# Grade 10 | Database | MCQ Paper

Questions 01 to 03 are based on the following database. The tables show data about books available for sale in a bookshop and the book publishers.

**Book Table** 

Book Tuble				
Book_ID	Book_Name	Quantity	Unit_Price	
B001	Exploring Moon	5	250	
B002	Wonders of the World	20	200	
B003	Art of Magic	50	150	
B004	Red Rackan's Treasure	20	300	

Book\_Publisher Table

Book_ID	Publisher_ID
B001	P003
B002	P002
B003	P002
B004	P001

# Publisher Table

Publisher_ID	Publisher_Name	Publ_Phone
P001	Williansons	5566778
P002	Bertram Publishers	2345678
P003	Siena and Sieana	2356987
P004	United Books	5587698

- 1. What is the most suitable data type for the Unit\_Price in Book Table?
  - 1) Currency

3) Number

2) Date

- 4) Text
- 2. Which of the following is most suitable as the primary key for the Book Table?
- (2015)

(2015)

1) Book\_ID

3) Quantity

2) Book Name

- 4) Unit\_Price
- 3. Which of the following field names is an example for a foreign key?

(2015)

- 1) Book\_Name in Book Table
- 2) Book ID in Book Publisher Table
- 3) Publ Phone in Publisher Table
- 4) Publisher\_Name in Publisher Table
- 4. Which of the following is a feature not provided by a database management application? (2016)
  - 1) Sorting Data

3) Generating Reports

2) Updating Data

4) Generating Charts

Questions 05 to 07 are based on the following database tables.

Taxi Table

Rate Table

Taxi_No	Rate_Type	Driver_Name	Driver_City
FX0675	Car	Perera	Colombo
FY1256	3W	Raju	Colombo
FI6782	Van	Dias	Matara
FZ1276	3W	Perera	Kandy

Rate_Type	Rate
Car	44
3W	38
Van	40

- 5. Which of the following is the most suitable field to be selected as the primary key for the Taxi Table? (2016)
  - 1) Taxi\_No

3) Driver\_Name

2) Rate\_Type

- 4) Driver\_City
- 6. Which of the following fields is an example for a foreign key in the database?
- (2016)

1) Taxi\_No in Taxi Table

3) Rate\_Type in Rate Table

2) Rate\_Type in Taxi Table

4) Driver\_City in Taxi Table

7. How many fields and records are available in the Rate Table, respectively?

3) 3 and 2

1) 2 and 2 2) 2 and 3

4) 3 and 3

Questions 08 to 11 are based on the following database tables that are used to store student subject marks.

# Student Table

# Subject Table

DoB	Name	Student_No	Class
20/11/95	Sarath	1001	1A
17/12/95	Kolitha	1002	1A
21/10/95	Kapila	1003	1A
18/12/95	Nalin	1004	1B

Sub_Code	Subject
01	Sinhala
02	Art
03	English

(2016)

# Marks Table

Sub_Code	Student_No	Marks
01	1001	85
02	1001	80
01	1002	65
03	1003	70

8.	How many fields are in the Subjects table?			(2017)
	1) 2	3)	4	
	2) 3	4)	6	
9.	What would be the most suitable field as the primary	ke	y for the Student Table	e? (2017)
	1) Student_No		Name	,
	2) DoB	4)	Class	
10.	What would be an example for a foreign key in the databas	e?		(2017)
	1) Sub_Code in Subject Table	3)	Marks in Marks Table	
	2) Sub_Code in Marks Table	4)	DoB in Student Table	
11.	How many marks did Kapila obtain for English?			(2017)
	1) 65	3)	80	
	2) 70	4)	85	
12	Consider the following statements related to database softw	are.		(2017)

12. Consider the following statements related to database software: (2017)

A - A collection of fields related to one object is called a record

B - A collection of related tables is called a database

C - A Foreign key of one table is the primary key of another table

Which of the above statements are correct?

1) A and B only

3) B and C only

2) A and C only

4) All A, B and C

Questions No. 13 and 14 are based on the following Books table used tokeep in a library.

# **Books Table**

ISBN	BookID	BookName	PublisherID	Edition
9789556682015	2304	ICT for your life	6	2
9789556682015	2305	ICT for your life	6	2
9789556902015	2306	Database Systems	2	4

13. What is a suitable field for the primary key?

1) BookID

2) BookName

3) ISBN

- 4) PublisherID
- 14. What is a suitable field for the foreign key?

1) BookID

2) BookName

3) Edition

4) PublisherID

Consider the following two tables named Marks and Subjects:

#### **Marks Table**

# Admission\_No Subject\_Code Marks 1111 80 89 1112 33 69 1113 34 72 1111 33 78

# **Subjects Table**

Subject_Code	Subject_Name
80	ICT
33	History
34	Science

- 15. Which of the following statements is incorrect regarding the Marks and Subjects tables? (2018)
  - 1) Admission\_No and Subject\_Code in Marks table is a composite key.
  - 2) Admission\_No is o primary key in Marks table.
  - 3) Subject\_Code is a foreign key in Marks table.
  - 4) There is a one-to-many relationship between Subjects table and Marks table.
- 16. Which of the following is correct regarding a database?

(2018)

(2018)

(2018)

- 1) A collection of fields makes a record; a collection of records makes a table, and a collection of tables makes a database.
- 2) A collection of fields makes a table; a collection of tables makes a record, and a collection of records makes a database.
- 3) A collection of records makes a field; a collection of fields makes a table, and a collection of tables makes a database.
- 4) A collection of tables makes a record; a collection of records makes a field, and a collection of fields makes a database.

Questions 17 to 20 are based on the following partly shown database tables that are used to store data about books, students, and books reserved by students in a school library.

Table: Book (Contains the details of books and whether each book is reserved or not.)

Book_ID	Title	Reserved
B0001	Effective Writing	TRUE
B0002	Classic Short Stories	TRUE
B0003	Poem Writing	FALSE
B0004	Vocal Theory	TRUE

Table: Student (Contains details of all students in school and whether each student is a library member or not)

Student_Name	Student_ID	Grade	Library_Member
Piyal	1001	7	TRUE
Kumar	1002	9	TRUE
Ismail	1003	8	TRUE
Sunil	1004	10	FALSE
Sarath	1005	7	TRUE

Table: Reservation (Contains details about books reserved by students)

Student_ID	Reserved_Date	Book_ID
1003	02/03/2019	E0002
1002	23/04/2019	E0001
1005	16/06/2019	E0004

17. How many fields are in the Student table?

(2019)

- 1) 2
- 2) 3

- 3) 4 4) 5
- 18. What would be an example of a foreign key in the database?

(2019)

- 1) Book\_ID in Reservation table
- 2) Grade in Student table
- 3) Reserved\_Date in Reservation table
- 4) Title in Book table
- 19. What is the title of the book reserved by Kumar?

(2019)

1) Classic Short Stories

3) Poem Writing

2) Effective Writing

- 4) Vocal Theory
- 20. A student gets the library membership and reserves a book. What tables need to be updated for this purpose? (2019)
  - 1) Book table and Reservation table
  - 2) Book table and Student table
  - 3) Reservation table and Student table
  - 4) Book table, Reservation table and Student table
- 21. Which of the following are considered as advantages of electronic databases? (2020)
  - A Smaller physical space is required to store data
  - B Easy to obtain copies
  - C More efficient in retrieving information.
  - 1) A and B only 2) A and C only

- 3) B and C only
- 4) All A, B and C

Questions 22 to 24 are based on the following database tables that are used to store data about authors, books, and the books written by authors.

> Table: Book Table: Author

AuthorID	FirstName	LastName
1001	Anil	Ratnayake
1002	Vijay	Sekaram
1003	Indika	Serasinghe
1004	Sharaf	Khan
1005	Lalith	Wijenayake

BookID	Name	Price
B01	Mathematics with Fun	500
B02	English for Beginners	400
B03	Science for Everyone	450
B04	Western Music	800
B05	Painting Basics	550

Table: Author\_Book

AuthorID	BookID	Royalty_Share
1004	B02	15%
1001	B03	20%
1005	B01	10%
1004	B04	15%
1003	B03	10%

22. What would be the primary key of Author\_Book table?

(2020)

1) AuthorID

3) AuthorID + BookID

2) BookID

4) AuthorID + Royalty\_Share

23. Consider the following statements.

(2020)

A - AuthorID in the Author table is a foreign key

B - AuthorID in the Author\_Book table is a foreign key

C - BookID in the Book table is a primary key

Which of the above statements are correct?

A and B only
 A and C only

3) B and C only

4) All A, B and C

24. Who is the author of the book titled "Mathematics with Fun"?

(2020)

1) Anil Ramanayake

3) Sharaf Khan

2) Indika Serasinghe

4) Lalith Wijenayake

25. Which of the following statements are correct regarding relational databases?

(2021)

A - A record is a collection of fields.

B - A table is a collection of records.

C - A relational database is a collection of tables.

1) A and B only

3) B and C only

2) A and C only

4) All A, B, and C

• Questions 26 to 28 are based on the following partly shown database tables that are used to store data about students, subjects and enrollment details in a school.

# Student

Student_ID	Student_Name
1001	Saman
1002	Raj
1003	Sharaf
1004	Shane

# Subject

Subject_ID	Subject_Name	Teacher_Name
S001	Chemistry	Perera
S002	Physics	Selvam
S003	Combined Maths	Nazwar
S004	Geography	Silva
S005	Political Science	Almeida

#### Enroll

Student_ID	Subject_ID	Date
1001	S002	04/01/2022
1005	S001	05/01/2022
1003	S002	09/01/2022
1001	S003	04/01/2022

- 26. What would be the primary key of the Enroll table?
- 3) Subject\_ID + Date

Student\_ID
 Subject\_ID

- 4) Student\_ID + Subject\_ID
- 27. What would be a foreign key in the database?

(2021)

(2021)

1) Subject\_ID in the Subject table

3) Date in the Enroll table

2) Student\_ID in the Student table

- 4) Subject\_ID in the Enroll table
- 28. Shane dropped the "Geography" subject and enrolled for the "Political Science" subject. Which table/tables needs/need to be updated for this purpose? (2021)
  - 1) Subject table
  - 2) Subject table and Enroll table
  - 3) Enroll table
  - 4) Student table, Subject table and Enroll table