KENDRIYA VIDYALAYA SANGATHAN, JAIPUR REGION

3rd Pre-Board Examination 2020-21

Informatics Practices

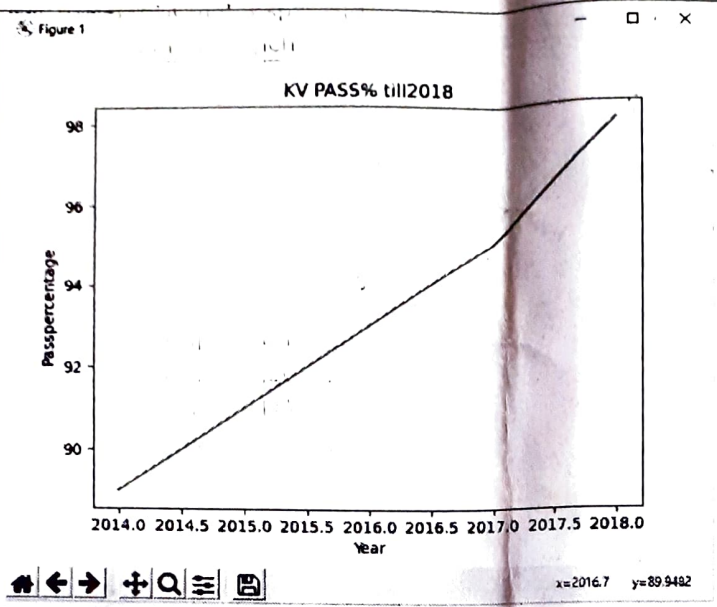
Class 12

Marking Scheme

1	a. False b. B. false	1
2	False	
3	Aggregate functions	1
4	Series( )	1
5	0,1,2,3,4.	
6	hisogram	
7	Shareware	
8	charts	1
9	Peer-to- Peer	
10	Home-Page	
11	False	
12	Installing Antivirus	1
13	Rows	1
14	Communication medium	1
15	Authentication	
16	Protocols	
17	c. Both a & b	
18	Min ()	
19	C having	1
20	a. To connect LANs.	1
21	False	1
22	(i) print(df.loc[0]) (ii) print(df['pname']) (iii) code pname price 0 x01 Talcum powder 200 1 x02 Face wash 50 (iv) 0 x01 1 x02 2 x03 Name: code, dtype: object (v) print(df[0:2][0:2]) 1 mark for correct answer	
23	(i) Select * from student where marks is null; (ii) Select * from student order by rollno desc;	

	(iii) Select ucase(name), marks from student; (iv) Select min(marks) from student; (v) both (a) & (b)	
24	Int64Index([100, 101, 102, 103, 104], dtype='int64') 100 1000 101 1000 102 1000 103 1000 104 1000 dtype: int64 1 mark each	
25	Single row functions give output for each row where as multiple row functions give one output for no. of rows . example single row text,maths functions, multiple row aggregate functions 1 mark for def. 1 mark for example. OR NULL values are ignored by aggregate functions. Example any 1 mark answer 1 for example.	
26	(a) 4 (b) 1.6	
27	(a) s.index=['a1','a2','a3','a4'] (b) import pandas 1 mark for each	2
28	These two queries give different output because first query count number of rows in a table where as second query gives number of name in column which may have null value. 2 marks for correct reply.	
29	(A) Hello (B) Hello OR (A) select dayname(now()); (B) 23	1 mark for each
30	import pandas as pd data={'code':['x01','x02','x03','x04','x05'],'pname':['Talcum powder','Face wash','Bath soap','Shampoo','Tooth paste'], 'price':[200,50,40,200,300]} df=pd.DataFrame(data) 1 mark for import and dictionary 1 mark for dataframe function and print	
31	(A) File transfer protocol (B) Internet Service Provider (C) World wide web (D) Personal Area Network ½ mark for each	
32	Cyber law encompasses a wide variety of legal and political issues related to internet including intellectual property, privacy, freedom of expression. 1 mark for each.	

33	We call this type of activity as Eavesdropping Precautions we can take in this : • • Alert employees. • • Round the clock control over physical access by outsiders to the area to be protected. • • Continuous supervision/observation of all service personnel allowed into the area for repairs or to make alterations. • • Thorough inspection by a qualified technical countermeasures specialist of all new furnishings, decorations, or equipment brought into the area. 1 mark for naming the activity 1 mark for mentioning any one risk .	
34	(a) Series() (b) Int (c) s.name="hello"	
35	Recycle ewaste: (a) Use certified e-waste recycler (b) Visit civic institutions (c) Explore retail options (d) Donate your electronics 1 mark for each Social networking merits: (A) Lowest cost (B) Huge potential audience (C) Closer connection with your client (D) Source of instant feedback Social networking demerits: (a) Unreliable information (b) Lack of control (c) Can be addicted 1&1/2 for 3 merits and 1 and ½ for 3 demerits.	

36	 1 mark for correct line 1 mark for title 1 mark for x,y labels OR import matplotlib.pyplot as plt import numpy as np label = ['Anil', 'Vikas', 'Dharma', 'Mahen', 'Manish', 'Rajesh'] per = [94,85,45,25,50,54] index = np.arange(len(label)) plt.bar(index, per) (statement1) plt.xlabel('Student Name', fontsize=5) plt.ylabel('Percentage', fontsize=5) (statement2) plt.xticks(index, label, fontsize=7, rotation=50) plt.title('Percentage of Marks achieve by student Class XII') plt.show() (statement 3) 1 mark for each statement.	
37	(a) Select sum(price) from vehicle; (b) Select count(type),company from vehicle group by company; (c) Select * from vehicle order by company; 1 mark for each	
38	(A)import pandas as pd df=pd.read_csv("C:\\student.csv") print(df) 2 marks (c) print(df[df['marks']>2]) 1 mark (d) for i,j in df.iteritems(): print(i,j) 2marks	
39	(a) Display author in upper case . Ans:- select ucase(author) from library; (b) Display minimum and maximum price from table library.	

	Ans:- select min(price),max(price) from library; (c) Display the name of publisher and quantity multiplied by price. Ans:- select publisher, quantity*price from library; (d) Display detail of author whose name start with 'F'. Ans:- select * from library where author like "F%"; (e) Display total quantity of books of each subject. Ans:- select count(quantity) from library group by subject; 1 mark for each correct answer. OR (A) Display the price of books after rounding it off to zero decimal place. Ans:- select round(price) from library; (B) Display the current date and time. Ans:- select now(); (C) Display the publisher name after removing all the spaces. Ans:- select trim(publisher) from library; (D) Display the first four characters of publisher name. Ans:- select length(publisher) from library; Display the length of string("good morning"); Ans:- select length("good morning"); 1 mark for each correct answer.	
40	i. Suggest a suitable cable layout for networking the computer of all labs and offices. Ans:- any suitable layout 1 mark ii. Suggest the placement of Hub/Switch/Repeater in the network. Ans:- switch in every lab and office repeater where distance is more than 100. 1 mark iii. Mention the fast way to provide internet accessibility to all wings. Ans:- lease line, broad band, fiber to home or any other 1 mark iv. In which wing server will be installed. Ans:- lab 1 1 mark	

	v. Which device is required to connect computer with internet cable, without which internet access is not possible but network works. Ans:- Modem 1 mark	