



**DOON UNIVERSITY, DEHRADUN**  
**Mid Semester Examination, First Semester, 2014**  
**School of Management**  
**MBA (2 yrs. I Sem.)**

**Course: MMS-504: BUSINESS STATISTICS & RESEARCH METHODOLOGY**

*Time Allowed: 1.5 Hours*

*Maximum Marks: 30*

*Note: Attempt All Sections A, B, C.*

SECTION: A *Attempt any five questions*

(Marks: 1\*5)

**Write short notes on the following:**

1. Range
2. Median
3. Standard Deviation
4. Central Tendency
5. Regression
6. Type I and Type II error.

SECTION: B *Attempt all questions*

(Marks: 2\*5)

Q1. Calculate Standard deviation from the following discrete frequency distributions.

Size (X)	4	5	6	7	8	9	10
Frequency	2	12	15	28	20	14	5

Q2. Calculate Median and Mean Deviation from the following data.

Class	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	8	12	25	45	11	9

Q3. Using the following data obtain two regression equations.

x	14	19	24	21	26	22	15	20	19
y	31	36	48	37	50	45	33	41	39

Q4. What do you understand by correlation? Discuss various types of correlation.

Q5. Define hypothesis. Discuss various types of hypothesis & steps involved in testing hypothesis.

SECTION: C *Attempt all questions*

(Marks: 7.5\*2)

Q1. Calculate correlation coefficient between age of husband &amp; wives in the following:

Age of Husbands	Age of Wives					Total
	10-20	20-30	30-40	40-50	50-60	
15-25	6	3	-	-	-	9
25-35	3	16	10	-	-	29
35-45		10	15	7	-	32
45-55	-	-	7	10	4	21
55-65	-	-	-	4	5	9
<b>Total</b>	9	29	32	21	9	100

Q2. Use chi-square test to find out whether there is any association between economic condition at home and I.Q.

Economic Condition	I.Q.		Total
	High	Low	
Rich	460	140	600
Poor	240	160	400
<b>Total</b>	700	300	1000

*Tabulated value of chi-square at 5 % level of significance is 3.84*