

UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)



उत्तराखंड मुक्त विश्वविद्यालय हल्द्वानी (नैनीताल)

Programme Name-BBA –Third Semester

Programme Code-BBA-12

Course Name- Business Statistics

Course Code-BBA 302

Maximum Marks-40

Session -2014-15, Summer

Last Date of Submission: 31 January, 2015

Section-A

Section 'A' contains 08 short answer type questions of 5 marks each. Learners are required to answers 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.

Discuss the following (1-6) –

1. Classification of data
2. Limitations of Business Forecasting
3. Properties of Coefficient of Correlation
4. Ogive Curves
5. Absolute measures of dispersion.
6. Karl Pearson's measures of skewness
7. Find out the Arithmetic Mean and Standard Deviation from the following;

Income (Rs.)	100-200	100-300	100-400	100-500	100-600
No. of Persons	15	33	63	83	100

8. From the following data calculate Karl Pearson's coefficient of correlation. Also calculate probable error and show how far correlation is significant-

Wages	100	101	102	102	100	99	97	98	96	95
Cost of Living	98	99	99	97	95	92	95	94	90	91

Section-B

Section 'B' contains 04 long answer-type questions of 10 marks each. Learners are required to answers 02 questions only.

1. What are the various modes of data collection? Under what circumstances would each method be more suitable as compared to the other methods? Give reasons for your answer.
2. A) Define Fisher's ideal index. Write its formula and state as to why is it called ideal?
 B) From the following data calculate price index numbers for the year 2010 with year 2000 as base by (i) Laspeyre's Method (ii) Paasche's Method and (iii) Fisher's ideal Method

Commodity	2000		2010	
	Price	Quantity	Price	Quantity
A	20	8	40	6
B	50	10	60	5
C	40	15	50	15
D	20	20	20	25

3. A) How will you determine the coefficient of determination?

B) Given that-

$$\sum X = 120, \sum y = 432, \sum XY = 4992, \sum X^2 = 1392, \sum Y^2 = 18,252 \quad N = 12$$

Find out-

- (i) The two regression equations.
 - (ii) The regression coefficients.
 - (iii) The coefficient of correlation r between X and Y .
4. Prepare a questionnaire to collect information from the students of a college about their social and economic status.