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Register Number:

6795

Name of the Candidate:

M.B.A. (RETAIL MANAGEMENT) DEGREE EXAMINATION - 2012**(FIRST YEAR)****(PAPER – III)****130. QUANTITATIVE TECHNIQUE FOR RETAIL**

December)

(Time: 3 Hours

Maximum: 100 Marks

Section – A**(5x3=15 Marks)** ✓**Answer any five questions: All questions carry equal marks:**

1. Define statistics.
2. Write short note on frequency distribution.
3. Define mode.
4. Define range.
5. Define set. Give an example.
6. In how many ways can the letters of the word ENGLISH is arranged?
7. Define the term profit.
8. Write the addition law on probability.

Section – B**(3x10=30 Marks)** ✓**Answer any three questions: All questions carry equal marks**

9. Write brief notes on measures of central tendencies.
10. Calculate the standard deviation for the following table.

C.I	3.5-4.5	4.5-5.5	5.5-6.5	6.5-7.5	7.5-8.5
F	9	14	22	11	17

11. Calculate the co-efficient of correlation for the following data

X	1	2	3	4	5	6	7	8	9
Y	9	8	10	12	11	13	14	16	15

12. If $A = \{1,2,3,4,5,6,7\}$ $B = \{3,4,5,6,7,8,9\}$ $C = \{1,2,4,6,8,9,10\}$

Prove that (i) $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$ (ii) $A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$

13. A bag contains 5 white and 10 red balls. Three balls are taken out a random. Find the probability that all three balls drawn red?

Section – C
(2x15=30 Marks) ✓
Answer any two questions

14. Discuss the different types of diagrams.

15. Calculate the quartile deviation for the following data

<i>C.I</i>	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60
<i>F</i>	50	70	100	180	150	120	70	60

16. The following data relate to the marks of 10 students in the interval test and the university examination for the maximum of 50 in each.

<i>Interval Marks</i>	25	28	30	32	35	36	38	39	42	45
<i>University Marks</i>	20	26	29	30	25	18	26	35	35	46

- Obtain the two regression equations and determine
- The most likely internal mark for the university mark of 25
- The most likely university mark for the internal mark of 30

17. Find the cost of living index number for 2002 on the base of 1991 on the basis from the following data using

 (i) Family budget method
 (ii) Aggregate expenditure method

<i>Commodity</i>	<i>Price in ₹</i>		<i>Quantity in quintals in 1991</i>
	<i>1991</i>	<i>1992</i>	
Rice	7	7.5	6
Wheat	6	6.75	3.5
Flour	5	5	0.5
Oil	30	32	3
Sugar	8	8.5	1

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