

Course Code: 1MAECO2

Course: Quantitative Method

Credit: 4

Last Submission Date: April 30 (for January Session)

October 31, (for July session)

Max. Marks:-30

Min. Marks:-11

Note:-attempt all questions.

- Q.1 Evaluate how in modern age statistics can be treated as the science of human welfare?
- Q.2 Calculate Pearson's correlation coefficient for the following data
- | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|
| X: | 40 | 45 | 28 | 42 | 48 | 20 | 36 | 40 |
| Y: | 50 | 47 | 38 | 40 | 45 | 28 | 38 | 48 |
- Q.3 Write a brief note on uses of equation in Economics .
अर्थशास्त्र में समीकरणों का प्रयोग पर सारगर्भित लेख लिखिए।
- Q.4 Give a Critical description about the merits and demerits of important measures of central tendency. What particular measure is considered to be the best and Why ?
केंद्रीय प्रवृत्ति के मापन की महत्वपूर्ण विधियों के गुण-दोषों पर आलोचनात्मक विचार प्रकट कीजिए। किस विशिष्ट माप को सर्वश्रेष्ठ माना जा सकता है और क्यों?
- Q.5 Explain the concept of regression. How does it differ from correlation.
रेग्रेशन के مفهوم को समझिए। यह सहसंबंध से कैसे भिन्न है?
- Q.6 Find the lines of regression for the two series given below. What is the most likely value of y when x = 150 ;
दिए गए दो श्रृंखलाओं के रेग्रेशन रेखाएं ज्ञात करें। x = 150 के लिए y का सबसे संभावित मान क्या है?
- | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| x = | 147 | 148 | 135 | 151 | 136 | 148 | 157 | 110 | 162 |
| y = | 191 | 288 | 410 | 482 | 513 | 506 | 468 | 477 | 541 |
- Q.7 Define Index number and state its importance .
निर्देशांक को परिभाषित कीजिए तथा इसका महत्व बताइए।
- Q.8 Prices of a Particular commodity in five years in two cities A and B are given below, find the city which had more stable prices.
दो शहरों A और B में किसी वस्तु के पांच वर्षों के मूल्य निम्न प्रकार हैं। किस शहर में मूल्य अधिक स्थिर रहे?
- | | | | | | |
|-----|----|----|----|----|----|
| A : | 20 | 22 | 19 | 23 | 16 |
| B : | 10 | 20 | 18 | 12 | 15 |

Q.9 The probability that a person stopping at a petrol pump will have his tyres checked is 0.12; the probability that he will ask to have his oil checked is 0.29 and the probability that he will ask to have both of them checked is 0.07 find the probability.

- i. A person who has his oil checked will also have his tyres checked.
- ii. A person shopping at the petrol pump will have either tyres or oil checked.
- iii. A person shopping at the petrol pump will have neither his tyres nor his oil checked.

bl dkr dh i kFkfedrk fd , d vkneh i vksy iEi ij Vk; j pxd dj k, xk 0-12 g\$ rsy; pxd dj k, xk bl dh i kf; drk 0-29 g\$ rFkk nkuka pxd dj k, xk bl dh i kf; drk 0-07 g\$ bl ?kVuk dh i kf; drk crkb, fd

- i. ftl 0; fDr us rsy pxd djok; k g\$ og Vk; j Hkh pxd dj k, xkA
- ii. i vksy iEi ij : dus okyk 0; fDr Vk; j ; k rsy pxd dj k, xkA
- iii. i vksy iEi ij : dus okyk 0; fDr u rks Vk; j pxd dj k, xk u gh rsy

Q.10 What do you mean by consistency of data ? How Will you examine it ? Write the conditions of consistency in case of two cutributes.

स्मको की विश्वसनीयता (संगति) से आप क्या समझते ग\$ bl dh tkp vki fdl i xkj करेंगे । दो गुणों की स्थिति में विश्वसनीयता की दशाएं लिखिए ।