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Shree Damodar College of Commerce & Economics, Margao
M.Com. (Semester I) Semester End Examination, February 2022
COC122: Business Statistics and Research Methodology (OA-18A)

Duration: 3 hours

Max. Marks 60

Instructions:

1. This paper consists of **Nine** Questions carrying **Equal** marks.
2. Question No.1 consists of **5 Compulsory** Questions of **2 Marks Each**.
3. Answer any **5** questions from Question **2,3,4,5,6,7,8 and 9**.
4. **Each** question carries **10** marks. Figures to the **right** indicate marks.

Q.1) Answer the following:

(5x2=10)

- a) Explain the objectives of hypothesis
- b) State how sample is different from population
- c) Write a brief note on Research Gap
- d) What you mean by non-parametric test?
- e) Explain Skewness and Kurtosis

Q.2) Write short note on:

- a) Structural Equation Modelling
- b) ANNOVA

(5)

(5)

Q.3) 'Research is a systematic and logical study of an issue or a problem or a phenomenon through scientific approach'. In light of this statement enumerate various steps in the process of research. **(10)**

Q.4) Explain plagiarism, fabrication and falsification in context of research. **(10)**

Q.5) Write a note on various measurement scales used in research. **(10)**

Q.6) Calculate Correlation coefficient for the following data

| | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|
| Price: | 5 | 8 | 9 | 10 | 15 | 12 | 13 | 16 | 14 |
| Demand: | 55 | 50 | 52 | 45 | 40 | 42 | 41 | 43 | 46 |

(10)

Q.7) A stenographer claims that she can take dictation at the rate of 115 words per minute. Can we reject her claim on the basis of 100 trial in which she demonstrates a mean of 112 words with a standard deviation of 15 words? Use 5% level of significance. **(10)**

Q.8) Below given are the figures of production (in million tonnes) of a sugar factory.

| Year | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------------------------|------|------|------|------|------|------|------|
| Production (million tonnes) | 80 | 90 | 92 | 83 | 94 | 99 | 92 |

- (I) Calculate Regression coefficient (10)
(II) Fit a straight-line trend to these figures.

Q.9) What is a research report? Discuss the format of a research report. (10)

END