Question Bank

DB2

Cognizant Academy

Couse Name DB2
Test Type <Pre-Test/ Post-Test>

Module No.	Module Name	Topics Covered
1	INTRODUCTION TO DB2	Database & RDBMS concepts
		DB2 Overview
		DB2 objects and Data types
		Introduction to SQL
		Tools - QMF and SPUFI
		SQL - DDL
		SQL - DCL
2	QUERYING DATABASE AND OTHER DB2 OBJECTS	SQL - DML (Simple Select)
		Functions
		Sorting & Grouping records
		Joins & Subqueries
		Correlated Subquery & Union
		SQL - DML (Update & Delete)
		Indexes
		View, Alias & Synonyms
3	APPLICATION PROGRAMMING	Coding the Application
		Pre-compilation
		Compiling & Linking
		Binding
		Execution
		Application Development Guidelines
		DB2 Utilities
		DB2 Security, Catalog Tables and Optimizer

Multiple Choice Questions

Q. No	Question
1	Characteristics of a Relational Database
2	Column used to uniquely identify a Tuple
3	Entity-Relationship model is a logical representation of
4	The row that contains an entry for each attribute is called
5	The value of Null is
6	DB2 is a
7	A relational database is perceived
8	Advantages of Database systems over File management systems are
9	Characteristics of Network Database
10	The database model which can be visualized as upside down tree structure
11	Hierarchical Database handles
12	Column or combination of columns which has unique values but not selected as primary key and is not part of primary key is
13	Column of a table used to establish relationship with other table and present itself in all the tables is
14	How many normalization are possible?

15	Normalization is done to remove
16	Every foreign key in the first table must either match a primary key in the second table or wholly null is called
17	Rule that states no column that is part of primary key can have a null value is
18	The integrity which specifies information allowed in a column is
19	Pre-processor for the host programming language
20	Provides necessary controls for managing concurrent access to data
21	The major components of the complex DB2 internal structure are
22	Which is a collection of direct access volumes, all of the same device type
23	The Subsystem which controls connections to other MVS subsystems and handles system start-up, shutdown and operator communication is
24	The sub components which does the definition, retrieval and update of DB2 data
25	Part of MVS subsystem and general purpose lock manager that aids in Data integrity
26	IRLM stands for
27	When the Program executes first time the control goes to the
28	This component does all the operations such as search, retrieval, update index maintenance and Physical database
29	Component responsible for the physical transfer of data between external storage and Virtual Memory
30	Catalogue consists of regular tables which is

31	The database directory is same as Catalogue which is
32	The basic DB2 objects are
33	Database is a collection of
34	Which of the following should be defined for each database?
35	A database can occupy
36	Logical address space on secondary storage to hold one or more tables is called as
37	One of the following option is not a type of tablespace
38	In Simple table space a page can have rows from
39	A Simple tablespace
40	In Segmented tablespace, each segment contains
41	Segmented tablespace
42	Partitioned Table spaces primarily used for

43	Which of the following is LOCKSIZE parameters?
44	Which of the following is not a Tablespace Parameter?
45	The logical derivation of a table from other table/tables is
46	Which is the Unit of I/O operation
47	What is Query Management Facility (QMF) ?
48	Which one supports the online execution of SQL statements from a TSO terminal
49	SQL is composed of
50	Which of the following is a example of DDL
51	Which of the following is a example of DCL
52	Which of the following is a example of DML
53	Foreign key constraints are specified using
54	Using ALTER we can change the specifications of
55	Using ALTER command we
56	Which commands grants and Revokes the Table, Plan, Database privileges
57	What happens when a column is omitted in the INSERT statement and the Column is not NULL?
58	Single row select is possible using which one of the following in the WHERE clause
59	Multi row select is possible using which one of the following in the WHERE clause
60	Which of the Clauses can be used in conjunction with WHERE clause?
61	"SELECT * FROM EMP WHERE EMPNO BETWEEN '150' AND '200'". Above query selects employees with EMPNO

62	"SELECT * FROM EMP WHERE EMPNO IN ('150' , '200')". Above query selects employees with EMPNO
63	Which of the following special characters are used along with LIKE clause
64	IS NULL clause checks
65	Which of the following Function type is available in DB2
66	Which of the following is an example of Aggregate function
67	Which of the following is an example of Scalar function
68	Duplicates are removed from the result set using
69	Sorting the records are done using
70	Which one of the following is true about ORDER BY?
71	Grouping the records can be done by
72	Eliminating the groups from the Result set is done by using
73	Which of the following is true?

74	Which of the following is true about GROUP BY?
75	The difference between Having and Where clause
76	For one or more tables being joined, both matching and non matching rows are returned. This type of join is called
77	All rows from the 1rst table plus matching rows in the 2nd table are retrieved in
78	All rows from the 2nd table plus matching rows in the 1st table are retrieved in
79	Only matching rows are retrieved in
80	The inner query can return more than one value when the outer query uses
81	The query which works in Bottom-to-Top fashion is
82	The nested select statement refers back to the columns in Previous Select statements in
83	EXISTS is preferred over IN in correlated sub-query, when

84	Which of the following is true about UNION?
85	UNION can be replaced by following logical operator if the selects are from only one table
86	For selecting data from multiples tables the following is used
87	It combines 2 sets of rows into a single set composed of all the rows in either or both of original sets without duplicates
88	Which one of the following is the Index parameters?
89	This command is used to give another name for the table, which is private to the uses who created it
90	It is the local name provided for the remote tables.
91	In Dynamic SQL
92	Host variables is a
93	Host variables are used in embedded SQL prefixed wih
94	Which of the following is used to produce Host variables
95	Host variables can be used in
96	Host variables can be used in
97	DCLGEN can be issued for

98	The output of DCLGEN command contains
99	DCLGEN output is added to the COBOL program using
100	SQLCA is
101	SQLCA is updated
102	SQLCODE = 0 is
103	SQLCODE = 100 is
104	SQLCODE > 0 is
105	SQLCODE < 0 is
106	SQLCA contains which of the following fields?
107	Indicator variables are used for
108	Indicator variables are defined in Working storage as

109	Indicator variable < 0 indicates
110	Failure to code or check null values gives SQLCODE
111	Cursors are used for
112	Which one of the following command is used to define a cursor
113	In cobol, Defining a cursor is done generally in
114	In cobol, opening a cursor is done in
115	Following command is used to return data from result table one row at a time and assigns the value to Host variable
116	This command releases all the resources used by the cursor
117	The cursor should be defined with which of the following clause for Updation?
118	Update cursors cannot be used if Select statement contains
119	Following command registers the current unit of work
120	The SQL statements and DB2 related INCLUDE members are commented out and it is replaced by CALL statement in
121	DBRM is created after
122	If there is a mismatch between the Timestamp in modified source code and DBRM, it gives runtime error of
123	Which one of the following is the input to Compilation step?
124	The output of Binding step is
125	Binding does which one of the following

126	When Binding a DBRM to a Package, Plan contains
127	Package is
128	Which of the following is a characteristic of a Package
129	The binding parameter Isolation specifies
130	Which of the following is a type of Isolation level
131	The Page lock is released as soon as another page is accessed in which of the following Isolation?
132	All page locks are released only when COMMIT is executed in which of following Isolation
133	Retrieved row or page is locked until the end of Unit of work. No other program can modify the data but new rows can be inserted. This type of locking is called
134	These parameters specifies when to Acquire and Release Tablespace locks
135	Which of the following Acquire and Release parameter is most preferred for DB2 batch program?
136	VALIDATE parameter refers to the method of checking
137	Which one of the following is NOT a Binding parameter?
138	For execution of a DB2 Cobol program we need
139	Which one of the following is a DB2 Utility?

140	The Integrity of DB2 data structures are checked using which of the DB2 utility?
141	Check utility checks the
142	This utility is used to create an imagecopy for the complete tablespace or a partition of tablespace
143	Every successful execution of COPY utility places atlease one row that indicates the status of Image copy, in which table?
144	The Utility to restore the Db2 Tablespaces and indexes to a specific instance is
145	The bulk inserts into DB2 table are accomplished using this Utility.
146	If a job terminates in any phase other than UTILINIT,
147	This utility is used to collect statistical information about DB2 tables, tablespaces, partitions, indexes and columns
148	Using this utility, we can obtain the details of the access path chosen by Db2 optimizer for SQL statements
149	When EXPLAIN is requested, the access path that DB2 chooses are put in coded format into the following table
150	EXPLAIN provides information about
151	Locking services are provided by which of the MVS subsystem
152	Db2 contains how many catalogued tables?

153	Optimizer
154	Optimizer evaluates which of the following factors?
155	Optimizer gets the information pertaining to the state of tables that will be accessed by SQL statements from

Option 1	Option 2	Option 3	Option 4	Correct Answer
It supports many to many relationships	Child Tables were allowed to have more than one parent	Represented in terms of Entities and attributes	A single table acts as a root	option 3
Composite Key	Alternate Key	Primary Key	Foreign Key	option 3
Tables	Data	Records	Entities	option 1
Tuple	Domain	Entity	Relation	option 1
Zero	Unknown	Space	None of the above	option 2
Relational database	Hierarchical	Network	None of the above	option 1
As a set of tables	Group of records	Collection of data	None of the above	option 4
Data redundancy	Single View	Concurrency	Data dependency	option 1 & option option 3
Child tables were allowed to have more than one parent	Network model supports many-to-many relationships	Can be visualized an upside down tree of data	Child may only have one parent but a parent can have multiple children	option 1 & option 2
Network	Hierarchical	Relational	None of the above	option 2
1-M relationship	M-1 Relationship	M-M Relationship	1-1 Relationship	option 1
Foreign Key	Composite Key	Unique Key	Alternate Key	option 4
Composite Key	Unique Key	Foreign Key	Alternate Key	option 3
3	5	4	2	option 2

Partial functional dependencies	Transitive dependencies	Multi valued dependencies	All of the above	option 4
Entity integrity	Referential Integrity	Domain integrity	None of the above	option 2
Entity integrity	Referential Integrity	Domain integrity	None of the above	option 1
Entity integrity	Referential Integrity	Domain integrity	None of the above	option 3
Data manager	Buffer manager	Precompiler	Bind	option 3
System service.	Locking service	Database service	Distributed data facility	option 2
System services	Database services	Buffer manager	Data manager	option 1 & option 2
Tablespace	Database services	Records	Storage Group	option 4
Database services	Locking service	System services	Distributed data facility	option 3
Locking service	Database services	System services	Distributed data facility	option 2
Runtime supervisor	Database manager	Buffer manager	IRLM	option 4
IMS Resource Lock Manager	Inter Resource Location Manager	Inter resource Locking Manager	None of the above	option 1
Runtime supervisor	Buffer Manager	File manager	Data manager	option 1
Runtime supervisor	Data manager	File manager	Buffer Manager	option 2
DiskManager	Buffer manager	File manager	Runtime supervisor	option 2
accessible by SQL statements	accessible by application program	not accessible by SQL statements	None of the above	option 1

accessible by SQL statements	not accessible by SQL statements	used for internal purpose only	None of the above	option 1 & option 3
STOGROUP, DATABASE, TABLESPACES	RECORDS, STOGROUP, DATABASE	STOGROUP, RECORDS, TABLESPACES	None of the above	option 1
STOGROUP	Index	Tables	Entities	option 3
STOGROUP, TABLESPACES	VIEW, TABLESPACES	BUFFERPOOL, TABLESPACES	STOGROUP, BUFFERPOOL	option 4
only one disk space	More than one disk space but disk spaces should be in same STOGROUP	More than one disk space and disk spaces need not be in same STOGROUP	None of the above	option 3
Indexspace	Dataspace	Tablespace	None of the above	option 3
Multiple	Segmented	Simple	Partitioned	option 1
1 table only	2 table only	More than 1 table	None of the above	option 3
Decreases the Concurrency	Increases the Concurrency	Increases Redundancy	Decreases redundancy	option 1
Rows from only 1 table	Rows from only 2 tables	Rows from many tables	None of the above	option 1
Decreases the Concurrency	Increases Redundancy	Increases the Concurrency	Decreases redundancy	option 3
Small tables	Very large tables	More than 1 table	None of the above	option 2

PAGE	TABLESPACE	ANY	All of the above	option 4
LOCKSIZE	PCTFREE	ERASE	INDEX	option 4
Records	Active set	View	None of the above	option 3
Record	Page	Byte	None of the above	option 2
It is an MVS- and VM- based query tool	Used for developers to check SQL statements or view table details	It allows end users to enter SQL queries to produce a variety of reports and graphs as a result of this query	It supports the online execution of SQL statements from a TSO terminal	option 1 & option 3
Embedded SQL	SPUFI	Query Manager	All of the above	option 2
DDL	DCL	DML	All of the above	option 2 & option 4
GRANT	ALTER	REVOKE	CREATE	4
REVOKE	UPDATE	DROP	DELETE	option 1
CREATE	GRANT	DELETE	DROP	option 3
DCL	DDL	DML	None of the above	option 2
Primary key	Foreign key	Primary and Foreign key	None of the above	option 3
can change the width of a column	can change datatype of the column	cannot change the width of a column	cannot change datatype of the column	option 3 & option 4
Privilege & Revoke	Grant & Revoke	Grant & Drop	None of the above	option 2
INSERT fails	Zero is inserted	Space is inserted	None of the above	option 1
Foreign Key	Alternate Key	Primary Key	Option 1 & 3	option 2 & option 3
Foreign Key	Alternate Key	Primary Key	Option 1 & 2	option 1
BETWEEN	IS NULL	IN	All of the above	option 4
> 150 & < 200	>=150 & <=200	>150 & <=200	>=150 & <200	option 2

150 & 200	in the range 150 to 200	in the range 151 to 199	None of the above	option 3 & option 4
-	*	%	_	4
NULL values only	NULL & SPACES	NULL & ZERO	All of the above	option 1
Aggregate	Scalar	Arithmetic	All of the above	option 4
AVG	DECIMAL	HEX	TIMESTAMP	option 1
COUNT	LENGTH	SUM	MIN	option 2
NO DUPLICATES	UNIQUE	DISTINCT	None of the above	option 3
ORDER BY	GROUP BY	SORT BY	ARRANGE BY	option 1
Only Column name can be specified along with ORDER BY	Only Column number in the Select column list can be specified along with ORDER BY	Default sorting is Descending	None of the above	option 4
ORDER BY	GROUP BY	SEGREGATE BY	ARRANGE BY	option 2
WHERE clause	WITH clause	HAVING clause	None of the above	option 3
WHERE is used on a column as well as aggregated data	HAVING is used on aggregated data	GROUP BY cannot appear without HAVING clause	GROUP BY cannot appear without WHERE clause	option 2

GROUP BY cannot be used if there is no aggregate function in Select list	GROUP BY cannot be used if the column on which grouping is done, is not in Select list	No other Table column apart from Grouping column can appear in the Select list	All of the above	option 4
Having is used on aggregate data and Where is used on column	Having is used on column and Where is used on aggregate d data	can be used interchang eably	None of the above	option 1
Inner Join	Outer join	Right Outer Join	All of the above	option 2
Left outer join	Right Outer Join	Inner Join	Full Outer join	option 1
Left outer join	Right Outer Join	Inner Join	Full Outer join	option 2
Left outer join	Right Outer Join	Inner Join	Full Outer join	option 3
Equality operators	Non-equality operators	Comparati ve operators	None of the above	option 4
Non-correlated subquery	Correlated subquery	Option 1 & 2	None of the above	option 1
Non-correlated subquery	Correlated subquery	Option 1 & 2	None of the above	option 2
there is a need to check only the existence of matching criteria	Column value returned by nested query do not matter	Option 1 & 2	None of the above	option 3

The two result set should contain same no. columns	Each column of the first result set must be either same data type as correspon ding column in the second or convertible	It retrieves distinct record	All of the above	option 4
AND	OR	NOT	None of the above	option 2
UNION	JOIN	UNION ALL	All of the above	option 4
UNION	UNION ALL	JOIN	None of the above	option 1
CLUSTER	ERASE	FREEPAG E	All of the above	option 4
SYNONY M	ALIAS	VIEWS	None of the above	option 1
SYNONY M	ALIAS	VIEWS	None of the above	option 2
Access Path is not determine d before execution	Hard coded in the application program	Statement s can change throughout the program execution	Option 1 & 3	option 4
Columns in Table	Defined in SQL statement s	Working Storage variable	None of the above	option 3
-	:	^	%	option 2
DCLGEN	QMF	SPUFI	Platinum	option 1
INTO clause of SELECT	in the Column list of SELECT	in the WHERE clause of SELECT	Option 1&3	option 4
input of SET clause of UPDATE	input of VALUES clause of INSERT	INTO clause of FETCH	All of the above	option 4
Single table	Multiple table	Single view	Multiple View	option 1

Host structure	Host variable	SQL DECLARE TABLE' statement	All of the above	option 4
COPY statement	INCLUDE statement	ADD Statement	None of the above	option 2
DB2 Communication area	Contains Host variables	Executable SQL	None of the above	option 1
after the execution of program	after each SQL statement execution	after each update statement execution	after each insert statement execution	option 2
Successful execution with warning	Execution was not successful	Successful execution	Data not found	option 3
Successful execution with warning	Execution was not successful	Successful execution	Data not found	option 4
Successful execution with warning	Execution was not successful	Successful execution	Data not found	option 1
Successful execution with warning	Execution was not successful	Successful execution	Data not found	option 2
SQLWARN	SQLCODE	SQLERRM	All of the above	option 4
Checking null values	Checking successful completion of SQL statement	Checking how many records updated	Checking how many records deleted	option 1
Numeric variable	Alphanumeric variable	COMP variable	Signed numeric variable	option 3

Valid value is retrieved	Null value is retrieved	Spaces are retrieved	Zero is retrieved	option 2
-305	-811	-805	-818	option 1
Row level processing	Set level processing	Column level processing	None of the above	option 2
DECLARE	DEFINE	OPEN	ASSIGN	option 1
Procedure division	Input-Output section	Working Storage Section	File section	option 3
Input-Output section	Working Storage Section	File section	Procedure division	option 4
Get	Fetch	Retrieve	Select	option 2
Close	Release	Deallocate	Free	option 1
Where current of	Set	For update of	None of the above	option 3
ORDER BY	UNION	JOIN	All of the above	option 4
Rollback	Commit	Update	None of the above	option 2
Linking Step	Compilation step	Precompilation step	Binding step	option 3
Precompilation step	Compilation step	Binding step	Linking Step	option 1
-913	-805	-818	-811	option 3
Object module	Modified source code	DBRM	None of the above	option 2
Application Plan	Load module	Object module	None of the above	option 1
Checks correctness of table & Column definitions and SQL syntax	Performs authorization validation	Creates application Plan	All of the above	option 4

Access Path	Reference to Physical location of Package	Reference to DBRM	None of the above	option 2
Executable by itself	Can be executed if it contains only one version of DBRM	Has to be bound to a Plan before execution	None of the above	option 3
Increases Bind time	Versioning is possible	Remote data access is not possible	None of the above	option 2
Mode of Page locking	Mode of creating the application Plan	How to use the DB2 resource	How the rows should be retrieved	option 1
Cursor Stability	Repeatable Read	Read Stability	All of the above	option 4
Repeatable Read	Read Stability	Cursor Stability	Uncommitted Read	option 3
Read Stability	Repeatable Read	Cursor Stability	Uncommitted Read	option 2
Read Stability	Repeatable Read	Cursor Stability	Uncommitted Read	option 1
ACQUIRE AND RELEASE parameters	ACQUIRE AND VALIDATE parameters	ACTION	None of the above	option 1
USE & DEALLOCATE	ALLOCATE & COMMIT	USE & COMMIT	ALLOCATE & DEALLOCATE	option 3
Existence of the table	Validity of table	DB2 access authorization	All of the above	option 4
FLAG	AUTHID	DEGREE	ACTION	option 2
Plan & Object module	Plan & Load module	DBRM & Load module	Only load module	option 2
CHECK	RECOVER	LOAD	All of the above	option 4

VALIDATE	RUNSTATS	CHECK	EXPLAIN	option 3
Referential integrity between two tables	Consistency of DB2 indexes	Delete invalid rows and copies them to exception table	All of the above	option 4
COPY	LOAD	REORG	RECOVER	option 1
SYSIBM.SYSPROCEDURES	SYSIBM.SYSCOPY	SYSIBM.SYSROUTINES	SYSIBM.SYSUTILITIES	option 2
RESTORE	REORG	RECOVER	LOAD	option 3
COPY	LOAD	INSERT	None of the above	option 2
The table space must restored first using RECOVER utility	The table space needs to be reorganized	LOAD utility automatically takes care of Restoration of table space	All of the above	option 1
REORG	RUNSTATS	RECOVER	None of the above	option 2
RUNSTATS	REORG	EXPLAIN	CHECK	option 3
SYSPROCEDURES	PLAN_TABLE	SYSTABLES	SYSPLAN	option 2
Type of access of particular tables	Order in which tables are joined	Whether SORT is required	All of the above	option 4
Runtime supervisor	Database manager	IRLM	Buffer manager	option 3
43	35	48	38	option 1

optimizes the SQL code	determines most efficient way to access data	estimates the cost of physically retrieving and writing the data	None of the above	option 2 & option 3
CPU cost	I/O cost	Db2 catalog statistics	All of the above	option 4
Runtime supervisor	Database manager	Db2 catalog	IRLM	option 3

Target Audience : ELT
Session : End of Module

Topics	Knowledge							Comprehension								Ea
	Easy		Average		Difficult			Easy		Average		Difficult			Ea
	Marks	Qs	Marks	Qs	Marks	Qs		Marks	Qs	Marks	Qs	Marks	Qs	Marks	
T1	0		1	1	2	1		0		2	1	3	1	0	
T2	0		1	1				0		2	1	3	1	0	
T3	0		1	1	2	1		0		0		3	1	0	
Total	7(5)							13(5)							

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Application						Application						Application			
sy	Average		Difficult		Easy		Average		Difficult		Easy		Average		
Qs	Marks	Qs	Marks	Qs	Marks	Qs	Marks	Qs	Marks	Qs	Marks	Qs	Marks	Qs	
	3	1	3	1	0		0		0		0		0		
	3	1	3	1	0		3	1	0		0		3	1	
	3	1	3	1	0		0		3	1	0		3	1	
18(6)					6(2)						6(2)				

		Total Marks
Difficult		
Marks	Qs	
0		
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		50(20)