EVEN/SEM/ECOH-602 (A/B)/305

TPC Even Semester Exam., 2018

ECONOMICS (Honours)

(6th Semester)

Course No. : ECOH-602

Full Marks : 50 Pass Marks : 17

Time: 2 hours

me figures in the margin indicate full marks

andidates have to answer either Option-A or Option-B

For Arts Students)

OPTION-A Course No. : ECOH-602 (A)

(STATISTICS FOR ECONOMICS-II) ver five questions, selecting one from each Unit

UNIT-I

(a) Distinguish between wholesale price maindex number and consumer price index number. (a) Distinguish between wholesale price price of 4 (a) Distinguish between wholesale price (a) Distinguish between one price (a) Distinguish between wholesale price (a) Distinguish between one price (b) Distinguish between one price (c) Distinguish between one p (b)

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Compute index nu	mber ar by	for usir and	taking simple simple			
aggregative metrage of price f	elativ	es: B	с	D	[©] 3+3 _₹ E	6
Commodities	15	22	38	25	50	c
Prices in 2010 Prices in 2012	30	25 P	57	35	63 GE	7

2. (a) What are the various difficulties involved in the construction of index number?

(b) From the data below, calculate index number by Fisher's ideal method : 5

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Commoditu	Prices in base	Quantity in base	Prices in current	Quantity in current
Se AC	year	year	year	year
A:	alle"	2	× 7	11
B	2	4 <i>6</i>	8	12
C 🔊	3	C	- 9 *	13
D S	4 2714 (311	0 K		14 C*

UNIT-I

3. (a) What is time series?

(b) How can time series analysis be helpful to the economists?

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Which component of time series which une serie applicable in the following cases? Demand for sweaters (ii) Decrease in death rate due to 1×5 5scoule advancement of medical research 3+3-1 (iii) Increase in literacy rate in (iv) Price of vegetables (v) Price of shares in the share market Explain the method of moving averages 5 ₍₁) for measuring trend. Discuss its role in the isolation of trends and in smoothing time series data.

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UNIT-III

- Explain the basic principles of sample (a)
- *(b)* What are the advantages of sampling over complete enumeration?
- (a) What is sampling bias? Explain.

(b) What are the advantages of stratified sampling over simple random sampling? Discuss.

(Turn Over)

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LEGE.AC.IN UNIT-IV (a) Differentiate between the following Parameter and Statistic 7.

estimate Point (ii) estimate

(i)

A random sample of size 10 was drawn from a normal population with an (b) unknown mean and a variance of 44.1 (inch)². If the observations are (in inches)-65, 71, 80, 76, 78, 82, 68, 72, 65 and 81, obtain 95% confidence interval for population mean.

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8. (a) The mean height obtained from a random sample of size 100 is 64 inches. The standard deviation of the distribution of height of the population is known to be 3 inches. Find 99% confidence interval for mean height of the population.

Write a note on standard normal (b) distribution.

UNIT-V

- 3+3=6 Explain the following concepts : **9.** (a)
 - (i) Null hypothesis and alternative hypothesis
 - (ii) Type I error and type II error

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what are the uses of Chi-square test?

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(Turn V

write a note on level of significance.

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1. (a)

(b)

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A random sample of size 20 from a normal population gives a sample mean of 42 and sample standard deviation of 6. Test the hypothesis that the population mean is 44. [Given : $t_{0.025} = 2.09$ and $t_{0.005} = 2.86$

for 19 d.f. at 5% level of significance]

(For Science Students)

OPTION-B

Course No. : ECOH-602 (B)

ELEMENTS OF ECONOMETRICS-II)

Answer five questions, selecting one from each Unit

UNIT-I

1. (a) State whether the following statements are True or False with proper justification : 2+2=4

Assumption of 'No multicollinearity' (i) means the correlation between the regressand and regressor is zero.

(ii) High R^2 value with a few or no significant t value is a symptom of multicollinearity.

(b)

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- (b) How can variance inflation factor be used as a method for detecting multicollinearity? Discuss with the help of a suitable example.
- 2. (a) State whether the following statements are True or False with proper justification :
 - (i) In case of high but imperfect multicollinearity, the regression coefficients remain indeterminate.
 - (ii) Multicollinearity is not a serious problem if the objective of regression analysis is only prediction and not the precise estimation of the regression coefficients.

(b) Discuss any three important remedial measures of multicollinearity, 2×3=6

UNIT-II

- 3. (a) What is heteroscedasticity?
 - (b) Discuss various remedial measures of heteroscedasticity.

UNIT-IV

- MM-SRCOLLEGE.AC.IN What is time series? (a)
 - seasonal and between *(b)* Distinguish cyclical variations of time series.

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series is Which component of time (c)mainly applicable in the following cases?

(i) Demand for cold drinks

- (ii) Decrease in the death rate due to advancement of medical science
- (iii) The increase of literacy rate in a developing country

(iv) Prices of agricultural commodities

- Discuss different types of trend in a 8.~ (a) time series.
 - (b) Add a note on the importance of time series study in economics,

UNIT-V

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Discuss the measurement of trend by the 9. method of least squares. Point out the merits and demerits of least square method in measuring the trend of a time series. 6+4=

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biscuss moving average method for measuring the trend of a time series.

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Calculate 3 yearly moving averages from the following time series data :

