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Reg. No. : .....

Name : .....

Second Semester M.A. (Human Resource Management) Degree Examination, August 2016

HRM 2.2.3 – STATISTICS FOR MANAGEMENT

(2014 Admission Onwards)

Time : 3 Hours Max. Marks : 75

PART – I

Answer **all** the questions. **Each** answer shall **not** exceed **50** words. **All** questions carry **equal** marks.

1. What is Pie diagram ?
2. What do you mean by Kurtosis ?
3. Explain Cartogram.
4. Distinguish between Census and sampling methods of data collection.
5. Explain the need for classification and tabulation of data.
6. What is one way analysis of variance ? What are its assumptions ?
7. What is a Scatter diagram ? How is it drawn ?
8. Distinguish between parametric and non-parametric tests.
9. Define Harmonic mean. What are its merits ?
10. Write a brief note on SPSS. **(10×2=20 Marks)**

P.T.O.

PART – II

Answer **any five** questions. **Each** answer not to exceed **500** words. **All** questions carry equal marks.

11. State the requisites of a good average.

12. Explain the functions of statistics.

13. Explain the various methods of graphical presentation of frequency distribution.

14. Explain the various methods of studying correlation.

15. Draw a multiple bar diagram from the following data :

Year	Sales (Rs. in Lakh)	Cost (Rs. in Lakh)	Profit (Rs. in Lakh)
2010	12	8	4
2011	13	9	4
2012	14	11	3
2013	15	13	2

16. The Blood Serum Cholesterol level of 10 persons are as under :

    240, 251, 277, 260, 290, 245, 255, 288, 272, 263

    Calculate standard deviation with the help of assumed mean = 264.

17. A random sample of size 16 has 58 as mean. The sum of the squares of the deviations taken from mean is 135. Can this sample be regarded as drawn from the population having 61 as mean ?

18. From the following data, use x^2 test to conclude whether innoculation is effective in preventing tuberculosis.

	Attacked	Not Attacked	Total
Innoculated	200	400	600
Not innoculated	1000	400	1400
Total	**1200**	**800**	**2000**

(5×5=25 Marks)

PART – III

Answer **any two** questions. **Each** answer shall **not** exceed **1200** words. **All** questions carry **equal** marks.

19. Define statistics. Discuss the importance of statistics in the field of business and commerce.

20. The following data relate to the scores obtained by 9 salesmen of a company in *an intelligence test and their weekly sales in thousand rupees :*

Salesmen Intelligence :	A	B	C	D	E	F	G	H	I
Test Score :	70	40	80	50	80	60	50	60	50
Weekly Sales :	60	50	70	30	60	50	40	60	30

a) Obtain the regression equation of sales on intelligence test scores of the salesmen.

b) If the intelligence test score of a salesman is 65. What would be his expected weekly sales ?

21. The below given three samples have been obtained from normal populatin with equal variance. Test the hypothesis that the sample means are equal.

Sample 1	**Sample 2**	**Sample 3**
11	9	14
14	9	12
7	10	13
10	5	9
8	7	12

(Table value of fat 5%, level of significance for $v_1 = 2$ and $v_2 = 12 = 3.88$).

22. Describe the various methods of graphical and diagrammatic representation of data. Give a few illustrations. **(2×15=30 Marks)**