**PARVATIBAI CHOWGULE COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)**

**DEPARTMENT OF ECONOMICS**

**Empirical techniques for economic analysis (Core)**

**SEMETSER II, FYBA**

**Course code:** ECO-IIC-4

**Credits: 4**

**Academic year 2020-21**

**Instructor: Mr. Ramu P. Pagi**

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| **Lecture No.** | **Date** | **Unit** | **Subtopics** | **References** |
| **1** | **10/02/2021** | **Unit 1: Population and Sampling** | Hypothesis | 1. Arora, P.N. et.al. (2007), *Comprehensive Statistical Methods,*  1st edition, S. Chand, New Delhi.   **Supplementary:**   1. Anderson, David R. et.al. *Statistics for Business and Economics,* Cengage Learning India Edition. |
| **2** | **11/02/2021** |  | population and sampling |  |
| **3** | **12/02/2021** |  | population and sampling |  |
| **4** | **13/02/2021** |  | Need for sampling |  |
| **5** | **17/02/2021** |  | concept of ‘Good Sample’ |  |
| **6** | **20/02/2021** |  | Methods of sampling: probability and non-probability sampling; |  |
| **7** | **24/02/2021** |  | Methods of sampling: probability and non-probability sampling |  |
| **8** | **25/02/2021** |  | Methods of sampling: probability and non-probability sampling |  |
| **9** | **26/02/2021** |  | Methods of sampling: probability and non-probability sampling |  |
| **10** | **27/02/2021** |  | sampling techniques |  |
| **11** | **03/03/2021** |  | Optimum sampling |  |
| **12** | **04/03/2021** |  | Nyman’s sampling: problems to be solved based on sampling methods |  |
| **13** | **05/03/2021** |  | Nyman’s sampling: problems to be solved based on sampling methods |  |
| **14** | **06/03/2021** |  | Nyman’s sampling: problems to be solved based on sampling methods |  |
| **15** | **10/03/2021** |  | Nyman’s sampling: problems to be solved based on sampling methods |  |
| **16** | **12/03/2021** | **Unit 2: Correlation and Regression** | Karl Pearson’s coefficient of correlation |  |
| **17** | **13/03/2021** |  | Karl Pearson’s coefficient of correlation |  |
| **18** | **17/03/2021** |  | Karl Pearson’s coefficient of correlation |  |
| **19** | **18/03/2021** |  | Spearman’s Rank coefficient of correlation |  |
| **20** | **19/03/2021** |  | Spearman’s Rank coefficient of correlation |  |
| **21** | **20/03/2021** |  | Spearman’s Rank coefficient of correlation |  |
| **22** | **24/03/2021** |  | properties of Pearson’s coefficient of correlation |  |
| **23** | **25/03/2021** |  | properties of Pearson’s coefficient of correlation |  |
| **24** | **26/03/2021** |  | Linear regression |  |
| **25** | **27/03/2021** |  | Linear regression |  |
| **26** | **31/03/2021** |  | meaning |  |
| **27** | **01/04/2021** |  | regression equations and lines |  |
| **28** | **03/04/2021** |  | CA 1 |  |
| **29** | **07/04/2021** |  | regression equations and lines |  |
| **30** | **08/04/2021** |  | regression equations and lines |  |
| **31** | **09/04/2021** |  | Practical via Ms. excel |  |
| **32** | **10/04/2021** |  | Practical via Ms. excel |  |
| **33** | **15/04/2021** |  | Practical via Ms. excel |  |
| **34** | **16/04/2021** |  | Practical via Ms. excel |  |
| **35** | **17/04/2021** |  | Practical via Ms. excel |  |
| **36** | **21/04/2021** | **Unit 3: Time Series & Index Numbers** | Components of time series |  |
| **37** | **22/04/2021** |  | fitting a trend |  |
| **38** | **23/04/2021** |  | fitting a trend |  |
| **39** | **24/04/2021** |  | methods: semi-averages |  |
| **40** | **28/04/2021** |  | moving average |  |
| **41** | **29/04/2021** |  | method of least squares |  |
| **42** | **30/04/2021** |  | method of least squares |  |
| **43** | **5/05/2021** |  | weighted aggregative index numbers |  |
| **44** | **06/05/2021** |  | weighted aggregative index numbers |  |
| **45** | **07/05/2021** |  | weighted aggregative index numbers |  |
| **46** | **08/05/2021** | **Unit 4: Hypothesis Testing** | Level of significance, |  |
| **47** | **12/05/2021** |  | critical area |  |
| **48** | **13/05/2021** |  | **CA 2** |  |
| **49** | **14/05/2021** |  | Type I and Type II errors |  |
| **50** | **15/05/2021** |  | Z test |  |
| **51** | **19/05/2021** |  | Z test |  |
| **52** | **20/05/2021** |  | F test |  |
| **53** | **21/05/2021** |  | F test |  |
| **54** | **22/05/2021** |  | T test |  |
| **55** | **26/05/2021** |  | T test |  |
| **56** | **27/05/2021** |  | χdistribution |  |
| **57** | **28/05/2021** |  | χdistribution |  |
| **58** | **29/05/2021** |  | ANOVA (one way and two ways). |  |
| **59** | **02/0/2020** |  | ANOVA (one way and two ways). |  |
| **60** | **03/06/2020** |  | Revision |  |