CICS Interview Questions And Answers Guide.

Global Guideline.

http://www.globalguideline.com/
CICS Interview Questions And Answers

CICS Job Interview Preparation Guide.

Question # 1
What is CICS?

Answer:-
CICS (Customer Information Control System) is a transaction server that runs primarily on IBM mainframe systems under z/OS and z/VSE. CICS is a transaction manager designed for rapid, high-volume online processing. This processing is mostly interactive (screen-oriented), but background transactions are possible.

While CICS has its highest profile among financial institutions such as banks and insurance companies, over 90 percent of Fortune 500 companies are reported to rely on CICS (running on z/OS) for their core business functions, beside many governments. CICS is used in bank-teller applications, ATM systems, industrial production control systems, insurance applications and many other types of interactive application.

Recent CICS Transaction Server enhancements include support for Web services and Enterprise Java Beans (EJBs). IBM began shipping the latest release, CICS Transaction Server - Version 3.2, in June of 2007.

Question # 2
Kindly specify the PIC clause for the following:
Any BLL Cell, Data type of Length Option field, HHMMSS type of data fields?

Answer:-
Any BLL Cell -S9(8) COMP
Data type of length Option field - S9(4) COMP
HHMMSS type of data fields - S9(7) COMP 3

Question # 3
List the sequence of steps used to achieve Modification in Skip Sequential Mode?

Answer:-
List the sequence of steps used to achieve “Modification in Skip Sequential Mode”.
I. READNEXT command
II. Issue the ENDBR command
II. Issue the READ command with UDATE option.
IV. Manipulate the record (DELETE or REWRITE command)
V. Issue START command
VI. Issuse two READNEXT commands (One for dummy skip)
VII. Go to step two.

Question # 4
What are the commands used to gain exclusive control over a resource?

Answer:-
What are the commands used to gain exclusive control over a resource (for Ex a Temporary storage queue)?
EXEC CICS ENQ EXEC CICS DEQ
RESOURCE(QID) RESOURCE(QID)
END-EXEC

Question # 5
Mention the 5 fields available in the symbolic map for every NAMED field in the DFHMDI macro? Give a brief description of these fields (Not exceeding a line).

Answer:-

Copyright © http://www.GlobalGuideline.COM
Question # 6
How do you initiate another transaction?

Answer:-
The transaction initiated should be in a position to retrieve information pertaining to which transaction has initiated it and from which terminal. (Code the required CICS commands)

EXEC CICS START
  INTERVAL(hhmmss)/TIME(hhmmss)
  TRANSID('TRAN')
  TERMID('TRM1')
  FROM(data-area)
  LENGTH(data-value)
  RTRANSID(EIBTRNID)
  RTERMID(EIBTRMID)
  END-EXEC

EXEC CICS RETRIEVE
  INTO(data-area)
  LENGTH(data-value)
  RTRANSID(data-name)
  RTERMID(data-name)
  END-EXEC

Read More Answers.

Question # 7
What is the CICS command used to access current date and time?

Answer:-
ASKTIME.

Read More Answers.

Question # 8
How do you terminate an already issued DELAY command?

Answer:-
EXEC CICS CANCEL
  REQID(id)
  END-EXEC

Read More Answers.

Question # 9
Which option of the PCT entry is used to specify the PF key to be pressed for initiating a transaction?

Answer:-
TASKREQ=PF1

Read More Answers.

Question # 10
Mention the option used in the CICS READ command to gain accessibility directly to the file I/O area. (Assume COBOL-II)?

Answer:-
SET(ADDRESS OF LINKAGE-AREA).

Read More Answers.

Question # 11
How do you establish a starting position in a browse operation?

Answer:-
EXEC CICS STARTBR ---- END-EXEC.

Read More Answers.

Question # 12
What is the CICS command that gives the length of TWA area?

Answer:-
EXEC CICS ASSIGN
  TWALENG(data-value)
END-EXEC.

Read More Answers.

Question # 13
How do you set the MDT option to ON status, even if data is not entered?

Answer:-
Mention FSET option in DFHMDF or set it dynamically in the program using FIELD+A attribute field.

Read More Answers.

Question # 14
How do you dynamically set the CURSOR position to a specific field?

Answer:-
MOVE-1 to FIELD + L field. Mention CURSOR option in the SEND command.

Read More Answers.

Question # 15
Specify the CICS command used to read a VSAM record starting with prefix F. Code all the relevant options?

Answer:-
EXEC CICS READ
DATASET('FILENAME')
INTO(data-area)
RIDFILD(data-area)
KEYLENGTH(1)
GENERIC
LENGTH(WK-LEN)
END-EXEC.

Read More Answers.

Question # 16
Which command is used to release a record on which exclusive control is gained?

Answer:-
EXEC CICS UNLOCK END-EXEC.

Read More Answers.

Question # 17
What is the option specified in the read operation to gain multiple concurrent operations on the same dataset?

Answer:-
REQID(value)

Read More Answers.

Question # 18
What are the attribute values of Skipper and Stopper fields?

Answer:-
ASKIP. PROT.

Read More Answers.

Question # 19
Specify CICS transaction initiation process. (From the perspective of CICS control programs and control tables.)?

Answer:-
TCP places data in TIOA and corresponding entry into TCT.
KCP acquires the transaction identifier from TIOA and verifies if it is present in PCT.
SCP acquires Storage in Task Control Area (TCA), in which KCP prepares control data for the task.
KCP then loads the application programs mentioned in PCT by looking for it in PPT.
If resident - real storage memory location is not present in the PPT the control is passed to PCP that loads the application program from the physical storage location address given in PPT. The control is then passed to the application program (LOAD module).

Read More Answers.

Question # 20
Specify the requirements for Automatic Task Initiation. (Mention the control table, it is entries and the corresponding Procedure division CICS command).?

Answer:-
DFHDCT TYPE = INTRA,
DESTIN = MSGS,
TRANSID = MSW1,
TRIGLEV = 1000

Copyright © http://www.GlobalGuideline.COM
Question # 21
What is the EIB parameter and the CICS command used to implement Pseudo-Conversational technique using single PCT - Single PPT entry?

Answer:-
EIBCALEN - To check if COMMAREA has been passed in return command.
EXEC CICS RETURN
TRANSID(data-name)
COMMAREA(data-area)
LENGTH(data-value)
END-EXEC

Question # 22
What are the two ways of breaking a CPU bound process to allow other tasks to gain access to CPU?

Answer:-
EXEC CICS DELAY EXEC CICS DELAY
INTERVAL(hhmmss) TIME(hhmmss)
END-EXEC END-EXEC

Question # 23
Mention the option (along with argument type) used in a CICS command to retrieve the response code after execution of the command?

Answer:-
RESP(S9(8) COM.)

Question # 24
Into what fields will the date and time values be moved after execution of the above command?

Answer:-
EIBDATE and EIBTIME.

Question # 25
What are the six different type of argument values in COBOL that can be placed in various options of a CICS command?

Answer:-
. Data Value - EX (Literal 8 or 77 KEYLEN PIC S9(4) COMP VALUE).
. Data Area - EX (01 RECORD-AREA, 05 FIELD PIC X(S).)
. Pointer-REF -EX (05 POINTER-I PIC S9(8) COMP.). Name -EX (05 FIELD-NAME PIC X(S) VALUE 'FILEA').
. Label - Cobol paragraph name
. HHMMSS - EX (77 TIMEVAL PIC S9(7) COMP3.)

Question # 26
What is the purpose of the Program List Table?

Answer:-
The Program List Table records the set of application programs that will be executed automatically at CICS start-up time

Question # 27
What is the function of the CICS translator?

Answer:-
The CICS translator convert the EXEC CICS commands into call statements for a specific programming language. There are CICS translator for Assembler, COBOL, and PL/I.

Question # 28
What does Pseudo Conversational mean?

Answer:-
The programming technique in which the task will not wait for the end-user replies on the terminal. Terminating the task every time the application needs a response from the user and specifying the next transaction to be started when the end user press any attention key (Enter, PF1 trough PF24, PF25, PA1, PA2 and clear) is pseudo-conversational processing.

**Question # 29**

Code the related portions of CICS/COBOL-I programs to gain addressability to TWA area assigned to a particular task. Assume that the size of TWA area is 300 bytes. What are the advantages if COBOL-II is used in the place of COBOL?

**Answer:**

Code the above requirement in COBOL-II.

AN: LINKAGE SECTION.
01 PARMLIST.
  02 FILLER PIC S9(8) COMP.
  02 TWA-PTR S(98) COMP.
01 TWA-DATA-LAYOUT.
  02 DATA-AREA PIC x(300)
PROCEDURE DIVISION.
  ..... EXEC CICS ADDRESS TWA(TWA-PTR)
  END-EXEC
  SERVISE RELOAD TWA-DATA-LAYOUT.

COBOL-II PROGRAM
LINKAGE SECTION
01 TWA-DATA-LAYOUT.
  05 DATA-AREA PIC X(300).
PROCEDURE ADDRESS
  ..... EXEC CICS ADDRESS
  TWA(ADDRESS OF TWA-DATA-LAYOUT)
  END EXEC

**Question # 30**

How and where is the TWA size set?

**Answer:**

TWASIZE=300 in PCT table.

**Question # 31**

What is the most common way of building queue-id of a TSQ?

**Answer:**

(Name the constituents of the Queue ID).
TERMID+TRANSACTION-ID.

**Question # 32**

What option is specified in the SEND command to send only the unnamed fields on to the screen?

**Answer:**

MAPONLY

**Question # 33**

What is the COMMAREA (communications area)?

**Answer:**

This is the area of main storage designed to let programs or task communicate with one another. used in programs via RETURN, XCTL and LINK commands.

**Question # 34**

How many conditions can you include in a single HANDLE CONDITION command?

**Answer:**

No more than 16 in a single handle condition. If you need more, then you must code another HANDLE CONDITION command.
Question # 35
Explain how to handle exceptional conditions in CICS?

Answer:-
An abnormal situation during execution of a CICS command is called an exceptional condition:
1. Handle Condition Command: It is used to transfer control to the procedure label specified if the exceptional condition specified occurs.
2. Ignore Condition Command: It causes no action to be taken if the condition specified occurs in the program. That is control will be returned to the next instruction following the command which encountered the exceptional condition.
3. No Handle Option: This option can be specified in any CICS command and it will cause no action to be taken for any exceptional condition occurring during execution of this command.
4. RESP Option: This option can be specified in any CICS command. If the RESP option is specified in a command, CICS places a response code at a completion of the command. The application program can check this code, then proceed to the next processing.

Question # 36
What information can be obtained from the EIBRCODE?

Answer:-
The EIBRCODE tells the application program if the last CICS command was executed successfully and, if not, why not.

Question # 37
What is EIB, How is can be used?

Answer:-
CICS automatically provides some system-related information to each task in a form of EXEC interface BLOCK (EIB), which is unique to the CICS command level. We can use all the fields of EIB in our application programs right away.

Question # 38
What CICS command do you need to obtain the user logon-id?

Answer:-
You must code EXEC CICS ASSIGN with the OPENID option.

Question # 39
What are the differences between and EXEC CICS XCTL and an EXEC CICS LINK command?

Answer:-
The XCTL command transfers control to an application program at the same logical level (do not expect to control back), while the LINK command passes control to an application program at the next logical level and expects control back.

Question # 40
How is addressability achieved to the data outside programs working storage?

Answer:-
The Base Locator for Linkage (BLL) is an addressing convention used to address storage outside the Working Storage Section of an application program. If BLL is used for the input commands (e.g.: READ, RECEIVE), it will improve the performance, since the program would be accessing directly the input buffer outside of the program. In order to work as intended, the program must construct BLL based on the following conventions:
1. The parameter list must be defined to program the parameter list itself. From the second address pointer onward, there is a one-to-one correspondence between the address pointer of the parameter list and 01 level data definitions.
2. VS COBOL II provides CICS application programs with a significant improvements in the area of addressability through the specific ADDRESS register. Therefore, if an application program is written in VS COBOL II, the program is no longer requires building the B

Question # 41
Explain re-entrancy as applies to CICS?

Answer:-
Reentrant program is a program which does not modify itself so that it can reenter to itself and continue processing after an interruption by the operating system which, during the interruption, executes other OS task including OS tasks of the same program. It is also called a "reenterable" program or "serially reusable" program. A quasi-reentrant program is a reentrant program under the CICS environment. That is, the quasi-reentrant program is a CICS program which does not modify itself. That way it can reenter to itself and continue processing after an interruption. During the interruption, executes other tasks including CICS tasks of the same program. In order to maintain the quasi-reentrancy, a CICS application program must follow the follow conventions:
- Constants in Working Storage: The quasi-reentrant program defines only constants in its ordinary data area (e.g. working Storage Section). These constants will never be modified and shared by the tasks.
- Variable in Dynamic Working Storage: The quasi-reentrant program acquires a unique storage area (called Dynamic Working Storage - DWS) dynamically for each
task by issuing the CICS macro equivalent GETMAIN. All variables will be placed in this DWS for each task. All counter would have to be initialized after the DWS has been acquired.

**Question # 42**

What happens when a CICS command contains the NOHANDLE option?

**Answer:-**

No action is going to be taken for any exceptional conditional occurring during the execution of this command. The abnormal condition that occurred will be ignored even if an EXEC CICS HANDLE condition exist. It has the same effect as the EXEC CICS IGNORE condition except that it will not cancel the previous HANDLE CONDITION for any other command.

**Question # 43**

What is the EXEC CICS HANDLE ABEND?

**Answer:-**

It allows the establishing of an exit so cleanup processing can be done in the event of abnormal task termination.

**Question # 44**

Explain the various ways data can be passed between CICS programs?

**Answer:-**

Data can be passed between CICS programs in three ways: COMMAREA, TRANSIENT DATA QUEUE & TEMPORARY STORAGE QUEUE. Data can be passed to a called program using the COMMAREA option of the LINK or XCTL command in a calling program. The called program may alter the data content of COMMAREA and the changes will be available to the calling program after the RETURN command is issued in the called program. This implies that the called program does not have to specify the COMMAREA option in the RETURN command.

If the COMMAREA is used in the calling program, the area must be defined in the Working Storage Section of the program (calling), whereas, in the called program, the area must be defined as the first area in the Linkage Section using reserved name DFHCOMMAREA.

**Question # 45**

What are the CICS commands available for program control?

**Answer:-**

The following commands are available for the Program Control services:

1. **LINK**: To pass control to another program at the lower level, excepting to be returned.
2. **XCTL**: To pass control to another program at the same level, not expecting to be returned.
3. **RETURN**: To return to the next higher-level program or CICS.
4. **LOAD**: To load a program
5. **RELEASE**: To release a program.

**Question # 46**

When a task suspends all the handle conditions via the PUSH command, how does the task reactivate all the handle conditions?

**Answer:-**

By coding an EXEC CICS POP HANDLE command

**Question # 47**

What is the difference between EXEC CICS HANDLE CONDITION and an EXEC CICS IGNORE command?

**Answer:-**

HANDLE CONDITION command creates a "go-to" environment. An IGNORE command does not create a go-to environment: instead, it gives control back to the next sequential instruction following the command causing the condition. They are opposites.

**Question # 48**

What is the function of the EXEC CICS HANDLE CONDITION command?

**Answer:-**

To specify the paragraph or program label to which control is to be passed if the "handle condition" occurs.

**Question # 49**

What is the effect of including the TRANSID in the EXEC CICS RETURN command?

**Answer:-**

The next time the end user presses an attention key, CICS will start the transaction specified in the TRANSID option.
Question # 50
What is some of the information available in the EIB area?

Answer:-
I. The cursor position in the map
II. Transaction ID
III. Terminal ID
IV. Task Number
V. Length of communication area
VI. Current date and time
VII. Attention identifier

Question # 51
What is a resident program?

Answer:-
A program pr map loaded into the CICS nucleus so that is kept permanently in main storage and not deleted when CICS goes "Short on Storage."

Question # 52
What happens to resources supplied to a transaction when an XCTL command is executed?

Answer:-
With an XCTL, the working storage and the procedure division of the program issuing the XCTL are released. The I/O areas, the GETMAIN areas, and the chained Linkage Section areas (Commarea from a higher level) remain. All existing locks and queues also remain in effect. With a LINK, however, program storage is also saved, since the transaction expects to return and use it again.

Question # 53
What are the differences between and EXEC CICS XCTL and EXEC CICS START command?

Answer:-
The XCTL command transfer control to another application (having the same Transaction ID), while the START command initiates a new transaction ID (therefore a new task number). The XCTL continues task on the same terminal. START can initiate a task on another terminal.

Question # 54
How can you start a CICS transaction other than by keying the Transaction ID at the terminal?

Answer:-
1. By coding the trans id and a trigger level on the DCT table
2. By coding the trans id in the EXEC CICS RETURN command
3. By associating an attention key with the Program Control Table
4. By embedding the TRANSID in the first four positions of a screen to the terminal.
5. By using the Program List Table.

Question # 55
Explain the means of supporting pseudo conversation programming. (Eg. Storing and restoring of states, control flow, error handling)?

Answer:-
When we send a map using SEND MAP command, Immediately we release the program by using EXEC CICS RETURN command. In this command we also specify the data that should be stored in COMMUNICATION AREA for later use. When this command is executed the corresponding program is released from the memory. After receiving the response from the terminal the program is again loaded and this time the data which we stored in communication area will be copied into the working storage section. And the map will be received with RECEIVE MAP command. The variable EIBCALEN in EIB holds the length of communication area. In procedure division we checks the value of EIBCALEN if it is zero, we first send the map followed by RETURN command. Otherwise, that is if EIBCALEN is not zero, we know that this transaction is not running first time and we receive the map by using RECEIVE MAP command.

Question # 56
Which transient data queue support ATI?

Answer:-
INTRA-PARTITION Data queue.

Question # 57
Into which table is the terminal id registered?

**Answer:**
TCT.

[Read More Answers](#)

**Question # 58**
Which CICS service transaction is used to gain accessibility to CICS control tables? Mention the one that has the highest priority.?

**Answer:**
CEDA

[Read More Answers](#)

**Question # 59**
What is the function of the Terminal Control table?

**Answer:**
To register all CICS terminals

[Read More Answers](#)

**Question # 60**
What does the following transactions do?

**Answer:**
CEDF: CICS-supplied Execution Diagnostic Facility transaction. It provides interactive program execution and debugging functions of a CICS programs.
CEMT: CICS-supplied Extended Master Terminal transaction. It displays or manipulates CICS control environment interactively.
CEBR: CICS-supplied Temporary Storage Browse transaction. It displays the content of Temporary Storage Queue (TSQ).
CECI: CICS-supplied Command Interpreter transaction. It verifies the syntax of a CICS command and executes the command.

[Read More Answers](#)

**Question # 61**
What are the differences between Temporary Storage Queue (TSQ) and Transient Data Queue (TDQ)?

**Answer:**
Temporary Storage Queue names are dynamically defined in the application program, while TDQs must first be defined in the DCT (Destination Control Table). When a TDQ contains certain amount of records (Trigger level), A CICS transaction can be started automatically. This does not happen when using a TSQ. TDQ (extra partition) may be used by batch application; TSQ cannot be accessed in batch. The Transient Data Queue is actually a QSAM file. You may update an existing item in a TSQ. A record in a TDQ cannot be updated. Records in TSQ can be read randomly. The TDQ can be read only sequentially. Records in Temporary Storage can be read more than once, while records stored in Temporary Data Queues cannot. With TDQs it is "one read" only.

[Read More Answers](#)

**Question # 62**
Why is a TERM ID recommended in naming a TSQ?

**Answer:**
In order to avoid confusion and to maintain data security, a strict naming convention for QID will be required in the installation. Moreover, for a terminal-dependent task (e.g. pseudo-conversation task), the terminal id should be included in QID in order to ensure the uniqueness of TSQ to the task.

[Read More Answers](#)

**Question # 63**
What is a mapset?

**Answer:**
A mapset is a collection of BMS maps link-edited together.

[Read More Answers](#)

**Question # 64**
What are the three ways available for a program to position the cursor on the screen?

**Answer:**
I. Static positioning. Code the insert cursor (IC) in the DFHMDF BMS macro.
II. Relative positioning. Code the CURSOR option with a value relative to zero (position 1.1 is zero)
III. Symbolic positioning. Move high values or -1 the field length in the symbolic map (and code CURSOR on SEND command ).

[Read More Answers](#)

**Question # 65**
How to establish dynamic cursor position on a map? How to get the cursor position when we receive a map?

**Answer:**
We dynamically position a cursor through an application program using a symbolic name of the symbolic map by placing -1 into the field length (i.e., fieldname + L) of the field where you wish to place the cursor. The SEND MAP command to be issued must have the CURSOR option (without value). Also, the mapset must be coded with MODE = INOUT in the DFHMSD macro. We get the cursor position when we receive a map by checking EIBCPOSN, which is a halfword ( S9(4)
COMP) binary field in EIB, and contains offset position (relatively to zero) of the cursor on the screen.

**Question # 66**
Can we define an alternate index on VSAM/RRDS?

**Answer:-**
No

**Question # 67**
Name three ways the Modified Data Tag can be set on?

**Answer:-**
The Modified Data Tag can be set on:
1. When the user enters data into the field.
2. When the application program moves DFHBMFSE to the attribute character.
3. By defining it in the BMS macro definition.

**Question # 68**
What is MDT?

**Answer:-**
MDT (Modified Data Tag) is one bit of the attribute character. If it is off (0), it indicates that this field has not been modified by the terminal operator. If it is on (1), it indicates that field has been modified by the operator. Only when MDT is on, will the data of the field be sent by the terminal hardware to the host computer (i.e. to the application program in end). An effective use of MDT drastically reduces the amount of data traffic in the communication line, thereby improving performance significantly. Therefore, BMS maps and CICS application program should be developed based on careful considerations for MDT.

**Question # 69**
What is the difference between using the READ command with INTO option and SET option?

**Answer:-**
When we use INTO option with the READ command the data content of the record will be moved into the specified field defined in the Working Storage Section of the program. When we use SET option with the READ command, CICS sets the address pointer to the address of the record in the file input / output area within CICS, so the application program can directly refer to the record without moving the record content into the Working Storage area defined in the program. Therefore, the SET option provides a better performance than the INTO option.

**Question # 70**
What is the difference between the INTO and the SET option in the EXEC CICS RECEIVE MAP command?

**Answer:-**
The INTO option moves the information in the TIOA into the reserved specified area, while the SET option simple returns the address of the TIOA to the specified BLL cell or "address-of" a linkage-section.

**Question # 71**
What does it mean when EIBCALEN is equal to zeros?

**Answer:-**
When the length of the communication area (EIBCALEN) is equal to zeros, it means that no data was passed to the application.

**Question # 72**
Explain floating maps with illustration?

**Answer:-**
Maps which can position themselves relative to the previous maps on the screen or page are known as the floating maps. For this you have to use special positional operands to LINE and COLUMN parameters of the BMS macro definition. They are SAME, NEXT. Actually this floating map concept is there only in Full BMS where as it is not available in Min. or Standard BMS macros. RECEIVE MAP is not recommended in the case of floating maps. Hence these maps are normally used to send information such as selected records from a database to screen but not for data entry. A mapset can contain more than one map in it, you may use all these maps to build a screen. In that case there are two ways to send these maps on to the screen.

i) Use separate SEND MAP commands one for each map involved, or

ii) Use ACCUM operand along with SEND MAP command and while sending really on to the screen use SEND PAGE to display them at one shot. The second one is called cumulative mapping scheme where you also can use floating maps.

Let's take a situation where you have to build a screen like this

HEADER MAP (no. of A gr. employs)
DETAIL MAP (employee list)
TRAILER MAP

Read More Answers.
Question # 73
What is the differences between getting the system time with EIBTIME and ASKTIME command?

Answer:-
The ASKTIME command is used to request the current date and time. Whereas, the EIBTIME field have the value at the task initiation time.

Read More Answers.

Question # 74
Explain the basic difference between Intra partition TDQ and Extra partition TDQ?

Answer:-
INTRA PARTITION TD QUEUEs. It is a group of sequential records which are produced by the same and / or different transaction within a CICS region. These Qs are stored in only one physical file (VSAM) in a CICS region, which is prepared by the system programmer. Once a record is read from a queue, the record will be logically removed from the queue; that is the record cannot be read again. EXTRA PARTITION TD QUEUEs It is a group of sequential record which interface between the transaction s of the CICS region and the systems outside of CICS region. Each of there TDQs is a separate physical file, and it may be on the disk, tape, printer or plotter.

Read More Answers.

Question # 75
What is the function of DFHMDF BMS macro?

Answer:-
The DFHMDF macro defines fields, literal, and characteristics of a field.

Read More Answers.

Question # 76
Which CICS system program is responsible for handling automatic task initialization?

Answer:-
The Transient Data Program (TDP).

Read More Answers.

Question # 77
How can the fact that EIBCALEN is equal to zeros be of use to an application programmer?

Answer:-
When working in a pseudo-conversational mode, EIBCALEN can be checked if it is equal to zero. A programmer can use this condition as a way of determining first time usage (of the program).

Read More Answers.

Question # 78
How can you prevent more than one user from accessing the same Transient Data Queue?

Answer:-
By issuing an EXEC CICS ENQ against the resource. When processing is completed, a DEQ should be executed.

Read More Answers.

Question # 79
Explain the term Transaction routing?

Answer:-
Transaction routing is a CICS mode of intercommunication which allows a terminal connected to local CICS to execute another transaction owned by a remote CICS.

Read More Answers.

Question # 80
What is ENQ in CICS?

Answer:-
If any one want to restrict Trans-ID to single user, enter trans-id with ENQ. It won't allow any one else to use the same trans-id.

Read More Answers.

Question # 81
What is a deadlock?

Answer:-
Deadlock (also known as a "deadly embrace") occurs when a task is waiting for a resource held by another task which, in turn, is waiting for a resources held by the first task.

Read More Answers.

Question # 82
In which CICS table would you specify the length of the TASK WORK AREA (TWA)?

**Answer:**
In the Program Control Table (PCT).

**Question # 83**
Which CICS command must be issued by the application program in order to gain access to the Common Work Area (CWA)?

**Answer:**
EXEC CICS ADDRESS with CWA option.

**Question # 84**
What information do you get when an EXEC CICS STARTCODE is issued?

**Answer:**
You will be able to determine if the application was started by
(1) a transient data trigger level (QD),
(2) a START command (S,SD),
(3) user (U) or terminal input (TD), or
(4) Distributed Program Link (D, DS).

**Question # 85**
How do you define Task Work Area?

**Answer:**
By defining it on the PCT (the Program Control Table)

**Question # 86**
The DFHCOMMARA is used to pass information from one application to another. What are some other ways that this function can be accomplished?

**Answer:**
You can also pass information in the following ways.
- By using a temporary storage queue.
- By using an intrapartition TDQ
- By using the Task Work Area
- By using TCTUA
- Through a file

**Question # 87**
When an application is invoked via the EXEC CICS START command with the from option, how does the application gain access to the common area?

**Answer:**
An EXEC CICS RETRIEVE command will access the common area.

**Question # 88**
In an on-line environment, how can you prevent more than one user from accessing the same Transient Data Queue at the same time?

**Answer:**
By issuing an EXEC CICS ENQ against the resource. When processing is completed, a DEQ should be executed.

**Question # 89**
Explain the term Function Request Shipping?

**Answer:**
Function request shipping is one of the CICS modes of intercommunication which allows an application program in a local CICS to access resources owned by a remote CICS.

**Question # 90**
Explain the term MRO (Multi Region Operation)?

**Answer:**
MRO is the mechanism by which different CICS address spaces with in the same CPU can communication and share resources.
Question # 91
What are different system tables used in CICS?

Answer:-
PCT, FCT, TCT, DCT, PPT

Read More Answers.

Question # 92
What is multitasking and multithreading?

Answer:-
multitasking is the feature supported by the operating system to execute more than one task simultaneously. Multithreading is the system environment where the tasks are sharing the same programs load module under the multitasking environment. It is a subset of multitasking since it concerns task which use the same program.

Read More Answers.

Question # 93
What is the difference between link Xctl?

Answer:-
Link is temporary transfer of control. Xctl is permanent transfer of control

Read More Answers.

Question # 94
Name some of the common tables in CICS and their usage?

Answer:-
PCT Program Control Table - defines each transaction containing a list of valid transaction identifiers (transid) where each transaction is paired with its matching program;
PPT Program Processing Table - contains a list of valid program names and maps and whether a current version is in the CICS region or needs to be brought in as a new copy;
FCT File Control Table - contains a list of files known to CICS, the dataset name and status (closed/open, enable/disabled;)
TCT Terminal Control Table - a list of the terminals known to CICS.

Read More Answers.

Question # 95
Name some common CICS service programs and explain their usage?

Answer:-
Terminal Control, File Control, Task Control, Storage Control, etc, Each CICS service program controls the usage and status for its resource (file, terminal, etc) within the CICS region.

Read More Answers.

Question # 96
What is meant by a CICS task?

Answer:-
A CICS task exist from the time the operator presses the enter key until the application program returns control to CICS.

Read More Answers.

Question # 97
What is meant by program reentrance?

Answer:-
A program is considered reentrant if more than one task can execute the code without interfering with the other tasks' execution.

Read More Answers.

Question # 98
What is the common systems area (CSA)?

Answer:-
The common systems area is the major CICS control block that contains system information, including pointers to most other CICS control blocks. The CSA points to all members of STATIC storage.

Read More Answers.

Question # 99
What is the EIB (execute interface block)?

Answer:-
The execute interface block lets the program communicate with the execute interface program, which processes CICS commands. It contains terminal id, time of day and response codes.

Read More Answers.
Question # 100
What is an MDT (Modified Data Tag)? Its meaning and use?

Answer:-
The modified data tag is the last bit in the attribute byte for each screen field. It indicates whether the corresponding field has been changed.

Read More Answers.

Question # 101
What is a transid and explain the system transid CEMT?

Answer:-
Transid is a transaction identifier, a four character code used to invoke a CICS task. CEMT is the master terminal transaction that lets you display and change the status of resources - it is the primary CICS service transaction.

Read More Answers.

Question # 102
What is the common work area (CWA)?

Answer:-
The common work area is a storage area that can be accessed by any task in a CICS system.

Read More Answers.

Question # 103
What is the COMAERA (communication area)?

Answer:-
An area used to transfer data between different programs or between subsequent executions of the same program. Needs to be defined in the LINKAGE Section.

Read More Answers.

Question # 104
What is the difference between pseudo-conversational and conversational?

Answer:-
pseudo-conversational will start a new task for each input. By coding a CICS RETURN command specifying TRANSID9ITSELF). Conversational will have an active task during the duration of the data entry.

Read More Answers.

Question # 105
What CICS command would you use to read a VSAM KSDS sequentially in ascending order?

Answer:-
First issue a STARTBR (start browse), which will position the browse at the desired record. Retrieve records by using subsequent READNEXT commands. Indicate the end of sequential processing with the ENDBR command. If the generic key is specified in the STARTBR command position in the file will be before the first record satisfying the generic key. For reading in descending order use the READPREV instead of READNEXT.

Read More Answers.

Question # 106
What is the difference between the XCTL and LINK commands?

Answer:-
The LINK command anticipates return of control to the calling program, the XCTL command does not. RETURN to the calling program will be the result of the CICS RETURN command, specifying TRANSID (name of the calling program)

Read More Answers.

Question # 107
What is DFHEIBLK?

Answer:-
DFHEIBLK is Execute Interface Block. It is placed in the linkage section automatically by CICS translator program.
It must be the first entry in linkage section. CICS places values prior to giving control to the program and we can find almost any information about our transaction.

Read More Answers.

Question # 108
What will be the length of the eibcalen, if the transaction is used to CICS first time?

Answer:-
The length will be 0 (zero).

Read More Answers.

Question # 109
What is the difference between a RETURN with TRANSID and XCTL? For example program A is issuing RETURN with TRANSID to program B. Program A is issuing XCTL to program B?

**Answer:**
In RETURN with TRANSID the control goes to the CICS region and the user has to transfer the control to program B by pressing any of the AID KEYS. In XCTL the control is directly transferred to program B.

**Question # 110**
How would you release control of the record in a READ for UPDATE?

**Answer:**
By issuing a REWRITE, DELETE, or UNLOCK command or by ending the task.

**Question # 111**
What CICS facilities can you use to save data between the transactions?

**Answer:**
COMMONAREA, TSQ and TDQ.

**Question # 112**
What is the difference between a physical BMS mapset and a logical BMS mapset?

**Answer:**
The physical mapset is a load module used to map the data to the screen at execution time. The symbolic map is the actual copybook member used in the program to reference the input and output fields on the screen.

**Question # 113**
What is Quasi-reentrancy?

**Answer:**
There are times when many users are concurrently using the same program, this is what we call Multi-Thread. For example, 50 users are using program A, CICS will provide 50 Working storage for that program but one Procedure Division. And this technique is known as quasi-reentrancy.

**Question # 114**
What are the 3 common ways to create maps?

**Answer:**
The first way is to code a physical map and then code a matching symbolic map in your COBOL program. The second way to create a physical map along with a matching symbolic map is to code only the physical map using the and SYSPARM option, CICS will automatically create a member in a COPY library. And the third way is to use a map generator such as SDF (Screen Definition Facility).

**Question # 115**
What is the difference between CICS Program Control Table (PCT) and CICS Processing Program Table (PPT)?

**Answer:**
PCT contains a list of valid transaction ID. Each transaction ID is paired with the name of the program, CICS will load and execute when the transaction is invoked. On the other hand, PPT indicates each program's location which pertains to a storage address if the program has already been loaded or a disk location if the program hasn't been loaded. PPT will also be used to determine whether it will load a new copy of the program when the transaction is invoked.

**Question # 116**
What is the difference between LINK and XCTL?

**Answer:**
The XCTL command passes control to another program, but the resources requested by the first program may still be allocated. A task does not end until a RETURN statement is executed. While in LINK command, program control resumes its instruction following the LINK parameter. The disadvantage of LINK is that it requires that both the calling program and the called program remain in main memory even though both are no longer needed.

**Question # 117**
What are different ways of initiating transaction in CICS?

**Answer:**
We can initiate CICS transaction
a) by giving transaction id
b) by giving CICS start command
c) automatic task initiation

Question # 118
What command do you issue to delete a record in a transient data queue?

Answer:-
READQ TD, the read is destructive.

Question # 119
How do you access the records randomly in TSQ?

Answer:-
By specifying the ITEM option

Question # 120
How many exceptional condition can be given in a HANDLE CONDITION?

Answer:-
Max. of 12 exceptional conditions can be given in a HANDLE CONDITION.

Question # 121
What does EIB mean?

Answer:-
The EIB is the EXECUTIVE INTERFACE BLOCK. It is not the EXECUTE INTERFACE BLOCK. All TP monitors or transaction processor are know as EXECUTIVEs as they carry out process on behalf of a program module. CICS and DB2 are executives.

Question # 122
In SYMBOLIC Cursor Positioning after moving - 1 to the length field also the cursor is not positioned in that particular field. Give reasons?

Answer:-
You have to explicitly specify the word CURSOR between your EXEC CICS and END-EXEC in the program.

Question # 123
Difference between TSQ and TDQ?

Answer:-
TDQ is read destructive, TSQ is not, TSQ can be created dynamically, TDQ cannot be created dynamically. TSQ is temporary in nature (i.e. it will be deleted when the program finishes execution, unless it is made permanent by making a entry in the Temporary Storage Table), TDQ is not.

Question # 124
What is a two Phase commit in CICS?

Answer:-
This occurs when a programmer Issues a EXEC CICS Syncpoint command. this is called two phase because CICS will first commit changes to the resources under its control like VSAM files, and the DB2 changes are committed. Usually CICS signal DB2 to complete the next phase and release all the locks.

Question # 125
What is ASRAABEND in CICS?

Answer:-
It occurs when program interruption takes place. e.g. when alphanumeric string moved to numeric data item OR when arithmetic calculations performed on nunnumeric data item OR when an attempt made to read an occurrence of a table beyond the defined occurrences.

Question # 126
What is the size of commarea?

Answer:-
The default commarea size is 65k.
Question # 127
The error code AEIV?

Answer:-
This is the error code for length, if length of the source data is more than the receiving field, This error will occur.

Question # 128
Which type of TDQ is read destructive?

Answer:-
Intrapartition TDQ is read destructive. extra partition TDQ is not read destructive.

Question # 129
How many ways are there for initiating a transaction ? what are they?

Answer:-
There are six ways in initiating a transaction they are as follows.
1. embedding four character transid on the top left most corner of the screen.
2. making use of EXEC CICS START TRANSID()
3. making use of EXEC CICS RETURN TRANSID()
4. By defining the transid in DCT ( destination control table ) to enable ATI ( AUTOMATIC TASK INITIATION)
5. Making use of PLT ( program list table )
6. By associating four character transid in PCT ( program control table )

Question # 130
How can you accomplish breakpoint in intertest?

Answer:-
U-for unconditional breakpoint, C-for conditional breakpoint, and A-for automatic breakpoint

Question # 131
A CICS program ABENDS with an ASRA ABEND code, What is its meaning?

Answer:-
A). Alink was issued to a program whose name does not exist in the PPT (Program Processing Table)
B) A program attempted to use a map that is not defined in the PCT (Program Control Table),
C) A security violation has occurred. The operator is not defined with the proper authority in the SNT (Sign on Table) to use a particular file
D) A program interrupt (0C0 or 0C2 ot ...) has occurred in a CICS program
E) An I/O error has occurred when attempting to use a VSAM file from a CICS program
ANS:
D) A program interrupt (0C0 or 0C2 ot ...) has occurred in a CICS program

Question # 132
What is Communication Area?

Answer:-
Communication Area is used to pass data between the program or between the task.

Question # 133
What are the differences between DFHCOMMAREA and TSQ?

Answer:-
Both are used to save data among tasks. but
1. COMMAREA is private to that transaction only like every transaction has its own COMMAREA created by CICS as soon as the transaction is initiated. however TSQ, if queue id is known can be accessed by other transactions also
2. COMMAREA length is s9(4) comp i.e. 65k, but TSQ can have any length
3. COMMAREA is available only during the transaction is running. TSQ if created with auxiliary option resides in aux memory and available even if main memory crashes
4. normally COMMAREA is used to transfer data from one task to another while TSQ is used widely within the task as a scratch pad.

Question # 134
What is difference between call and link?

Answer:-
In case of call, whenever you do changes to the called program you need to compile the calling program also. In case of link, it is not needed.
Question # 135
TSQs can be written in the Main storage or Auxiliary storage (True or False)?
Answer:-
True
Read More Answers.

Question # 136
CICS Command level is?
Answer:-
Low level version of CICS macro level
Read More Answers.

Question # 137
Which is the CICS control program that provides communication services between user written application programs and terminals?
Answer:-
Terminal Control Program
Read More Answers.

Question # 138
The EIB field which gives the last CICS command executed is?
Answer:-
EIBRCODE
Read More Answers.

Question # 139
What is the CICS command that is used to copy a screen image of a terminal into another terminal?
Answer:-
ISSUE COPY
Read More Answers.

Question # 140
Which is the command that is used to dump the main storage areas related to a task?
Answer:-
DUMP
Read More Answers.

Question # 141
Sync points cannot be requested by the application programs (True or False)?
Answer:-
False
Read More Answers.

Question # 142
What is the primary function of the Processing Program Table (PPT)?
Answer:-
To register all programs and maps
Read More Answers.

Question # 143
Which is the command used for terminating a browse operation?
Answer:-
ENDBR
Read More Answers.

Question # 144
Which of the following are recoverable CICS resources?
Answer:-
Question # 145
What is the CICS Command that is used for reading a record from the TDQ?

Answer:-
READQ

Question # 146
What is the function of the LOAD command?

Answer:-
To fetch a program, table or map to the main storage.

Question # 147
How do you access storage outside your CICS program?

Answer:-
In COBOL storage was accessed via BLL cell using the SET option of ADDRESS commands. In COBOL II the special register ADDRESS OF lets you reference the address of any Linkage Section field.

Question # 148
What is the meaning and use of the EIBAID field?

Answer:-
EIBAID is a key field in the execute interface block; it indicates which attention key the user presses to initiate the task.

Question # 149
How do you control cursor positioning?

Answer:-
It's controlled by the cursor option of the SEND MAP command using a direct (0 through 1919) or symbolic value.

Question # 150
What is an ASRA?

Answer:-
An ASRA is the CICS interrupt code, the equivalent of an MVS abend code.

Question # 151
What is temporary storage?

Answer:-
Temporary storage is either main or auxiliary storage that allows the program to save data between task invocations.

Question # 152
What is transient data?

Answer:-
Transient data provides CICS program with a simple method for sequential processing, often used to produce output for 3270 printers.

Question # 153
What are the two types of transient data queues?

Answer:-
They are intrapartition, which can only be accessed from with CICS and extrapartition, which are typically used to collect data online, but process it in a batch environment.

Question # 154
What are transient data sets defined to CICS?

Answer:-
They are defined in the destination control table (DCT).

Question # 155
What is Journal Recovery and Dynamic Transaction Backout?

Answer:-
Journal Recovery is recovery of changes made to a file during online processing. If a file has I/O problems it is restored from a backup taken before online processing began and the journaled changes are applied. Dynamic transaction backout is the removal of partial changes made by a failed transaction.

Question # 156
What is the meaning of the SYNCPOINT command?

Answer:-
SYNCPOINT without the ROLLBACK option makes all updates to protected resources permanent, with the ROLLBACK option it reverses all updates.

Question # 157
What is the MASSINSERT option?

Answer:-
MASSINSERT is a WRITE option that modifies normal VSAM split processing, leaving free space after the inserted record, so subsequent records can be inserted without splits. it is ended by an UNLOCK command

Question # 158
What is a cursor in CICS SQL processing?

Answer:-
A cursor is a pointer that identifies one row in a SQL results table as the current row.

Question # 159
What is the significance of RDO?

Answer:-
RDO is Resource Definition Online. Since release 1.6 RDO allows resources (terminals, programs, transactions and files) to be defined interactively while CICS is running.

Question # 160
What is CECI?

Answer:-
CECI is the command level interpreter transid that interactively executes CICS commands. It is a rudimentary CICS command debugger which does not require coding an entire program.

Question # 161
What is CEDF?

Answer:-
CEDF is the execute diagnostic facility that can be used for debugging CICS programs.

Question # 162
What is CEBR?

Answer:-
CEBR lets you browse the contents of a specific temporary storage queue.

Question # 163
What is a logical message in CICS?

Answer:-
A logical message is a single unit of output created by SEND TEXT or SEND MAP commands
BMS collects the separate output from each command and treats them as one entity. This technique may be used to build CICS reports.

Question # 164
What is the meaning of the ENQ and DEQ commands?

Answer:-
Neither command is exclusively a transient data command. The ENQ command reserves any user defined resource for the specific task. For enqueued transient data no other task will be able to write records to it for as long as it is enqueued. DEQ removes the lock.

Question # 165
How do you delete Item 3 in a five-item TSQ?

Answer:-
You can't at least not directly. Options, none of them good, include:
I. adding a logical-delete flag to the contents of each item;
II. moving item 4 to 3 and 5 to 4 and initializing item 5, all thru rewrites; this is a variant on 1;
III. Creating a new 'copy' TSQ that excludes the unwanted item, killing the old TSQ (deleteq ts), writing the new TSQ with the original name from the new TSQ, and then deleting the 'copy' TSQ. This way, you will get an accurate report from NUMITEMS.

Question # 166
What is interval control and what are some of the CICS commands associated with it?

Answer:-
CICS interval control provides a variety of time-related features - common commands are ASKTIME, PORMATTIME, START, RETRIEVE, and CANCEL.

Question # 167
What is task control and what are the CICS commands associated with it?

Answer:-
Task control refers to the CICS functions that manage the execution of tasks. Task control commands are SUSPEND, ENQ, and DEQ.

Question # 168
What is the CICS LOAD command?

Answer:-
The LOAD command retrieves an object program from disk and loads it into main storage - it's primarily used for a constant table that will be available system-wide.

Question # 169
What is the ABEND command and when would you use it?

Answer:-
The ABEND command forces a task to end abnormally. It creates a transaction dump and invokes the dynamic transaction backout.

Question # 170
DB2 What is the difference between a package and a plan. How does one bind 2 versions of a CICS transaction with the same module name in two different CICS regions that share the same DB2 subsystem?

Answer:-
Package and plan are usually used synonymously, as in this site. Both contain optimized code for SQL statements - a package for a single program, module or subroutine contained in the database request module (DBRM) library. A plan may contain multiple packages and pointers to package that could be referenced in two different plans.

Question # 171
How to build up LU 6.2 communication?

Answer:-
Pseudo-conversational transactions are almost always the preferred method. In these mode CICS releases resources between responses to user input, i.e. the task is ended awaiting the user response.

Question # 172
Why is it important not to execute a STOP RUN in CICS?
Answer:-
Stop run will come out from the CICS region.

Question # 173
What is the difference between a Symbolic map and Physical map?

Answer:-
SYMBOLIC MAP IS USED BY USER AND PHYSICAL MAP IS USED BY SYSTEM

Question # 174
Can a program change protected field?

Answer:-
NO

Question # 175
What is the difference between physical map and symbolic map?

Answer:-
The physical map is the load module and the symbolic map is the data structure.

Question # 176
What is the attribute byte?

Answer:-
Defines the display/transmission of field. Most cases is an output field from the program.

Question # 177
What is MDT? What are FSET, FRSET?

Answer:-
MDT: Bit in the attribute byte indicating modification of field on screen. Happens on an input operation. FSET: Sets MDT on to ensure field is transmitted. Happens on an output operation FRSET: Reset MDT. Until this happens, field continues to be sent.

Question # 178
When you compile a CICS program, the (pre) compiler puts an extra chunk of code. Where does it get included and that is it called? What is its length?

Answer:-
DFHEIBLK, DFHCOMMAREA.

Question # 179
What is the use of DCT?

Answer:-
Destination Control Table used define TDQs

Question # 180
What is ENQ, DEQ?

Answer:-
Task control commands to make resources serially reusable.

Question # 181
What is an ASRA abend?

Answer:-
Any data exception problem SOC7, SOC4 etc.
Question # 182
What is an AEY9 abend?

Answer:-
DB2/IDMS not up.

Read More Answers.

Question # 183
What is EXEC CICS RETRIEVE?

Answer:-
Used by STARTed tasks to get the parameters passed to them.

Read More Answers.

Question # 184
Name some important fields in the EIB block?

Answer:-
EIBRESP, EIBCALEN, EIBRRCDE, EIBTASK, EIBDATE, EIBTIME

Read More Answers.

Question # 185
Can you use DYNAMIC calls in CICS?

Answer:-
Yes, the called routine must be defined in PPT and the calling program must use CALL identifier...

Read More Answers.

Question # 186
How do you handle errors in CICS programs?

Answer:-
Check EIBRESP after the call or use the HANDLE condition.

Read More Answers.

Question # 187
What is the usage of language in the PPT entry?

Answer:-
Language interface and call parameters

Read More Answers.

Question # 188
What is an AICA abend?

Answer:-
Runaway Task.

Read More Answers.

Question # 189
How would you resolve an ASRA abend?

Answer:-
In COBOL II start with CEBR, and get the offset/instruction.

Read More Answers.

Question # 190
Can you access QSAM (seq) files from CICS?

Answer:-
No

Read More Answers.

Question # 191
Can you access ESDS files from CICS?

Answer:-
Yes

Read More Answers.
Question # 192
What is the primary objective of CICS?

Answer:-
To provide the control and services of the DB/DC system.
Read More Answers.

Question # 193
What are the three BMS options?

Answer:-
Minimum, Standard, FULL.
Read More Answers.

Question # 194
What is the difference between START and XCTL?

Answer:-
START is used to start a new task. It is an interval control command. XCTL is used to pass control to a program within the same task. It is a program control command.
Read More Answers.
**Mainframes Most Popular Interview Topics.**

1: IMS DB Frequently Asked Interview Questions and Answers Guide.

2: JCL Frequently Asked Interview Questions and Answers Guide.

3: VSAM Frequently Asked Interview Questions and Answers Guide.

4: IDMS Frequently Asked Interview Questions and Answers Guide.

5: IBM MainFrame Frequently Asked Interview Questions and Answers Guide.

6: IBM AS400 Frequently Asked Interview Questions and Answers Guide.

7: IBM Assembler Frequently Asked Interview Questions and Answers Guide.

8: IBM COBOL400 Frequently Asked Interview Questions and Answers Guide.

9: IBM Natural Frequently Asked Interview Questions and Answers Guide.

10: IBM DB400 Frequently Asked Interview Questions and Answers Guide.
About Global Guideline.

Global Guideline is a platform to develop your own skills with thousands of job interview questions and web tutorials for fresher's and experienced candidates. These interview questions and web tutorials will help you strengthen your technical skills, prepare for the interviews and quickly revise the concepts. Global Guideline invite you to unlock your potentials with thousands of Interview Questions with Answers or begin a tutorial right away, such as HTML, XML, XSLT, Cascading Style Sheet (CSS), Search Engine Optimization (SEO), JavaScript, Structure Query Language (SQL), Database Articles, Web Hosting Guide and much more. Learn the most common technologies Interview Questions and Answers. We will help you to explore the resources of the World Wide Web and develop your own skills from the basics to the advanced. Here you will learn anything quite easily and you will really enjoy while learning. Global Guideline will help you to become a professional and Expert, well prepared for the future.

* This PDF was generated from http://www.GlobalGuideline.com at January 29th, 2017

* If any answer or question is incorrect or inappropriate or you have correct answer or you found any problem in this document then don't hesitate feel free and e-mail us we will fix it.

You can follow us on FaceBook for latest Jobs, Updates and other interviews material. www.facebook.com/InterviewQuestionsAnswers

Follow us on Twitter for latest Jobs and interview preparation guides http://twitter.com/InterviewGuide

Best Of Luck.

Global Guideline Team
http://www.globalguideline.com
Support@globalguideline.com