

KENDRIYA VIDYALAYA SANGATHAN
TINSUKIA REGION
COMPUTER SCINCE (083)
PRE-BOARD EXAMINATION (MARKING SCHEME)
Class-XII

Max Marks-70

Time: 3 hrs

General Instructions:

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Section A have 18 questions carrying 01 mark each.
4. Section B has 07 Very Short Answer type questions carrying 02 marks each.
5. Section C has 05 Short Answer type questions carrying 03 marks each.
6. Section D has 03 Long Answer type questions carrying 05 marks each.
7. Section E has 02 questions carrying 04 marks each. One internal choice is given in Q35 against part C only.

SECTION A		
1	True	1
2	Valid variable name are (a) _ d t (d) Is	1
3	[1,2,3,4]	1
4	If x=10,y=20,z=30 then print(z-y/x+int(x/z)) will give 28.0	1
5	c) ['Pre Board']	1
6	(b) readlines()	1
7	Alter command is used to modify the primary key in a relation in MySql.	1
8	b) Raises FileNotFoundError	1
9	b) move file pointer 5 characters ahead from current position in file	1
10	Device on the network responsible for storing the MAC address in a computer is - (a) NIC	1
11	Cardinality and degree of the table (b) 10, 11	1
12	Constraint that checks if data is entered for a field in a table. (a) Not Null	1
13	The structure of the table/relation can be displayed using _____ command. (b) describe	1
14	Wildcard characters used in MySQL (a) % , _	1
15	Name of file handle could be abything. i. fout = open("MYPET.TXT",'w') ii. fin = open("MYPET.TXT",'r')	1
16	Module to be imported to establish connection between Python and MySql is mysql.connector	1
Q17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as (a) Both A and R are true and R is the correct explanation for A (b) Both A and R are true and R is not the correct explanation for A (c) A is True but R is False (d) A is false but R is True		
17	Assertion (A): The tuple items cannot be deleted by using the del keyword. Reason (R): To delete an entire tuple, we can use the del keyword with the tuple name.	1

	Answer (b)							
18	Assertion (A): CSV files are used to store the data generated by various social media platforms. Reason (R): CSV file can be opened with MS Excel. Answer (b)	1						
SECTION - B								
19	½ mark for each correction done s = [11, 13, 15] tot=0 for n in range(len(s)): tot = tot + s[n] print(tot)	2						
20	Full marks for correct output, 0 for incorrect output. txt = "fun with python" print(txt.find("th", 7, 14)) Output: 11	2						
21	Referential Integrity is enforced using foreign keys as they connect two or more tables. For eg. let there be two tables CUSTOMER (CustNo, Name, Address) and Order (OrderNo, OrderDate, OrderName, CustNo). Now, if the tables are not connected using foreign keys and if a customer who has made an order is deleted, then it will be not possible to fulfil the order. Hence, foreign keys constraint are used so that this problem does not arise. This is called as referential integrity. <i>There could be other relevant examples also.</i>	2						
22	Answer: A7B5C3D1 <i>Full marks for correct answer, 0 for incorrect answer.</i>	2						
23	Expand the following terms: ½ mark for each correct answer. i. PPP - Point to Point Protocol ii. HTTP – Hyper Text Transfer Protocol iii. POP – Post Office Protocol iv. FTP – File Transfer Protocol	2						
24	2 advantages of Star topology – 1. Easy to expand 2. Reliable – Node failure does not cause network failure. <i>Or any other two advantages.</i> OR 4 unguided media – Radiowave, Microwave, Satellite, Infrared (1/2 mark for each correct media)	2						
25	Difference between DROP and DELETE command in SQL <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">DROP</th> <th style="text-align: left; padding: 5px;">DELETE</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">It is DDL command to physically remove a table</td> <td style="padding: 5px;">It is DML command. It is used to remove data from a table.</td> </tr> <tr> <td style="padding: 5px;">Syntax Drop table <tablename>;</td> <td style="padding: 5px;">Syntax: Delete from <table> where <condition>;</td> </tr> </tbody> </table> <i>Or any other two differences. (half mark for each difference)</i> OR	DROP	DELETE	It is DDL command to physically remove a table	It is DML command. It is used to remove data from a table.	Syntax Drop table <tablename>;	Syntax: Delete from <table> where <condition>;	2
DROP	DELETE							
It is DDL command to physically remove a table	It is DML command. It is used to remove data from a table.							
Syntax Drop table <tablename>;	Syntax: Delete from <table> where <condition>;							

	HAVING	WHERE	
	Used with Group By clause on groups of rows.	It works on one row at a time.	
	Example Select count(empid), deptt From employee Group by deptt Having count(deptt)>2;	Syntax: Select * From employee Where address = 'delhi';	
	<i>Or some other (half mark for each difference)</i>		

SECTION - C

26	<pre>def Change (VALUES) : for i in range (len (VALUES)) : if i%2 == 1: num[i] = num[i] * 2 print (VALUES)</pre>	<i>1 mark for for loop 1 lark for condition ½ mark for multiplying by 2 ½ mark to print Any other relevant code can also be considered.</i>	3
----	--	---	---

27	<pre>def display_words() : fin = open('PARA.TXT', 'r') para=fin.read() lst = para.split() for word in lst: if len(word)>5: print(word) fin.close()</pre>	<i>½ mark for opening file in correct mode ½ mark for read function ½ mark for split function ½ mark for for loop ½ mark for condition ½ mark for display and close Other working code is also allowed</i>	3
----	---	--	---

OR

	<pre>def display_lines() : fin = open('PARA.TXT', 'r') count=0 lst=fin.readlines() for line in lst: l = line.strip().split() if l[0]=='It': count = count+1 print(count) fin.close()</pre>	<i>½ mark for opening file in correct mode ½ mark for readlines function ½ mark for loop ½ mark for strip and split function ½ mark for condition and increment ½ mark for display and close Other working code is also allowed</i>	
--	--	---	--

28	<i>1 mark for correct sql query. 0 for incorrect or partially correct answer.</i> Outputs of the SQL queries (a) to (c) based on the relation STOCK i) SELECT * FROM STOCK ORDER BY Stkdate DESC; ii) SELECT * FROM STOCK WHERE Dcode=102 AND Qty > 50; iii) SELECT Itname, Dcode, Qty FROM STOCK WHRE Qty BETWEEN 50 AND 100;	3
----	---	---

29	Write outputs for the following SQL queries based on table EMP and DEPT <i>One mark for each correct output. No mark for incorrect answer</i>	3															
	<table border="1"> <tr> <td>i)</td> <td>dno</td> <td>MAX(salary)</td> </tr> <tr> <td></td> <td>-----</td> <td></td> </tr> <tr> <td></td> <td>10</td> <td>6000</td> </tr> <tr> <td></td> <td>15</td> <td>6000</td> </tr> <tr> <td></td> <td>20</td> <td>7000</td> </tr> </table>	i)	dno	MAX(salary)		-----			10	6000		15	6000		20	7000	
i)	dno	MAX(salary)															

	10	6000															
	15	6000															
	20	7000															

ii)	COUNT(DISTINCT(gender)) ----- 2
iii)	<pre> ename dname salary ----- TOM HR 5000 BOB FIN 6000 PAT HR 6000 JOE FIN 5000 </pre>

30	<pre> fruits=[] # empty stack def PUSH(lst): # lst has names of fruits for name in lst: if name[0]=='A' or name[0]=='O': fruits.append(name) def POP(): if len(fruits)==0: print('stack empty') else: name = fruits.pop() print(name) </pre> <p><i>1.5 marks for push and 1.5 marks for pop. Other correct methods can also be considered.</i></p> <p>OR</p> <pre> NameStk=[] def PUSH(names_lst): for name in names_lst: if len(name)==3: NameStk.append(name) # display the stack print(NameStk[::-1]) </pre> <p><i>2 marks to push elements and 1 marks to display. Other correct methods can also be considered.</i></p>	3
----	---	---

SECTION - D

31	<p><i>1 mark for each correct answer</i></p> <p>a) Most suitable place to install server is Bravo block as it has maximum number of computers and therefore this block caters to maximum traffic.</p> <p>b) Layout for wired connectivity</p> <div data-bbox="488 1591 1365 1864" data-label="Diagram"> <pre> graph TD Alpha[Alpha] -- 50 --> Charlie[Charlie] Alpha -- 50 --> Delta[Delta] Bravo[Bravo] -- 80 --> Charlie Bravo -- 50 --> Delta Charlie -- 60 --> Delta </pre> </div> <p>c) Switches will be placed in all blocks. Modem will be placed in Bravo block.</p> <p>d) Repeater will be placed between Charlie and Bravo block.</p> <p>e) Fastest link from main campus to remote campus 5km away will be Optical Fiber Cable.</p>	5
----	---	---

32 (a)	Output: 22 #40 #9 #13 # 2 marks for correct answer, 0 for incorrect.	2		
32 (b)	<p>1 mark for each correct statement. 0 for incorrect.</p> <p>Write the following missing statements to complete the code: Statement 1 – to form the cursor object Statement 2 – to execute the command that inserts the record in the table Student. Statement 3- to add the record permanently in the database</p> <pre>import mysql.connector as mydb mycon = mydb.connect (host = "localhost", user = "root", passwd = "system", database = "Admin") cursor = <u>mycon.cursor()</u> #Statement 1 sql = "UPDATE BOOK SET PRICE = PRICE + 100 WHERE Book_Name like '%C++%' " cursor.<u>execute(sql)</u> #Statement 2 <u>mycon.commit()</u> #Statement 3 mycon.close()</pre>	3		
33	<p>1 mark for each correct answer. No marks for incorrect one.</p> <p>a) <u>import csv</u> # Statement 1 b) <u>csvwriter.writerow(headings)</u> # Statement 2 c) <u>csvwriter.writerows(data)</u> # Statement 3 d) <u>csv.reader(f)</u>: # Statement 4 e) Output ['Country', 'Capital', 'Game'] ['India', 'Delhi', 'Hockey'] ['USA', 'Washington DC', 'Ice Hockey'] ['New Zealand', 'Wellington', 'Rugby']</p> <p>OR</p> <table border="1" data-bbox="178 1255 1404 1692"> <tr> <td data-bbox="178 1255 795 1692"> <pre>import pickle def read_binary(): tup=() fin = open('staff.dat','rb') try: tup = pickle.load(fin) if tup[3] > 5000: print(tup) except: print('some error ocured') fin.close()</pre> </td> <td data-bbox="795 1255 1404 1692"> <p>½ mark for import file ½ mark to declare tuple ½ mark to open file 1 mark for try and except block 1 mark for using pickle.load function 1 mark for condition and print data ½ mark to close file</p> </td> </tr> </table>	<pre>import pickle def read_binary(): tup=() fin = open('staff.dat','rb') try: tup = pickle.load(fin) if tup[3] > 5000: print(tup) except: print('some error ocured') fin.close()</pre>	<p>½ mark for import file ½ mark to declare tuple ½ mark to open file 1 mark for try and except block 1 mark for using pickle.load function 1 mark for condition and print data ½ mark to close file</p>	
<pre>import pickle def read_binary(): tup=() fin = open('staff.dat','rb') try: tup = pickle.load(fin) if tup[3] > 5000: print(tup) except: print('some error ocured') fin.close()</pre>	<p>½ mark for import file ½ mark to declare tuple ½ mark to open file 1 mark for try and except block 1 mark for using pickle.load function 1 mark for condition and print data ½ mark to close file</p>			
SECTION – E				
34	<p>1 mark each for correct answer. No mark for partially correct query.</p> <p>a) SELECT * FROM PRODUCTS WHERE Manufacturer <> 'Samsung'; b) SELECT PName FROM PRODUCTS WHERE Manufacturer = 'Samsung'; c) SELECT PName FROM PRODUCTS WHERE Price > 20000; d) SELECT PName FROM PRODUCTS WHERE PName like 'W%'</p>	<p>1 1 1 1</p>		

35	<p>a) Statement 6 will be printed <i>1 mark for correct answer, 0 for incorrect one</i></p> <p>b) If location is Chennai and he is paid more than or equal to Rs. 100000 <i>1 mark even if answer says more than 100000. 0 for incorrect one</i></p> <p>c) No way I accept the offer <i>1 mark for each correct line of output, 0 for incorrect one</i></p>	1+1+2
----	---	-------