

BHARATIYA VIDYA BHAVAN'S SARDAR PATEL INSTITUTE OF TECHNOLOGY

MUNSHI NAGAR, ANDHERI (WEST), MUMBAI – 400 058, India (Autonomous College Affiliated to University of Mumbai)

ISE Examination 2019-20

Max. Marks: 20 Class: FYMCA

Course Code: MCA 23

Subject: Probability and Statistics

Duration: 1 hrs Semester: II

Date: 06 / 03/2020

Time: 12-01 pm

Instructions:

(1) All questions are compulsory.

(2) Use of scientific calculator is allowed.

(3) Assume any necessary data but justify the same.

													M	arks	CO-BL-P
(a)	Calculate the Bowley's coefficient of skewness for the following data.												1	5]	2-1-1.1.
	C.I. 30-35 35-40 40-45 45-50 50-55 55-60									•	2-1-1.1.2				
		Frequen		5	10	-	40-45 30	45-50		5 5	5-60				
	OR	Troque	109	-	10		30	33	15		5				
	The following is the age distribution of 125 persons. Find the coefficient of variation.												Г	51	2-1-1.1.
							Paradia		o cociii	Ciciii	or va	iation.	L	5]	2-1-1.1.2
	Age		0-10	10-2		30	30-40	40-50	50-60	60)-70	70-80	1		
	No pers	of	15	15	23		22	25	10		5	10			
(b)	Find the missing frequency of the following, if mode=136cms.												[:	5]	1-1-1.1.1
	Cla	ass interval	terval 120-1		125-130) 1	130-135	135-14	10 14	115	14	5 150			
		frequency		7		10 18		7	14			145-150			
	Trequency														
	The second of th		The following table gives the number of accidents in a city during 10 days of time. Find												
2.	The fol	lowing table	e gives	the n	umber o	face	cidents i	n a city	during	10 da	vs of	time Fi	nd [4	51	3_1_1 1 1
	The fol whether	lowing table the acciden	e gives	the nunifor	umber o	f acc	cidents i ted over	n a city that per	during iod.	10 da	ys of	time. Fi	nd [5	5]	3-4-1.1.1
	The fol whether	lowing table the accident	e gives	the nunifor	umber omly dist	f accribu	cidents i	n a city that per	during iod.	10 da	ys of	_	nd [5	5]	3-4-1.1.1
	The fol whether	Day Number	of	the nunifor	umber omly dist 2 3 8 10	f accributed 4	ted over	that per	during iod. 7 8			_	nd [5	5]	3-4-1.1.1
	Whether	Day Number accidents	of	unifor 1 8	mly dist 2 3 8 10	ribu 4	ted over 5 12	that per 6 8 1	iod. 7 8 0 14	9	10			5]	3-4-1.1.1
	Whether	Day Number	of	unifor 1 8	mly dist 2 3 8 10	ribu 4	ted over 5 12	that per 6 8 1	iod. 7 8 0 14	9	10			5]	3-4-1.1.1
2. (a)	Whether	Day Number accidents	of	unifor 1 8	mly dist 2 3 8 10	ribu 4	ted over 5 12	that per 6 8 1	iod. 7 8 0 14	9	10			5]	3-4-1.1.1
(a)	(Given	Day Number accidents for 9 degree	of es of fr	unifor 1 8 eedon	mly dist 2 3 8 10 n at 5% l	ribu 4 9 evel	ted over 5 12 of signi	that per 6 8 1 ficance,	iod. 7 8 0 14 the tab	9 10 le valu	10 11 ue of	χ^2 is 16.9	9)		
(a)	(Given	Day Number accidents for 9 degree	of sof fr	unifor 1 8 eedon	mly dist 2 3 8 10 n at 5% l	evel	ted over 5 12 of signi	6 8 1 ficance,	the tab	9 10 le valu	10 11 11 11 10 11	χ^2 is 16.9	9) [5		3-4-1.1.1
(a)	(Given OR A rando hypothe	Day Number accidents for 9 degree m sample of sis that the	of ses of fr	unifor 1 8 eedon tuden veight	mly dist 2 3 8 10 at 5% l ts gave r in the p	evel	ted over 5 12 of signi	6 8 1 ficance,	the tab	9 10 le valu	10 11 11 11 10 11	χ^2 is 16.9	9) [5		
(a)	(Given OR A rando hypothe [Give at	Day Number accidents for 9 degree	of ses of from the front of 100 ses of from the front of 100 ses of from the front of 100 ses of front of	eedon tuden veight	mly dist 2 3 8 10 at 5% l ts gave many sin the part of the pa	evel	ted over 5 12 of signi	6 8 1 ficance,	the tab	9 10 le valu	10 11 11 11 10 11	χ^2 is 16.9	9) [5 he		3-4-1.1.1
(a)	(Given OR A rando hypothe Give at Fit a line	Day Number accidents for 9 degree m sample of sis that the 1% level of ear regression	of some an wear of significant of salary	eedon tuden veight	mly dist 2 3 8 10 ts gave note in the poly- te $z_{\alpha}=2.58$ to year.	evel nean	ted over 5 12 of signification is	6 8 1 ficance, of 58 kg 60 kg. U	the tab	9 10 le valu	10 11 ae of of 4 k	g. Test the	9) [5]	2-1-1.1.1
(a)	(Given OR A rando hypothe Give at Fit a line	Day Number accidents for 9 degree m sample of sis that the 1% level of ear regression. Year	of of some an very significant of sales	tudent veight icance ales or	mly dist 2 3 8 10 at 5% l ts gave r in the paragram at z_{α} in the	evel nean	ted over 5 12 of signification is	that per 6 8 1 ificance, 6 6 kg. U	iod. 7 8 0 14 the tab 3. with a se 1%	9 10 le valu	10 11 11 of 4 k of sign	g. Test the	9) [5 he]	3-4-1.1.1
(a)	(Given OR A rando hypothe Give at Fit a line	Day Number accidents for 9 degree m sample of sis that the 1% level of ear regression Year es('000	of some an wear of significant of salary	tudent veight icance ales or	mly dist 2 3 8 10 ts gave note in the poly- te $z_{\alpha}=2.58$ to year.	evel nean	ted over 5 12 of signification is	that per 6 8 1 ificance, 6 6 kg. U	the tab	9 10 le valu	10 11 11 of 4 k of sign	g. Test the	9) [5 he]	2-1-1.1.1