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	Reg	istration No :							
Tot	al Nu	mber of Pages	s : 02					15M	MBA NG10 ²
	210	0 21		STICS AND BRANC Time : Max Ma	Examination DECISION S CH : MBA 3 Hours arks : 100 DE : E635			210	
Ar	nswer	Question No.	1 (Part-1) wl	hich is com	pulsory, an	y EIGHT fro	om Part-II a	nd any	тwo
	21	o Th	e figures in	-	Part-III. and margin	indicate ₂ ma	arks.	210	
				Pa	art- I				
Q1	-)	Short Answer		ons (Answer	All-10)			(2	2 x 10)
	a) b)	The mean of dis The average of					mbers is 50.	Find	
	e)	average of all nu The arithmetic n	umbers taken	together.	-				
	c) d) ₂₁₀	Find mean if C.	√ = 5% and va		210 210	210	wo numbers.	210	
	e) f)	Compute S.D of Find standard e		ition coefficie	nt if r=0.5				
	g)	If B \subset A, find P ($\frac{2}{3}$)	4						
	h)	One card is draw	, wn from a pao				rawn is an a	ce?	
	i) j)	If λ =20 persons				•	o. that the se	ervice	
	21	facility is busy.	0	210	210	210		210	
				_					
00			A		rt- II	ny Finht aut			(0 ~ 0)
Q2	a)	Focused-Short Find N. if $R=\frac{2}{3}$ ar		e Questions	- (Answer A		t of Twelve)		(6 x 8)
Q2	•	Find N, if $R = \frac{2}{3}$ and Two variables g	nd ΣD^2 =55 (R ave the follow	e Questions t = Rank Corr ving data :	- (Answer A		t of Twelve)		(6 x 8)
Q2	•	Find N, if $R = \frac{2}{3}$ and Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$	nd ΣD^2 =55 (R ave the follow $\delta_x = 4, \delta_y = 3$	e Questions = Rank Corr ving data : 8, r=0.7	e- (Answer A relation Coeffi	cient)	t of Twelve)		(6 x 8)
Q2	b)	Find N, if $R = \frac{2}{3}$ and Two variables g	nd $\Sigma D^2 = 55$ (R ave the follow $\delta_x = 4, \delta_y = 3$ of y when x=24	e Questions = Rank Corr ving data : a, r=0.7 4 from the reg	e- (Answer A relation Coeffi	cient)	t of Twelve)	210	(6 x 8)
Q2	b)	Find N, if $R=\frac{2}{3}$ and Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$ Find the value o Find median from	nd ΣD^2 =55 (R ave the follow $\delta_x = 4, \delta_y = 3$ of y when x=24 on the following Less than	e Questions = Rank Corr ving data : b, r=0.7 4 from the reg ng table : Less than	elation Coeffi gression equa 210 Less than	cient) ation. 210 Less than	Less than		(6 x 8)
Q2	b)	Find N, if $R = \frac{2}{3}$ and Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$ Find the value o Find median from Marks	nd ΣD^2 =55 (R ave the follow $\delta_x = 4, \delta_y = 3$ of y when x=24 m the following Less than 10	be Questions R = Rank Corr ving data : B, r=0.7 4 from the reg ng table :	elation Coeffi gression equa 210 Less than 30	cient) ation. 210 Less than 40	Less than 50		(6 x 8)
Q2	b)	Find N, if $R=\frac{2}{3}$ and Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$ Find the value o Find median from	nd ΣD^2 =55 (R ave the follow $\delta_x = 4, \delta_y = 3$ of y when x=24 on the following Less than	e Questions = Rank Corr ving data : b, r=0.7 4 from the reg ng table : Less than	elation Coeffi gression equa 210 Less than	cient) ation. 210 Less than	Less than		(6 x 8)
Q2	b)	Find N, if $R=\frac{2}{3}$ and Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$ Find the value of Find median from Marks No. of Students	nd ΣD^2 =55 (R ave the follow $\delta_x = 4, \delta_y = 3$ f y when x=24 m the followin Less than 10 3	e Questions = Rank Corr ving data : 4, r=0.7 4 from the reg table : Less than 20 8	relation Coeffi gression equa 210 Less than 30 17	cient) ation. 210 Less than 40 20	Less than 50 22	210	(6 x 8)
Q2	b) c) ₂₁₀ d)	Find N, if $R=\frac{2}{3}$ ar Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$ Find the value o Find median from Marks No. of Students If the means of and 4 respective	and ΣD^2 =55 (R ave the follow $\delta_x = 4, \delta_y = 3$ of y when x=2- on the following Less than 10 3 two groups c	be Questions R = Rank Corr ving data : A, r=0.7 4 from the regonant to the	elation Coeffi gression equa 210 Less than 30 17 observations 8 and 4 resp	cient) ation. 210 Less than 40 20 are equal ar ectively, find	Less than 50 22 nd their S.D grouped S.D	210	(6 x 8)
Q2	b) c) ₂₁₀	Find N, if $R = \frac{2}{3}$ ar Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$ Find the value o Find median from Marks No. of Students If the means of and 4 respective If $Q_1 = 26, Q_3 = 7$ If a random var	and $\Sigma D^2 = 55$ (R ave the follow $\delta_x = 4, \delta_y = 3$ of y when x=24 m the following Less than 10 3 two groups of ely, find group 6 and Bowley	e Questions a = Rank Corr ving data : a, r=0.7 4 from the regination of the regeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee	elation Coeffi gression equa 210 Less than 30 17 observations 8 and .4 resp of skewness =	cient) ation. 210 Less than 40 20 are equal ar ectively, find = 0.2, Find me	Less than 50 22 nd their S.D grouped S.D edian.	210 	(6 x 8)
Q2	b) c) ₂₁₀ d) e) ²¹⁰ f)	Find N, if $R = \frac{2}{3}$ and Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$ Find the value of Find median from Marks No. of Students If the means of and 4 respective If $Q_1 = 26, Q_3 = 7$	and $\Sigma D^2 = 55$ (R ave the follow $\delta_x = 4, \delta_y = 3$ of y when x=24 m the following Less than 10 3 two groups of ely, find group 6 and Bowley iable x follow	e Questions = Rank Corr ving data : a, r=0.7 4 from the regonant table : Less than 20 8 of 30 and 50 bed S.D. are y coefficient of y s Normal dis	elation Coeffi gression equa 210 Less than 30 17 observations 8 and 4 resp of skewness =	cient) ation. 210 Less than 40 20 are equal ar ectively, find = 0.2, Find me mean = 18 a	Less than 50 22 nd their S.D grouped S.D edian. and S.D.=25	210 	(6 x 8)
Q2	b) c) ₂₁₀ d) e) ²¹⁰ f) g) h)	Find N, if $R=\frac{2}{3}$ ar Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$ Find the value o Find median from Marks No. of Students If the means of and 4 respective If $Q_1 = 26, Q_3 = 7$ If a random var P(-31 < x < 67) A Binomial rand Two dice are tos	and ΣD^2 =55 (R ave the follow $\delta_x = 4, \delta_y = 3$ of y when x=2- on the following Less than 10 3 two groups of ely, find group 6 and Bowley iable x follow om variable x ssed at once.	e Questions a Rank Corr ving data : a, r=0.7 4 from the regination of the regin	 Answer A relation Coeffination Coefficient Coefficient	cient) ation. 210 Less than 40 20 are equal ar ectively, find = 0.2, Find me mean = 18 a x=4) = P(x=2) is neither 7 find	Less than 50 22 nd their S.D grouped S.D edian. and S.D.=25 find 'p'. nor 11?	210 	(6 x 8)
Q2	b) c) ₂₁₀ d) e) ²¹⁰ f) g)	Find N, if $R=\frac{2}{3}$ ar Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$ Find the value o Find median from Marks No. of Students If the means of and 4 respective If $Q_1 = 26, Q_3 = 7$ If a random var P(-31 < x < 67) A Binomial rand	and ΣD^2 =55 (R ave the follow $\delta_x = 4, \delta_y = 3$ of y when x=2- on the following Less than 10 3 two groups of ely, find group 6 and Bowley iable x follow om variable x ssed at once.	e Questions a = Rank Corr ving data : a, r=0.7 4 from the reginstrate ng table : Less than 20 8 of 30 and 50 oed S.D. are y coefficient of y coef	 Answer A relation Coeffination Coeffination Coeffination Coeffination Coeffination Coeffination Coeffination Coefficient Coef	cient) ation. 210 Less than 40 20 are equal ar ectively, find = 0.2, Find me mean = 18 a x=4) = P(x=2) is neither 7 find	Less than 50 22 nd their S.D grouped S.D edian. and S.D.=25 find 'p'. nor 11?	210 	(6 x 8)
Q2	b) c) ₂₁₀ d) e) ²¹⁰ f) g) h)	Find N, if $R = \frac{2}{3}$ ar Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$ Find the value of Find median from Marks No. of Students If the means of and 4 respective If $Q_1 = 26, Q_3 = 7$ If a random var P(-31 < x < 67) A Binomial rand Two dice are toos Find the best act	and $\Sigma D^2 = 55$ (R ave the follow $\delta_x = 4, \delta_y = 3$ of y when x=24 m the following Less than 10 3 two groups of eachy, find group 6 and Bowley iable x follow om variable x ssed at once.	e Questions a = Rank Corr ving data : a, r=0.7 4 from the reginstrate ng table : Less than 20 8 of 30 and 50 oed S.D. are y coefficient of y coef	 Answer A relation Coeffination Coefficient Coefficient	cient) ation. 210 Less than 40 20 are equal ar ectively, find = 0.2, Find me mean = 18 a x=4) = P(x=2) is neither 7 find	Less than 50 22 nd their S.D grouped S.D edian. and S.D.=25 find 'p'. nor 11?	210 	(6 x 8)
Q2	b) c) ₂₁₀ d) e) ²¹⁰ f) g) h) i)	Find N, if $R = \frac{2}{3}$ ar Two variables g $\bar{x} = 20, \bar{y} = 15, \delta$ Find the value of Find median from Marks No. of Students If the means of and 4 respective If $Q_1 = 26, Q_3 = 7$ If a random var P(-31 < x < 67) A Binomial rand Two dice are toos Find the best act	and $\Sigma D^2 = 55$ (R ave the follow $\delta_x = 4, \delta_y = 3$ of y when x=24 m the following Less than 10 3 two groups of ely, find group 6 and Bowley iable x follow om variable x ssed at once.	Questions R = Rank Correlation ving data : a , r=0.7 4 from the regination a from the regination b from the regination	 Answer A relation Coeffination Coefficient C	cient) ation. 210 Less than 40 20 are equal ar ectively, find = 0.2, Find me mean = 18 a x=4) = P(x=2) n is neither 7 n g EMV criterio	Less than 50 22 nd their S.D grouped S.D edian. and S.D.=25 find 'p'. nor 11? on.	210 are 8 .210 5, find	(6 x 8)

210	210	210	210	210	210	210	210

j) The following table gives daily demand of brades in 100 days.

Demand	0	1	2	3	4	5
Frequenc	y 14	16	18	23	19	10

	-	1 2 3	45 55 49	40 40 52	61 48	53 64		
	F	•						
			// /=	/111	61	b /		
	_		A	B 40	C 51	D 67		
		Workers		Job				
Q6		the assignment is given in the fo		that will minimiz	ze the total tin	ne taken in minu		6) 2
				$ \begin{array}{cccccccccccccccccccccccccccccccccccc$				
				B				
Q5	²¹⁰ Solv	e by using domi	nance rule the fo		21	10 21	(1)	6) ²
	(W)	= Ware house, F	P = Plant)					
		Demand	250	300	500			
		P2	15	10	18	500		
	ŀ	P1	25	17	25	300		
	Г		W1	W2	W3	Supply		
Q4	Find 210prob	the optimal cos	-	i' method via VA 210	M for the follo	owing transportat		6)
		2x+4y≤12 4x+2y≤12						
	Max	imize Z = 2x+3y s.t						
Q3	210 Solv	g Answer Type e the following L	Questions (An PP by simplex r	swer Any Two o	out of Four) ₂₁	10 21	¹⁰ (1)	6)
				Part-III				
	(O =	· Origin, D= Dest	tination)					
	-	O3 Demand	7 8	2 10	4 4	7		
	210	02	6	1	4	9	0	4
	010	01 210	D1 4 210	D2 3 210	D3 2	Supply 6		
	l) Obta	ain an initial BFS	and TC from th	e following TP by	y NWCM.			
			1 143]			
			Plav	vor Algo go g				
			Plav	Player B /er A $\begin{bmatrix} -1 & 3 & 2 \\ 3 & 2 & 2 \\ 2 & 0 & 1 \end{bmatrix}$]			

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21			