**MINOR-2 EXAMINATION**

M.Tech –**CSE/MTA/Mecha./Nano/EST/ ( 3rd-SEMESTER):** SESSION **2022-23**

|  |  |
| --- | --- |
| Course Code: **MCSC-201 / MMTA-301 / EST-303 / MMTR-301** | Duration: **60 Min.** |
| Course Name: **Research Methodology / Research Methodology and Technical Writing** | Maximum Marks: **20** |

***Instructions:***

1. *Attempt any* ***four*** *questions.*
2. *Clearly state assumptions wherever necessary.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Questions** | **MM** | **CO** | **BL** |
| **1** | Define impact factor and categories in Web of Science? A journal publication and citation metrics are given in the table. Comment on the performance of journals based on change in journals impact factor?   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Year** | *2015* | *2016* | *2017* | *2018* | | **Papers published** | *3000* | *3500* | *5000* | *9000* | | **Citations received** | *5000* | *4000* | *7000* | *7000* | | ***5*** | *CO2* | *L4* |
| **2** | Describe levels of measurements and write short note on goodness of measurement scales? | ***5*** | *CO2* | *L2* |
| **3** | Describe hypothesis, parameters of hypothesis and errors in hypothesis testing? | ***5*** | *CO3* | *L2* |
| **4** | Define h-index, i10-index, and q-index? The citations received by an author’s published papers is listed below, determine his h-index and i10-index? Citations: ***[ 28, 26, 51, 2, 17, 5, 7,8,9,3 ]*** | ***5*** | *CO4* | *L4* |
| **5** | Write the properties of co-variance and explain when is median preferred over mean to represent a set of values? | ***5*** | *CO4* | *L3* |
| **6** | Define kurtosis and determine mean, median, mode, range, standard deviation, and skewness for the data given below?  Data: ***[ 21,20,34,45,34,22,25,46,30,25,26,37,45 ]*** | ***5*** | *CO4* | *L4* |