncTask?

53. How to avoid ANR ?

54. What are the different Android APIs which helps to play audio and video ?

55. What are application Widgets in android?

56. Define Processes in Android?

57. What is an Adapter?

58. How do I turn off notifications on my Android?

59. What is a push notification on android?

60. How do you disable apps on Android?

UNIT 5

61. Explain REST and SOAP

62. What is portable wifi hotspot ?

63. What are the different methods used to get current location of an Android device ?

64. Which are the phone-related manifest permissions and their purpose.

65. What you meant by Bluetooth List Paired Devices.

66. Explain Android graphics

SECTION C
Short Essays (4Marks)

UNIT 1

1. Difference between Java program and Android program ?

2. What are the application development component in android ?,Expain each with practical examples .

3. Write a note on virtual machine in Android?

4. Why we need dalvik virtual machine in android instead of jvm ?

5. What is Android emulator?

6. Why is java called a platform independent language ?

7. What you mean by object oriented programming?

8. What is the purpose of R.java file?

9. Write about values and assets?

10. Write about Android history?

11. What are core building blocks in Android give a short note about it?

12. Why Android is an Open Source?

13. Give a note on Android architecture?

14. What is content provider in Android?

UNIT 2

15. Write short note on toast, spinner, alert dialogue box, toggle button?

16. Write a note on different types of system broadcast receivers?

17. What are the difference between linear layout and relative layout?

18. What is table layout ?

19. How to start an application automatically after startup ?

20. What is the use of AndroidManifest.xml file?

21. Write a short note on intents?

22. Write about event broad casting with intents?

23. Give an example code using form widgets?

24. What are the basic tools used to develop an android app?

25. What is the difference between implicit intent and explicit intent in android?

26. What is event in Android gave its example?

UNIT 3

27. Write a short note on ADB tool?

28. Write about content provider?

29. What is SharedPreference and its Applications ?

30. What are the native content providers available in Android ?

31. What is a portable wi-fi hotspot?

32. What you mean by data binding?

33. What it mean by linkify?

34. Write a java program to write a String into File ?

35. What is content provider and what is it typically used for?

36. What is DDMS? Describe some of its capabilities/

37. What is the purpose of files in Android?

38. What are the abstract methods in content providers? Give a short note about it?

39. How to access sqlite database in Android?

UNIT 4

40. Explain Android Video Player

41. Explain AsynTask

42. Explain Android Media Player

43. Explain Android Media Recorder

44. Explain Using the Camera to Take and Process Pictures?

45. Which are the Thread-safe methods? Explain.

46. What is the mean of Runnable AsynTask?

47. Differentiate between ArrayAdapter and SimpleCursorAdapter.

48. In which situations you will use thread AsyncTask and message handling. ?

49. Explain the NotificationManager.

UNIT 5

50. How to use JSON in android?

51. What is the need of external libraries in a program ?

52. How an android device is communicate with server ?

53. What is web services ?

54. Advantages of JSON over Xml

55. What is JSON ?

56. How to create a program to show map of a particular place ?

57. How to make an application which helps us to read sms message on receiving time ?

58. What is the purpose of Android TelephonyManager.

59. How to send sms in android

60. How to send email in android using intent.

SECTION D
Essay (15Marks)

UNIT 1

1. Compare Android with other mobile operating systems

2. Write a note on activity life cycles.

3. Define Android Architecture?

4. Write note about manifest file and resources?

5. What is Android virtual machine and how it is works?

6. What is Android and uses of it?

7. What are the features and application of Android?

8. Give the advantages and scope of android?

9. Explain Activity and Activity life cycle?

UNIT 2

10. What are layout in Android explain it with an example?

11. Write a program to show some names in a listview ?

12. Difference between onItemClickLlistener and onItemSelectedListener ?Explain with the help of code.

13. How instant messaging application like whatsapp,hike,google hangout starts working automatically after device boot up ? Explain with the help of code .

14. How to pass values from one activity to another ? Explain with the help of code .

15. Explain different types of system broadcast receivers ?

16. What is android form widgets and give note about it with an example?

17. What is intent and Bundles? Give notes about it?

18. Write a code for creating a UI, using the form widgets?

19. What you mean by data adapter and data binding?

20. Discuss about Event Reception with Broadcast Receivers?

21. Describe XML Layouts, Relative layout, Table layouts and Also write any one Layout with an Example?

UNIT 3

22. How can we saving and loading the files in Android?

23. Explain about SQLite?

24. What are the ways to store data permanently in an Android device ?

25. What is SharedPreference ? Explain with real world examples .

26. Explain content provider?

27. What is the use of ADB in Android?

28. How can we create a database in Android? Write an example program for it?

UNIT 4

29. Explain threads in Android?

30. What is the use of Handlers ?

31. What is ANR and How to avoid ANR to make good use experience ?

32. Discuss about the process and it's life cycle in Android?

33. what is life cycle of UI thread.

34. What is the difference between Async task and message handling?

35. Detail about Custom Components.

UNIT 5

36. Android XML Parsing.

37. Write the programming logic to make a call blocker.

38. Explain JSON parsing

39. What are the different methods available in android to get the current location of a device? Explain each with advantages and disadvantages

40. What are the cross platform tools available to make Android Application ?

41. How we can make and receiving phone calls and explain about capturing call-related events.

42. Explain Android Bluetooth and which the different tasks are?

43. Drawing graphics in Android. How?

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SDC5IT20 (P)   Dot Net and Database - Lab

Syllabus :   C# - LAB Programs

1. Simple C# programs
2. Create and populate Windows Forms
3. Create and use user controls in a Windows Forms application
4. Create menus in a Windows Forms applications
5. Add code to form and control event procedures sin a Windows Forms applications.
6. Validate user input in a Windows Forms applications
7. Bind Windows Forms applications to various data sources by using Microsoft ADO.NET
8. Debug a Windows Form Application (try/catch)

Database -   Lab Programs

1. Preparing the Database Environment and Creating Database
2. Network Configuration
3. User Manager and configuration
4. Reporting and managing performance
5. Performing Database backup
6. Managing and Scheduling tasks
7. Configure oracle for recovery
8. Backup configuration
9. RMAN for backup and recovery
10. Monitoring using RMAN
11. Flashback Technology

DOT NET LAB MANUEL

1. Create a console application to find the number is odd or even.

2. Create a console application to find the number is Armstrong number or not.

3. Create a console application to implement a calculator.

4. Create a console application to find the factorial of a number.

5. Create a console application to print Fibonacci series.

6. Create a console application to find the word is palindrome or not.

7. Create a console application to print the reverse of a number.

8. Create a console application to read and print the details of n students using class and

object

9. Create a windows form application to Display the content of text box to another simple calculator.

10. Create a windows form application To display the content of text box using message box.

11. Create a windows form application to display the selected item in a text box.

12. Write a program to accept a string and convert the case of the character

13. Create a windows form application to Display the selected items from the list box.

14. Create a preview screen that will disply data entered into customer data entry scheme and perform validation.

15. Create a windows form application to display largest of three number using from application.

16. Create a windows form application to Create a login page and perform validation.

17. Create a windows form application to display the content of text box to another and to read a character and check whether it is vowel or not.

18. Create a windows form application to display the selected item in combo box.

19. Create a windows form application to display the selected date using month calendar control.

20. Create a window form application to change the background color and foreground color of a text.

21. Create a windows form application to Change the font type of the text.

22. Create a window application to create a basic notepad application.

23. Create a window application to display the selected day, month, year by a calendar control

24. Create a windows form application to read and display book details.

25. Create a windows form application to perform Basic string operation (uppercase and lowercase).

26. Create a windows form application to Find the root of a quadratic equation.

27. Create a windows form application to display a text in red color and change to blue when mouse move over it.

28. Create a windows form application to perform Exception handling.

29. Create a windows form application to display a number is prime or not

30. Create a windows form application to find prime numbers within a range and display it in a listbox

31. Create a windows form application to display factorial of a number

32. Create a windows form application to display a given number is odd or even

33. Create a windows form application to display odd or even numbers within range in a listbox

34. Create a windows form application to display Indian rupee denomination

35. Create a windows form application to construct an arithmetic calculator

36. Create a windows form application to construct a simple calculator

37. Create a windows form application to display Fibonacci series in a listbox

38. Create a windows form application to find the reverse of a number and display it in a message box

39. Create a windows form application to find sorting of a number

40. Create a windows form application to display the given number is amstrong or not in a message box

41. Create a windows form application to display amstrong numbers within a range in a listbox

42. Create a windows form application to display the reverse of a string

43. Create a windows form application to find sorting of a string

44. Create a windows form application to find append the string

45. Create a windows form application to illustrate the menu bar

46. Create a windows form application to illustrate the combo box

47. Create a windows form application to display the multiplication table

48. Create a windows form application to display   the electricity bill

49. Create a windows form application to display the greatest and smallest number of two numbers

50. Create a windows form application to illustrate the picture box using Hscrollbar and Vscrollbar

51. Write a program to implement string functions, length, trim and change case.

52. Write a program to print the year, weeks and days.

53. Write a program to convert the numbers to words.

54. Write a program to implement the purchase bill for a shop.

55. Write a program to implement ATM transaction.

56. Create a windows form application to read details from a database table in a datagrid using ADO.NET   connectivity.

57. Create a windows form application to insert , update and delete the students details to a database table by ADO.NET connectivity.

58. Create a database connectivity and show select, insert, update and delete operations on the book table.

SDC5IT21 (P) - Android and J2EE/Python Programming - Lab Elective Lab

Syllabus   :   SDC5IT21 (P) – Android

1. Creating Activities for Menu Items and Parsing XML Files
2. Writing Multi-Threaded Applications using Async Task
3. Using Web View and Using the Network
4. Using Audio Functions in Android
5. Graphics Support in Android
6. Preferences and Content Providers
7. Preference Activity
8. Creating Menus
9. Location Services and Google Maps in Android
10. Obtaining User Location
11. Obtaining a Maps API Key

12. Creating Status Bar Notifications
13. Data Storage
14. Simulating Sensors

ANDROID LAB MANUEL

1) Android application for adding two numbers.

2) Develop simple user interface to display message

3) Java android program to build a simple android application.

4) Java android program to demonstrate usage of string.xml file

5) Java android program to demonstrate activity life cycle

6) Java android program to change the background of your activity.

7) Java android program to create simple menu in android with two options.

8) Starting another activity from your own activity using intent.

9) Program to implement simple calculator.

10) Program to understand basic logic operations.

11) Program to find factorial of a number.

12) Java android program to demonstrate toast in an application.

13) Java android program to draw a canvas (graphics).

14) Java android program to demonstrate radio group application.

15) Write a program to show alert dialog with positive and negative button.

16) Write a program to show custom dialog

17) Write a program that read the value from an edit text and show that value in another acitivity.

18) Write a program to load values in listview and implement onItemClickListener.

19) Write a program to load values in spinner and implement onItemSelectedListener.

20) Android application for BMI Calculation.

21) Program to implement simple Login.

22) Example of service in android that plays an audio in the background.

23) Program to implement popup menu.

24) Android application for convert degree Celsius to Fahrenheit.

25) Simple example of android shared preference.

26) Write a program to store and retrieve data using sharedpreference.

27) Write a program to create, retrieve, update, delete operations using SQLite database.

28) Program to implement Android sensor.

Syllabus : SDC5IT21 (P) - J2EE LAB

1. Practical demonstration on Distributed Multi tired Applications, Web & Business Components,
2. Handling Client HTTP Request & Server HTTP Response,
3. Initializing Parameters & ServletContext.
4. Initializing a Servlet, Parameters
5. Programme for ServletContext Attributes (Context binder), Session Management,
6. Programme for Request Dispatcher & Redirecting.
7. Programme on Components of Java Server Pages, Implicit Objects & Standard JSP Tags, Scope of JSP objects
8. Step By Step Usage of JDBC API
9. Connecting to Database in Java.
10. Developing Web Application with MySQL Database by implementing Java Beans, DAO's & MVC Architecture
11. Implementing Hibernate in Java Web Applications using Netbeans with MySQL
12. Building Spring MVC Framework Applications by using Netbeans

J2EE LAB MANUEL

1) Write a jsp program to check the number is prime or not

2) A jsp program to display the factorial of a number

3) A jsp program to check the number is palindrome or not

4) A jsp program to print the Fibonacci series of 10 numbers

5) Write a jsp program to check the number is amstrong or not

6) Write a jsp program to print the Fibonacci series of first 10 numbers

7) Write a jsp program to demonstrate the auto refresh header

8) Write a jsp program to demonstrate the IP address and port number

9) Write a jsp program to demonstrate the context path

10) Write a jsp program to create a login page and the registration form of a student

11) Write a jsp program to demonstrate the application of implicit object

12) Write a jsp program to demonstrate the use of HTTP header request

13) A simple servlet program to display welcome servlet

14) A simple servlet program to print Hello World

15) A simple servlet program for table creation

16) A Servlet program to print simple counter.

17) A Servlet program to print Factorial of a number.

18) A Servlet program for validating the password entered by the user using RequestDispatcher Interface

19) A Servlet program for redirecting the request to the google server using SendRedirect Method.

20) A Servlet program for redirecting the request to the google server using ServletConfig Interface.

21) A Servlet program for setting the attribute in the application scope and getting that value from another servlet.

22) A Servlet program for login and logout using HTTPSession.

23) A Servlet program for maintaining the state of the user using link

24) A jsp program to enter user id and password and validate the session

25) A jsp program to demonstrate the use of Http Header Request

26) A jsp program of the application of implicit object

27) A jsp program to demonstrate the Context Path

28) A jsp program to demonstrate the IP address and port number

29) A jsp program to demonstrate the Auto Refresh Header

30) A jsp program to validate a session

31) A java program to print student details using JDBC.

32) Create a Dynamic web application to register the student details using jdbc.

33) A simple java program using Hibernate .

34) A Simple java program using Spring .

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Syllabus   :   SDC5IT21 (P) - PYTHON LAB

1. Programs using Loops and decisions

2. Programs for constants and String Manipulations

3. Programs for Functions, arrays , tuple, list, Dictionary

4. Programs for Sessions and request handling

5. Programs for Modules, Input-Output, Exception Handling, OOPs concept

6. Programs for Database management, Multithreading Installation of WAMP/XAMPP
    Server, MySQL db, and Python MySQL interface

7. Exchange of data between web page and server

8. Storage /Retrieval/Updation of form data in MySQL DB

SDC5IT21(P) PYTHON LAB MANUEL

1. Write a python program to print a Tuple in reverse order.
2. Using menu-driven program, demonstrate list operations:
    a. Append a list
    b. Remove list element
    c. Update an element
    d. Find length of list
3. Demonstrate Dictionary operations using menu driven programming:
    a. Insert an item
    b. Update an item
    c. Delete an item
    d. Clear dictionary
4. Write a python program to demonstrate IndexOutOfRange exception?
5. Using object oriented programming concept , write a python program to compute area
    and perimeter of a circle, if the Diameter is passed by the user.
6. Code a python program to find largest of 3 given numbers?
7. Write a program using class and object, to check whether a given number is Prime or
    Not?
8. Using python code create a text file "myfile" and write "Hello, Good morning" into this
    file.
9. Write a program to check whether given Year is Leap year or Not.

10. Using Datetime module of python, write a program to calculate your Age, if DOB is passed as input.
11. Illustrate Inheritance property using a python program to find Prime numbers up to 'n'.
12. Write a program to Print ' *' in a triangle shape.
13. Calculate Factorial of a given number using python program?
14. Code a program to find sum of digits of a number, if the number is given as input?
15. Demonstrate python SERVER SIDE scripting to print "Hello World " in web page.
16. Create an Application Form using HTML controls and properties.
17. Illustrate Internal linking and External linking in HTML programming.
18. Create a Database Table as shown below:

Emp_Id	**Name**	**Age**	**Designation**	**Salary**
01	James	45	Asst. Prof.	55000
02	Seetha	33	UD Clerk	25000
03	Laila	42	Professor	130000
04	Mukesh	50	Principal	145000

   a.   INSERT Datas into table.
   b.   UPDATE the field salary=30,000 where Designation is UD Clerk.
   c.   DISPLAY the table entries.
19. Create a Database Table as shown below:

Emp_Id	**Name**	**Age**	**Designation**	**Salary**
01	James	45	Asst. Prof.	55000
02	Seetha	33	UD Clerk	25000
03	Laila	42	Professor	130000
04	Mukesh	50	Principal	145000

   a.   INSERT Datas into table.
   b.   DELETE the entry with Emp_Id=02.
   c.   DISPLAY the entries where salary>1,00000.
20. Write a python program to illustrate string datatype:
      a.   Slicing a string
      b.   Updating string
      c.   Islower() and isdigit()

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