

KENDRIYA VIDYALAYA ,BHUBANESWAR REGION

Class: XII [SET-1]

INFORMATICS PRACTICES(065)

Term2 Pre-BoardExam(2021-22)

Maximum Marks: 35

Time Allowed: 2 Hours

General Instructions:

- The question paper is divided into 3 sections – A, B and C
- Section A, consists of 7 questions (1-7). Each question carries 2 marks.
- Section B, consists of 3 questions (8-10). Each question carries 3 marks.
- Section C, consists of 3 questions(11-13). Each question carries 4 marks.
- Internal choices have been given for question numbers – 1 , 3,7, 8 and 12.

SECTION A

(7*2=14 marks)

Each question is of 2 marks.																																					
Q1.	Amlan, a network engineer, has been assigned a task to create the network in your school. 1. What devices he will use to develop the network. 2. What is a switch and how it is different from Hub. <p style="text-align: center;">OR</p> Your class teacher is taking class in virtual mode. Which type of network service is being used. Define about the service.	2																																			
Q2.(i)	I : <ul style="list-style-type: none">• Am a address• Used to provide you information. Who am I?	1																																			
(ii)	What is WWW?	1																																			
Q3.	Predict the output of the following queries: i. Select round(6.5675,2); ii. Select mid('PRE_BOARD_EXAM',4,6); <p style="text-align: center;">OR</p> Briefly explain the purpose of the following SQL functions: i. NOW() ii. RTRIM()	2																																			
Q4.	Explain about cookies.	2																																			
Q5.	Help suman in predicting the output of the following queries: i) select length(mid('NETWORKING',2,3)); ii) select DAYOFYEAR('2012-02-08');	2																																			
Q6.	What is the difference between Having clause and Where clause?	2																																			
Q7.	A relation Vehicles is given below : <table border="1" style="margin: 10px auto;"><thead><tr><th>V_no</th><th>Type</th><th>Company</th><th>Price</th><th>Qty</th></tr></thead><tbody><tr><td>AW125</td><td>Wagon</td><td>Maruti</td><td>250000</td><td>25</td></tr><tr><td>J0083</td><td>Jeep</td><td>Mahindra</td><td>4000000</td><td>15</td></tr><tr><td>S9090</td><td>SUV</td><td>Mitsubishi</td><td>2500000</td><td>18</td></tr><tr><td>M0892</td><td>Mini van</td><td>Datsun</td><td>1500000</td><td>26</td></tr><tr><td>W9760</td><td>SUV</td><td>Maruti</td><td>2500000</td><td>18</td></tr><tr><td>R2409</td><td>Mini van</td><td>Mahindra</td><td>350000</td><td>15</td></tr></tbody></table> <p>Find out the Output</p> a. select Company, count(*) from Vehicles group by company. b. select V_no,Type,Price from Vehicles where Price>350000. <p style="text-align: center;">OR</p>	V_no	Type	Company	Price	Qty	AW125	Wagon	Maruti	250000	25	J0083	Jeep	Mahindra	4000000	15	S9090	SUV	Mitsubishi	2500000	18	M0892	Mini van	Datsun	1500000	26	W9760	SUV	Maruti	2500000	18	R2409	Mini van	Mahindra	350000	15	2
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	Write SQL commands to: a. Display the average price of each type of vehicle having quantity more than 20. b. Count the type of vehicles manufactured by each company.	
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SECTION B

(3*3=9 marks)

Each question carries 3 marks.																																					
Q8.	<p>Consider the table Garment and write the query:</p> <p>Table: GARMENT</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>G CODE</th> <th>G NAME</th> <th>SIZE</th> <th>COLOUR</th> <th>PRICE</th> </tr> </thead> <tbody> <tr> <td>111</td> <td>T Shirt</td> <td>XL</td> <td>Red</td> <td>1400.00</td> </tr> <tr> <td>112</td> <td>Jeans</td> <td>L</td> <td>Blue</td> <td>1600.00</td> </tr> <tr> <td>113</td> <td>Skirt</td> <td>M</td> <td>Black</td> <td>1100.00</td> </tr> <tr> <td>114</td> <td>Ladies Jacket</td> <td>XL</td> <td>Blue</td> <td>4000.00</td> </tr> <tr> <td>115</td> <td>Trousers</td> <td>L</td> <td>Brown</td> <td>1500.00</td> </tr> <tr> <td>116</td> <td>Ladies Toop</td> <td>L</td> <td>Pink</td> <td>1200.00</td> </tr> </tbody> </table> <p>i. Display the Minimum price of the Garment. ii. Count and display the number of GARMENT from each SIZE where number of GARMENTS are more than 1. iii. Display the sum of price of each color garment</p> <p style="text-align: center;">OR</p> <p>(i) Select INSTR("Button to Clicked","o"); (ii) Select MONTHNAME("2017-03-09"); (iii) Select RIGHT("Informatics",6);</p>	G CODE	G NAME	SIZE	COLOUR	PRICE	111	T Shirt	XL	Red	1400.00	112	Jeans	L	Blue	1600.00	113	Skirt	M	Black	1100.00	114	Ladies Jacket	XL	Blue	4000.00	115	Trousers	L	Brown	1500.00	116	Ladies Toop	L	Pink	1200.00	3
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Q9.	<p>(i) What is DBMS? (ii)What are it's advantages? (iii)Write 2 names of DBMS Software?</p>	3																																			
Q10.	<p>Akash wants to find the following data from mysql using functions. What commands he will write to (I) find the name of the day of the current date. (ii)display your name in capital letter. (iii)to display the name of the month in which you were born.</p>	3																																			

SECTION C

(4x3 = 12 marks)

Each question carries 4 marks																																
Q11.	<p>Consider a table SALESMAN with the following data:</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>SNO</th> <th>SNAME</th> <th>SALARY</th> <th>BONUS</th> <th>DOJ</th> </tr> </thead> <tbody> <tr> <td>A01</td> <td>AKASH</td> <td>25000</td> <td>106.25</td> <td>2019-10-14</td> </tr> <tr> <td>A02</td> <td>ANKITA</td> <td>15000</td> <td>67.33</td> <td>2012-08-23</td> </tr> <tr> <td>B02</td> <td>BINAYA</td> <td>12500</td> <td>52.41</td> <td>2015-02-03</td> </tr> <tr> <td>B03</td> <td>NEESHA</td> <td>35000</td> <td>NULL</td> <td>2012-10-08</td> </tr> <tr> <td>C07</td> <td>LALITA</td> <td>10600</td> <td>45.78</td> <td>2021-03-17</td> </tr> </tbody> </table> <p>Write SQL queries using SQL functions to perform the following operations: a) Display salesman name and bonus after rounding off to zero decimal places. 15 b) Display the position of occurrence of the string "TA" in salesman names. c) Display the four characters from salesman name starting from second character. d) Display the month name for the date of join of salesman .</p>	SNO	SNAME	SALARY	BONUS	DOJ	A01	AKASH	25000	106.25	2019-10-14	A02	ANKITA	15000	67.33	2012-08-23	B02	BINAYA	12500	52.41	2015-02-03	B03	NEESHA	35000	NULL	2012-10-08	C07	LALITA	10600	45.78	2021-03-17	4
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Q12.	Write SQL commands for the following table MOVIE:	4																														
	<table border="1" data-bbox="288 181 1238 483"> <thead> <tr> <th>NO</th> <th>TITLE</th> <th>TYPE</th> <th>RATING</th> <th>SEATS_LEFT</th> <th>PRICE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>SANJU</td> <td>BIOPIC</td> <td>A</td> <td>4</td> <td>250</td> </tr> <tr> <td>2</td> <td>RAID</td> <td>ACTION</td> <td>B</td> <td>2</td> <td>175</td> </tr> <tr> <td>3</td> <td>RACE3</td> <td>ACTION</td> <td>C</td> <td>7</td> <td>245</td> </tr> <tr> <td>4</td> <td>HAAMI</td> <td>COMEDY</td> <td>A</td> <td>3</td> <td>130</td> </tr> </tbody> </table>	NO	TITLE	TYPE	RATING	SEATS_LEFT	PRICE	1	SANJU	BIOPIC	A	4	250	2	RAID	ACTION	B	2	175	3	RACE3	ACTION	C	7	245	4	HAAMI	COMEDY	A	3	130	
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4	HAAMI	COMEDY	A	3	130																											
	<p>(I)select TYPE,COUNT(*) from MOVIE group by TYPE; (ii)select TITLE,max(PRICE),min(PRICE) from MOVIE; (iii)select TITLE,TYPE,SEATS_LEFT from MOVIE order by SEATS_LEFT desc; (iv)select * from MOVIE where TYPE='ACTION' and PRICE>200;</p> <p style="text-align: center;">OR</p> <p>Based on the above given table named 'MOVIE', Satyam has executed following queries:</p> <p>(I) select count(distinct RATING) from MOVIE; (ii)select TITLE,max(PRICE) from MOVIE goup by RATING having max(PRICE)>200; (iii)select right(TITLE,3) from MOVIE where price>100; (iv)select mod(SEATS_LEFT,3) from MOVIE;</p>																															
Q13.	<p>You have given to create a network in your school building. It has 4 blocks of buildings. Distance between the various blocks is as follows: A to B - 50 m A to C - 60 m A to D - 110m D to B - 60m D to C - 100m C to A - 70m Numbers of computers in each block Block A - 20 Block D - 50 Block B - 15 Block C- 30</p> <div data-bbox="300 1509 1249 2085" style="border: 1px solid black; height: 257px; width: 595px; margin-top: 20px;"></div>	4																														

Based on the above specifications, answer the following questions:

- (a) Out of LAN, WAN and MAN, what type of network will be formed if we interconnect different computers of the campus? Justify.
- (b) Suggest the topology which should be used to efficiently connect the various blocks of school building. Also draw the cable layout for the same.
- (c) Suggest a network device to connect all computers in each building with justification.
- (d) The School wants internet accessibility in all the blocks. Suggest a suitable technology.