



Goa Vidyaprasarak Mandal's
Gopal Govind Poy Raiturcar College of Commerce and Economics,
Ponda Goa

M.Com (Semester I) Examination, April 2015

CO102: BUSINESS STATISTICS (OB 10A)

Duration : 2 hours

Total Marks: 50

- Instructions: 1) Answer all Questions
2) Each question carries 10 marks*

Q 1 Answer the following:

- Distinguish between primary data and secondary data.
- What are the requisites of a good measure of central tendency.
- State the models and components of time series.
- Explain briefly null hypothesis and alternative hypothesis.
- The mean of binomial distribution is 20 and standard deviation is 4. Find the value of n , p and q .

Q2 X) Given that the variance of X is 9, the two regression equations are

$$8X - 10Y = -66$$

$$\text{and } 40X - 18Y = 214$$

Find i) The average of X and Y .

ii) Correlation coefficient between two variables

iii) Standard deviation of Y .

OR

Y) The following are the annual profits, in thousand of rupees, in a certain business:

Year	:	2005	2006	2007	2008	2009	2010	2011
Profits	:	60	75	72	65	80	95	98

(in '000 ₹)

Use method of least squares to fit a straight line to above data, hence estimate the profit for the year 2015.

Q3 X) A salesman has 70% chance of making a sale to each customer. The behavior of successive customer is independent. If two customers X and Y enter, what is the probability that the salesman will make a sale to A or B ?

OR