Disclaimer: The questions given here are indicative of the format of questions in the MCQ section of the end semester exam, and not exhaustive. The final question paper for your exam will be set by the University and will have a wide range of questions. Please use this model paper in conjunction with your other course materials to prepare well for your exams.

Sl. No.	Question	A	B	C	D	Correct Answer
1	What is the output? def function1(number): return number + 25 function1(5) print(number)	25	5	10	Name Error	Name Error
2	What is the output for the code? def function(name, age=20): print(name, age) function('Ananda', 25)	Ananda 25	Ananda 20	Error	Ananda	Ananda 25

3	What will be the Output?
	class Student1:
	def __init__(self,name,id):
	self.name=name
	self.id=id
	print(self.id)
	std2=Student1("Rima",10)
	std2.id=2
	print(std2.id)
		102	2,10	100,2	2	102

4	Consider the following multi-dimensional array named multi_arr: [[2 3 4] [5 7 8]] What would be the output of the following code snippet?: multi_arr[0,0:2]	[2 3 4]	[2 3]	[5 7 8]	[5 7]	[2 3]
5	Which library is preferred when data is in Tabular Format?	Pandas	Numpy	Matplotlib	Seaborn	Pandas
6	Which of the following code will generate the following output? Jan 31 Feb 28 Mar 31	import pandas as pdS1 = pd.Series(data = [31,28,31], index=["Jan","Feb","Mar"]) print(S1)	import pandas as pdS1 = pd.Series(data = (31,28,31]), index=["Feb","Mar","April]) print(S1)	import pandas as pdS1 = pd.Series(data = (31,29,31]), index=["Feb","Jan","April])print(S1)	import pandas as pdS1 = pd.Series(data = (30,28,31]), index=["Feb","Mar","Jan"]) print(S1)	import pandas as pdS1 = pd.Series(data = [31,28,31], index=["Jan","Feb","Mar"]) print(S1)
7	Which of the following is the correct syntax to provide label ("Demo y label") to y-axis for a graph? (Assuming the alias for matplotlib.pyplot is plt)	plt.xlabel ("Demo y label")	plt.label("Demo y label")	plt.ylabel('Demo y label')	plot.ylabel ("Demo y label")	plt.ylabel('Demo y label')

8	Consider the following lists: x = [11,22,33,44,55] y = [9,18,27,36,45] Which of the following is the correct syntax for plotting a scatter plot using the above lists?	import matplotlib.pyplot as pltx = [11,22,33,44,55] y = [9,18,27,36,45] plt.scatter(x,y) plt.show()	import matplotlib.pyplot as pltx = [11,22,33,44,55] y = [9,18,27,36,45] plt.barh(x,y)plt. show()	import matplotlib.pyplot as pltx = [11,22,33,44,55] y = [9,18,27,36,45] plt.bar(x,y)plt. show()	import matplotlib.pyplot as pltx = [11,22,33,44,55] y = [9,18,27,36,45] plt.show()	import matplotlib.pyplot as pltx = [11,22,33,44,55] y = [9,18,27,36,45] plt.scatter(x,y) plt.show()
9	X is a plot that creates a joinplot between every possible numerical column in a dataset. Which of the following is X?	barplot	pieplot	scatter plot	pairplot	pairplot
10	Hexagonal binning is used in X analysis when the data is Y in density i.e. when data is scattered and difficult to analyze through scatterplots. What are X and Y respectively?	bivariate, sparse	univariate, sparse	bivariate, dense	univariate, dense	bivariate, sparse
11	Consider a situation where in an university that conducts online course all over india conducts the survey .Information from the student is collected once a year regarding the feedback for teaching faculty. The information regarding the content delivery, portion completion, and so on. What type of survey does this comes under?	Derived statistics	Census	Sample survey	Descriptive statistics	Census
12	Choose the correct statement from the given below statements S1: The statistics cannot be performed on qualitative data S2: The statistics can be performed on qualitative data if quantified	S1 only follows	S2 only follows	S1 and S2 both follows	S1 and S2 both do not follows	S2 only follows
13	Considering two events A and B, the occurrence of B and the non-occurrence of A are represented by which of the following?	A-bar union B	A-bar intersection B	B-bar union A	B-bar intersection A	A-bar intersection B
14	Find the probability of selecting a black card or a 7 from a deck of 52 cards.	0.69	0.81	0.27	0.54	0.54
15	How to calculate the binomial distribution probability (non-cumulative) in Microsoft excel with given parameters: Value of x is stored in cell C2 The probability of success = 0.7 Trials = 7	BINOM.DIST (C2,7,0.7,1)	BINOM.DIST (C2,7,0.7,0)	BINOM.DIST (D2,7,0.3,0)	BINOM.DIST (C2,3,0.3,0)	BINOM.DIST (C2,7,0.7,0)

16	Consider the poisson distribution expression: P(x)= (e^-λ) (λ^ x) / x! What is 'λ' in the above expression?	Standard deviation of poisson distribution	Mean of poisson distribution	Successes per unit	Probability of x successes	Mean of poisson distribution
17	When the curve is a bell curve we consider it to be a normal distribution. Within the range of (-2σ ,2σ) how many percentage of the data points will fall?	0.34	0.64	0.68	0.95	0.95
18	In the normal distribution, what is the relationship between the mean, mode and median?	Mean>mode>median	Mean<Mode<median	Mean=mode=median	Mean<mode>median	Mean=mode=median
19	When the mean is 0.295 and the x=0.35 let the standard deviation be 0.025. Find the value of z.	1.9	2.2	3.3	4.8	2.2
20	The complete set of sources from where the data collection is possible is known as which of the following?	Population	Sample	Confidence interval	Crowd	Population
21	If out of 500 clocks sold by a shop, 48% were digital. If a random sample of 100 clocks are considered, what is the probability that proportion of the sample that is digital is between 50% and 55%?	0.155	0.265	0.355	0.405	0.265
22	Which of the following is true?	Accuracy of population mean is higher than sample mean	Accuracy of sample mean is higher than population mean	Accuracy of sample mean and population mean are equal	Sample mean is twice as accurate as population mean	Accuracy of population mean is higher than sample mean
23	In an industrial plant, the flow rate of a cryogenic gas through 4 different outlets is measured in m/s. The data from one such random sample is presented above. The p-value for a one-way ANOVA conducted on this data is?	0.74	0.0074	0.72	0.089	0.0074
24	The incharge of a beverage bottling plant is interested in measuring the fill rate in cu.m/s for 500 ml PET bottles from 5 different filling stations. The data observed for a random sample generated in a study he conducts is presented above. The p-value of a one-way ANOVA conducted on this data is?	0.828	0.054	0.019	0.021	0.828
25	For a symmetrical distribution which of the following is true?	β1>0	β1<0	β1=0	β1=3	β1=0
26	If mean=25, median=30 and standard deviation=15, the distribution will be which of the following?	Symmetrical	Positively Skewed	Negatively Skewed	Normal	Negatively Skewed
27	Binomial distribution will be symmetric in which of the following situation?	p>q	p=q	np>npq	p<q	p=q

28	In a binomial distribution which of the following is not possible to calculate?	P(X<0)	P(X>0)	P(X=0)	P(0<=X<=n)	P(X<0)
29	How to create a series from an array? Assuming pandas and NumPy haven't previously been imported.	import NumPy as npa=np. array['a','b'] b=pd.series(a)	import NumPy as npa=np. array['a','b'] b=pd.series(b)	import NumPy as npa=np. array('a','b') b=pd.series(b)	import numpy as npimport pandas as pd a=np.array (['a','b'])b=pd. Series(a)	import numpy as npimport pandas as pd a=np.array (['a','b'])b=pd. Series(a)
30	Write the output of the following : import pandas as pd series1 = pd.Series([100,220,30]) print(series1)	0 1001 2202 30 dtype: int64	Output:102030 dtype: int64	Output:012 dtype: int64	Output:123 dtype: int64	0 1001 2202 30 dtype: int64