



Class: XI

Time Allowed: 20 minutes

HIGHER SECONDARY SCHOOL CERTIFICATE EXAMINATION 2024

SUBJECT: COMPUTER SCIENCE MODEL PAPER

Q1:

SECTION "A"

Marks: 15

Note: Attempt all questions from this section. Each question carries **one** mark.

- i. A light sensitive device that converts drawing printing text or another image into digital form is:
A. Keyboard B. Scanner C. OMR D. None of these
- ii. What type of operating system MS-DOS is?
A. CLI B. GUI C. Multitasking D. Menu driven interface
- iii. 1 gigabyte is equal to:
A. 2^{10} bytes B. 2^{20} bytes C. 2^{30} bytes D. None
- iv. The amount of vertical space between line of text in a document is called:
A. Double Space B. Line Space C. Single Space D. Vertical Spacing
- v. Which of the following is not the antivirus software?
A. Oracle B. Avira C. Kasper D. McAfee
- vi. IBM 1401 is _____ generation computer.
A. 1st Gen B. 2nd Gen C. 3rd Gen D. 4th Gen
- vii. The OSI models define layers 1, 2 and 3 as the _____ layer.
A. Physical support B. User support C. Network support D. Transport
- viii. Decryption and encryption are the feature of:
A. Transport layer B. Presentation layer C. Session layer D. Application layer
- ix. A collection of interconnected networks is called:
A. Internet B. Intranet C. Topology D. Interface
- x. The speed of CD-ROM measured in:
A. X B. Y C. DPI D. None of these
- xi. In _____ topology the computer cable is broken, networks get down:
A. Bus B. Ring C. Star D. None of these
- xii. Which of the following device copies electrical signals from one Ethernet to another?
A. Bridge B. Repeater C. Hub D. None of these
- xiii. The core of an optical fiber is _____.
A. Plastic B. Glass C. Metal D. Both A & B
- xiv. _____ cable is not susceptible to most noise that is electrical in nature:
A. Twisted pair wire B. Coaxial C. Fiber optic D. None of these
- xv. The name of a word document displays in _____
A. Status bar B. Home tab C. Ribbon D. Title bar

END OF SECTION A

Using given information to answer Q.1, Q.2 and Q.3.

Some records from a database table named as **Invoice** are shown below.

InvoiceID	OrderDate	TotalPrice	Salesperson
INV189	2/28/2019	1200	Jawad Ahmed
INV590	6/20/2019	480	Shabana Rauf
INV991	11/2/2019	1765	Ammar Amjad

Consider the given specifications of this table.

- The InvoiceID field is primary key and it should store up to 6 text characters. This field cannot be left empty.
- The OrderDate field should have date data type.
- The TotalPrice field should have numeric data type.
- The Salesperson field should store up to 50 text characters. This field cannot be left empty.

1. The SQL query to create this table is

<pre>CREATE TABLE Invoice (InvoiceID text(6) NOT NULL, OrderDate date, TotalPrice int, Salesperson text(50) NOT NULL, PRIMARY KEY (InvoiceID));</pre>	<pre>CREATE TABLE Invoice (InvoiceID text(6) NOT NULL, Salesperson text(50) NOT NULL, OrderDate date, TotalPrice int, PRIMARY KEY (InvoiceID));</pre>
A	B
<pre>CREATE TABLE Invoice (InvoiceID text NOT NULL, OrderDate date, TotalPrice int, Salesperson text NOT NULL, PRIMARY KEY (InvoiceID));</pre>	<pre>CREATE TABLE Invoice (InvoiceID text(6) NOT NULL, Salesperson text(50), OrderDate date, TotalPrice text(4), PRIMARY KEY (InvoiceID));</pre>
C	D

2. The record having InvoiceID = INV991 needs to be edited as follows:

- Change the Salesperson to Fakhar Jahan
- Change the Price to 1800

The SQL query to do these changes is

A	UPDATE Invoice SET (Salesperson = 'Fakhar Jahan' AND Price = 1800) WHERE InvoiceID = 'INV991';
B	UPDATE Invoice SET Salesperson = 'Fakhar Jahan' AND SET Price = 1800 WHERE InvoiceID = 'INV991';
C	UPDATE Invoice SET Salesperson = Fakhar Jahan, Price = 1800 WHERE InvoiceID = INV991;
D	UPDATE Invoice SET Salesperson = 'Fakhar Jahan', Price = 1800 WHERE InvoiceID = 'INV991';

3. The SQL query in MS Access to delete this table is

- A. Drop Table Invoice;
- B. Drop Invoice Table;
- C. Delete Table Invoice;
- D. Delete Invoice Table;

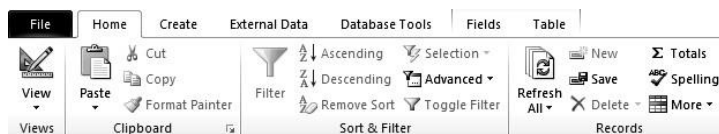
4. All of the following can be done using ALTER TABLE statement EXCEPT

- A. adding records in a table.
- B. adding column in a table.
- C. deleting column in a table.
- D. deleting constraints in a table.

5. All of the following can be done in the design view of the MS Access EXCEPT

- A. selecting the primary key.
- B. entering data for each record.
- C. applying data validation rules.
- D. assigning data types of to each field.

6. Consider the given image of MS Access database.



The menu that should be clicked to locate the option to create a relationship among tables is

- A. Table menu.
- B. Create menu.
- C. External Data menu.
- D. Database Tools menu.

7. Fatima created a form using MS Access Form Wizard. She selected the following layout for the form.



The layout that she selected is

- A. Tabular.
- B. Justified.
- C. Datasheet.
- D. Columnar.

8. Consider the given data.

Ahmer
Aamir
Afnan
Asher

If ascending sort is applied on this data in MS Access, then the data would be arranged as

Asher	Asher
Afnan	Ahmer
Ahmer	Afnan
Aamir	Aamir
A	B
Aamir	Aamir
Ahmer	Afnan
Afnan	Ahmer
Asher	Asher
C	D

Use the given database table to answer Q.9, Q.10, Q.11 and Q.12.

Staff_ID	FirstName	LastName	Age	Salary
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S200	Ali	Raza	36	45000
S201	Shumaila	Anjum	24	32000
S202	Marium	Khan	28	29000
S203	Farhan	Jamali	33	49000
S204	Shariq	Rafique	21	20000

9. Given is the result of a query applied in design view.

Staff Query1

FirstName	LastName	Staff	Staff	Staff	Staff
Ali	Raza				
Shumaila	Anjum				
Farhan	Jamali	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shariq	Rafique			> 30 And < 25	

B	Field:	Staff_ID	FirstName	LastName	Age	Salary
	Table:	Staff	Staff	Staff	Staff	Staff
	Sort:					
	Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Criteria:				> 30	
or:				< 25		

C	Field:	Staff_ID	FirstName	LastName	Age	Salary
	Table:	Staff	Staff	Staff	Staff	Staff
	Sort:					
	Show:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Criteria:				> 30	
or:				< 25		

D	Field:	Staff_ID	FirstName	LastName	Age	Salary
	Table:	Staff	Staff	Staff	Staff	Staff
	Sort:					
	Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Criteria:				< 30 And > 25	
or:						

The query is

10. The given query is applied on the table.

Field:	Staff_ID	FirstName	LastName	Age	Salary
Table:	Staff	Staff	Staff	Staff	Staff
Update To:				37	
Criteria:				< 33	> 20000
or:					

Which of the following options shows CORRECT Staff_ID whose records is/ are updated after applying this query?

- A. S200, S201, S202, S203 and S204
- B. 201, 202 and 203
- C. S201 and S202
- D. S200

11. Consider the given image showing a query in design view applied on this table.

Field:	Staff_ID	FirstName	LastName	Age	Salary
Table:	Staff	Staff	Staff	Staff	Staff
Sort:					
Show:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:					> 20000 And < 30000
or:					

The option that shows records fetched by this query is

A	<table border="1"> <thead> <tr> <th>FirstName</th> <th>LastName</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Ali</td> <td>Raza</td> <td>36</td> </tr> <tr> <td>Shumaila</td> <td>Anjum</td> <td>24</td> </tr> <tr> <td>Marium</td> <td>Khan</td> <td>28</td> </tr> <tr> <td>Farhan</td> <td>Jamali</td> <td>33</td> </tr> <tr> <td>Shariq</td> <td>Rafique</td> <td>21</td> </tr> </tbody> </table>	FirstName	LastName	Age	Ali	Raza	36	Shumaila	Anjum	24	Marium	Khan	28	Farhan	Jamali	33	Shariq	Rafique	21
FirstName	LastName	Age																	
Ali	Raza	36																	
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Marium	Khan	28																	
Farhan	Jamali	33																	
Shariq	Rafique	21																	
B	<table border="1"> <thead> <tr> <th>FirstName</th> <th>LastName</th> <th>Salary</th> </tr> </thead> <tbody> <tr> <td>Ali</td> <td>Raza</td> <td>45000</td> </tr> <tr> <td>Shumaila</td> <td>Anjum</td> <td>32000</td> </tr> <tr> <td>Farhan</td> <td>Jamali</td> <td>49000</td> </tr> </tbody> </table>	FirstName	LastName	Salary	Ali	Raza	45000	Shumaila	Anjum	32000	Farhan	Jamali	49000						
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FirstName	LastName	Age																	
Marium	Khan	28																	

12. Consider the given image showing the delete query in design view that is applied on this table.

Field:	Staff_ID	FirstName	LastName	Age	Salary
Table:	Staff	Staff	Staff	Staff	Staff
Delete:	Where	Where	Where	Where	Where
Criteria:				< 30	
or:					< 40000

The number of records that will be deleted by this query is

- A. Two.
- B. Three.
- C. Four.
- D. Five.

13. The CORRECT syntax of SQL query to select all the fields in a table is

- A. Select * From Table_Name;
- B. Select All From Table_Name;
- C. Select * Table From Table_Name;
- D. Select Complete Table From Table_Name;

14. Omar is getting an error message while trying to apply a relationship on two tables in MSAccess. A possible reasons is that

- A. both tables have different number of fields and same number of tuples.
- B. both tables have different number of fields and different number of tuples.
- C. the common fields in both tables on which relationship is to be applied have differentnames.
- D. the common fields in both tables on which relationship is to be applied have differentdata types.

15. A database administrator wants that the user to input dates of year 2019 only in the field of a database table having date data type. The data validation condition he should apply is

- A. >=#01/01/2019# OR <=#12/31/2019#
- B. >=#01/01/2019# OR <=#01/01/2020#
- C. >=#01/01/2019# AND <=#01/01/2020#
- D. >=#01/01/2019# AND <=#01/01/2020#



Class: XI

HIGHER SECONDARY SCHOOL CERTIFICATE EXAMINATION 2024

Time: 2 hours 40 minutes

SUBJECT: COMPUTER SCIENCE SECTION "B" AND SECTION "C" Total Marks 60

Q2: SECTION "B" SHORT ANSWER QUESTIONS 30Marks

Note: Answer any **ten** of the following questions. Each question carries **three** marks.

1. Define Bus. Write the function of Address Bus.
2. What is the function of cache?
3. What is the function of accumulator register?
4. Why laser printer is more efficient?
5. Why operating system is necessary for computer? Also write the features of operating system.
6. Differentiate between analog and digital signal.
7. List the components of LAN.
8. Define WAN and its objectives.
9. Why is ROM called non-volatile memory?
10. Write the importance of e-commerce in modern era.
11. Which kind of transmission direction used in mobile communication? Explain.
12. Define the elements of the data communication.
13. What is the purpose of stacks in computer architecture? Also define its functions.
14. Define fetch cycle and execution cycle and also draw the diagram of instruction cycle.
15. Define search engine. Enlist any three popular search engine.
16. What is Software Piracy? Define some examples of it.
17. What is the purpose of language translator? Why compiler is more reliable than interpreter?
18. Write the full forms of:
a) DHCP b) VPN c) MICR d) FORTRON e) TCP/IP f) CSMA

SECTION "C" DETAILED ANSWER QUESTIONS

30 Marks

Note: Attempt any two questions. Each question carries equal marks.

- Q3. (a) Explain guided media and also justify why fiber optic is more reliable. (7)
(b) Explain copyright and also define its advantages and disadvantages. (8)
- Q4. (a) What is mean by topology? Describe any three-network topologies with diagram. (7)
(b) What is the purpose of registers in computer architecture also define any four of its types. (8)
- Q5. (a) Explain primary memory and its types. (7)
(b) What is an OSI model? Write the functions of hardware layers. (8)

END OF PAPER