

| <b>Title of Course:- DESCRIPTIVE STATISTICS USING EXCEL &amp; 'R'</b>  |   |                                   |  |  |   |
|--|---|-----------------------------------|--|--|---|
| <b>Nodal Department of HEI to Run Course:-</b>   |   |                                   |  |  |   |
| <b>Broad Area/Sector:- DATA ANALYSIS</b>   |   |                                   |  |  |   |
| <b>Sub-sector:-</b>  |   |                                   |  |  |   |
| <b>Nature of Course:- Independent</b>  |   |                                   |  |  |   |
| <b>Name of Suggestive Skill Council:</b>   |   |                                   |  |  |   |
| <b>Aliened NSQF Level:</b>   |   |                                   |  |  |   |
| <b>Expected Fees of the Corse: -</b>   |   |                                   |  |  |   |
| <b>Stipend to Student Expected from Industry:-</b>   |   |                                   |  |  |   |
| <b>Number of Seats:-</b>   |   |                                   |  |  |   |
| <b>Course Code:-</b>   |   |                                   |  |  |   |
| <b>Maximum Marks: - 100</b>  |   | <b>Minimum Marks:- 40 Marks</b>   |  | <b>Credits:- 03(01 Theory, 02 Practical)</b>                 |   |
| <b>Name of Proposed Skill Partner (Please specify, Name of Industry, Company etc. for Practical / Training/Internship/OJT):-</b>   |   |                                   |  |  |   |
| <b>Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course (Please specify, Name of Industry, Company etc. for Practical/Training/Internship/OJT):-</b> |   |                                   |  |  |   |
| <b>Syllabus</b>  |   |                                   |  |  |   |
| Unit   | Topics                                      | General/<br>Skill Component       | Theory/<br>Practical/<br>OJT/<br>Internship/<br>Training | No. of Theory<br>Hours<br>(Total 15<br>Hours = 01<br>Credit) | No. of Skill<br>Hours<br>(Total 60<br>Hours = 02<br>Credit) |
| I  | Introduction to 'R' & MS-Excel              | Familiarity with Software         | Theory/Practical   | 02   | 05  |
| II   | Types of Data and Frequency Distribution    | Data Handling                     | Theory/Practical   | 02   | 10  |
| III  | Graphical Representation of Data            | Data Representation               | Theory/Practical   | 03   | 15  |
| IV   | Measures of Central Tendency and Dispersion | Computational /Analytical Ability | Theory/Practical   | 05   | 15  |
| V  | Simple Correlation and Rank Correlation     | Computational /Analytical Ability | Theory/Practical   | 03   | 15  |
| <b>Suggested Readings:-</b>  |   |                                   |  |  |   |
| 1. Chambers, J. (2008). Software for Data Analysis: Programming with R, Springer.  |   |                                   |  |  |   |
| 2. Crawley, M.J. (2017). The R Book, John Wiley & Sons.  |   |                                   |  |  |   |
| 3. Eckhouse, R.H. and Morris, L.R. (1975). Minicomputer Systems Organization, Programming and Applications, Prentice-Hall.   |   |                                   |  |  |   |
| 4. Matloff, N. (2011). The Art of R Programming, No Starch Press, Inc.   |   |                                   |  |  |   |
| <b>Suggested Digital Platforms/Web Links for Readings:-</b>  |   |                                   |  |  |   |
| <a href="http://heecontent.upsdc.gov.in/SearchContent.aspx">http://heecontent.upsdc.gov.in/SearchContent.aspx</a>  |   |                                   |  |  |   |
| <a href="https://swayam.gov.in/explorer?searchText=statistics">https://swayam.gov.in/explorer?searchText=statistics</a>  |   |                                   |  |  |   |
| <a href="https://nptel.ac.in/course.html">https://nptel.ac.in/course.html</a>  |   |                                   |  |  |   |
| <a href="https://www.edx.org/search?q=statistics">https://www.edx.org/search?q=statistics</a>  |   |                                   |  |  |   |
| <a href="https://www.coursera.org/search?query=statistics&amp;">https://www.coursera.org/search?query=statistics&amp;</a>  |   |                                   |  |  |   |
| <b>Suggested OJT/Internship/Training/Skill Partner:-</b>   |   |                                   |  |  |   |
| <b>Suggested Continuous Evaluation Methods:- Assignments, Group discussion, Quiz etc.</b>  |   |                                   |  |  |   |
| <b>Course Pre-requisites:-</b> No pre-requisite required, Open to All.   |   |                                   |  |  |   |
| <b>Suggested Equivalent Online Courses:-</b>   |   |                                   |  |  |   |
| <b>Any Remarks/Suggestions:-</b>   |   |                                   |  |  |   |
| <b>Note:</b>   |   |                                   |  |  |   |
| • Number of units in Theory/Practical may vary as per need.  |   |                                   |  |  |   |
| • Total Credits per Semester = 03(It can be more, but students will get only 03 credits/ semester or 06 credits/year   |   |                                   |  |  |   |
| • Credits for Internship/OJT/Training/Practical = 02 (Training Hours = 60)   |   |                                   |  |  |   |