

KENDRIYA VIDYALAYA AF, 9 BRD PUNE
II UNIT TEST 2018-19
CLASS-XI
SUBJECT-Computer Science

Time: 90 Min

MM:50

- Q.1 (a) What is the difference between an Interpreter and a Compiler. [2]
 (b) What is the function of memory. What are its measuring units. [2]
 (c) What is an operating system What is its roles. [2]
 (d) Write a short note on mobile processor. [2]
 (e) Draw block diagram for basic computer organization. [2]
- Q.2 (a) Convert $EB4A_{16}$ to decimal. [1]
 (b) 101111010001100111_2 to Octal. [1]
 (c) convert number 106 to binary . [1]
 (d) Represent HELLO in 7 bit ASCII form. [2]
- Q.3 (a) State and verify Absorption law in Boolean Algebra. [2]
 (b) Prove algebraically $X.Y+X'Z+YZ=X.Y+X'Z$ [2]
 (c) Draw logic circuit using NOR gate only $(X+Y)(X'+Y)(X'+Y')$ [2]
 (d) Write the dual form of $(A.1)+(A+0+A')$ [2]
- Q.4.(a) Differentiate between DDL and DML commands. [2]
 (b) Differentiate between CHAR and VARCHAR data types. [2]
 (c) Given the following teacher relation: write SQL command for question (c) to(g) [4]

NO	NAME	DEPARTMENT	DATE OF JOINING	SALARY	SEX
1	RAJA	COMPUTER	21/5/98	8000	M
2	SANGITA	HISTORY	21/5/97	9000	F
3	RITU	SOCIOLOGY	29/8/98	8000	F
4	KUMAR	LINGUISTICS	13/6/96	10000	M
5	VENKARTRAMAN	HISTORY	31/10/99	8000	M
6	SIDHU	COMPUTER	21/5/86	14000	M
7	AISHWARYA	SOCIOLOGY	11/1/1988	12000	F

- i. To list the names of male teachers in history department.
- ii. To list all names of teachers with date of admission in ascending order.
- iii. To display teachers name , department and salary of female teachers.
- iv. Display the details of those whose name contains A in middle.

Q 5.(a) Define Primary key with example. [2]

(b) Write the resulting output of the following : [1 X 5 = 5]

- (i) Select SUBSTR('Programmer of python', 11);
- (ii) Select 500 + SQRT(169);
- (iii) Select RIGHT('AMAN SHARMA' , 5);
- (iv) Select ROUND(675.567 , -2) + MOD (15.44, 3);
- (v) select dayofyear('2018-02-21');

(c) In a database there are two tables : [4 X 2 = 8]

Table :ARTICLE

ICode	Iname	Price
101	Washing Machine	30000
202	Refrigerator	20000
303	TV	25000
404	Computer	45000

Table :BRAND

ICode	Brand
101	Videocon
202	Videocon
303	Sony
404	Dell

Write MySql queries for the following :

- (i) To display ICode, IName and corresponding Brand of those Item, whose Price is between 20000 and 30000 (both value inclusive)
- (ii) To increase the Price of all the Items by 2% which has Price more than 28000.
- (iii) Identify primary key and foreign key in above given table. Justify your answer.
- (iv) Find out degree and cardinality of after Cartesian product of above given table.

Q.6(a) Write an SQL query to create a table “SPORTS” with the following structure: [2]

Field	Type	Constraint
SCode	Varchar(5)	Primary Key
SName	Varchar(20)	Unique
SLeader	Varchar(20)	
NoOfMember	Integer	
SSymbol	Chart(1)	Not Null

(b) In a database there is a table ‘Watch’ as shown below: [2x1 = 2]

Watch

CompID	Name	CompHQ	ContPerson
101	Titan	Okhla	R.K Jeet
201	Maxima	Shahdara	V.K. Kohali
301	Ajanta	Gurgaon	T.K. Mehta
401	Citizen	Delhi	S. Mohanti

- (i) Write a query to add a column ‘Price’ with data type integer.
- (ii) Suggest suitable candidate key for above given table.
