# Week 2: Statistical Methods for Decision Making (Inferential Statistics)

**Mentor Session Duration:** 2 hours/session

**Faculty Name:** Dr. P.K.Viswanathan, Great Lakes Institute of Management, Chennai Areas: Analytics & Operation

# No. of videos: 7

**Total Duration of videos: 2.70 hrs.**

**Pre-requisite**: Please install R before the Mentor learning session

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Video No.** | **Video Name** | **Duration of the video** | **Topics Covered** | **Conceptual or Hands-On** |
| 1 | Paste Link([Basics of](https://olympus.greatlearning.in/courses/6935/pages/basics-of-probability?module_item_id=217451) [Probability](https://olympus.greatlearning.in/courses/6935/pages/basics-of-probability?module_item_id=217451)) | 37:38 | Probability Meaning and Concepts | Conceptual |
| 2 | Paste Link ([Marginal](https://olympus.greatlearning.in/courses/6935/pages/marginal-probability?module_item_id=217452) [Probability](https://olympus.greatlearning.in/courses/6935/pages/marginal-probability?module_item_id=217452)) | 15:44 | Marginal Probability | Conceptual |
| 3 | Paste Link ([Bayes Theorem](https://olympus.greatlearning.in/courses/6935/pages/bayes-theorem?module_item_id=217453)) | 17:43 | Bayes Theorem | Conceptual |
| 4 | Paste Link ([Probability](https://olympus.greatlearning.in/courses/6935/pages/probability-distributions?module_item_id=217454) [Distributions](https://olympus.greatlearning.in/courses/6935/pages/probability-distributions?module_item_id=217454)) | 24:56 | Probability Distributions | Conceptual |
| 5 | Paste Link ([Poisson](https://olympus.greatlearning.in/courses/6935/pages/poisson-distribution?module_item_id=217455) [Distribution](https://olympus.greatlearning.in/courses/6935/pages/poisson-distribution?module_item_id=217455)) | 19:25 | Poisson Distribution | Conceptual |
| 6 | Paste Link ([Normal](https://olympus.greatlearning.in/courses/6935/pages/normal-distribution?module_item_id=217456) [Distribution](https://olympus.greatlearning.in/courses/6935/pages/normal-distribution?module_item_id=217456)) | 33:08 | Normal Distribution | Conceptual |
| 7 | Paste Link ([Case Study](https://olympus.greatlearning.in/courses/6935/pages/case-study-example-for-normal-distribution?module_item_id=217457) [Example for](https://olympus.greatlearning.in/courses/6935/pages/case-study-example-for-normal-distribution?module_item_id=217457) [Normal](https://olympus.greatlearning.in/courses/6935/pages/case-study-example-for-normal-distribution?module_item_id=217457) [Distribution](https://olympus.greatlearning.in/courses/6935/pages/case-study-example-for-normal-distribution?module_item_id=217457)) | 13:51 | Case Study Example for Normal Distribution | Conceptual |

|  |  |
| --- | --- |
| **Practice Material for learners** | 1. Paste Link [Practice Question on Probability Distribution](https://olympus.greatlearning.in/courses/6935/files/384710?module_item_id=217488) 2. Paste Link [Bayes Theorm concept and examples](https://olympus.greatlearning.in/courses/6935/files/384665?module_item_id=217489) 3. Paste Link [Probability Distribution Solution](https://olympus.greatlearning.in/courses/6935/files/384674?module_item_id=217490) |
| **Practice Material to be downloaded before the mentoring session** | 1. Paste Link: [SMDM Practice Assignment](https://olympus.greatlearning.in/courses/6935/files/384692?module_item_id=217492) 2. Paste Link: [SMDM Practice Exercise 1 Model Solution](https://olympus.greatlearning.in/courses/6935/files/384675?module_item_id=217493) |