

## DT-010-0046007

Seat No.

## Third Year Bachelor of Hotel and Tourism Management (Sem. VI) Examination

April - 2022

6.6.E.2 : Research Methodology

(New Course)

Faculty Code: 010

Subject Code: 0046007

Time: 3 Hours [Total Marks: 70

**Instructions**: (1) Attempt any five questions.

- (2) All the questions carry equal marks.
- 1 Describe the techniques of defining a research problem. 14
- What is a research problem? Describe its necessity. Give an example.
- 3 Explain, as in under what circumstances would you recommend. 14
  - (a) A probability samples
  - (b) A non-probability samples
  - (c) A stratified sample
  - (d) A cluster samples
- 4 Elaborate goodness of measurement scales. Also describe various primary data collection methods.
- 5 Answer the following:

7+7=14

- (a) In a random selection of 64 of the 2400 intersections in a small city, number of accidents per year was 3.2 and the sample standard deviation was 0.8.
  - (i) Make an estimate of the standard deviation of the population from the sample standard deviation.

- (ii) Work out on standard error of mean for this finite population.
- (iii) If the desired level of confidence is 0.9, what will be the upper and lower limits of the confidence interval for the mean number of accidents per year?
- (b) In a sample of 16 measurements of the diameter of a sphere gave a mean  $\bar{X}=4.58$  inches and a standard deviation  $\sigma_S=0.08$  inches. Find 95% and. 99% confidence limits of actual diameter.
- 6 Write short notes on any 2 from the following:

 $2 \times 7 = 14$ 

- (a) Ex post facto research.
- (b) Objectives of research
- (c) Research & scientific method
- (d) Experience survey.
- 7 Briefly elaborate the following:

 $2 \times 7 = 14$ 

- (a) Informal Experimental Designs
- (b) Completely Randomized Design