

**Course Code: 20BS4101**

**ASSIGNMENT-2 QUESTION BANK**

**A.Y:2021-22/Sem-4**

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| **Q.No** | | **Question** | **Course Outcome** | **BTL** |
| 1 | a | Fit a Binomial distribution to the following data   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | X | 0 | 1 | 2 | 3 | 4 | 5 | | F | 2 | 16 | 28 | 12 | 9 | 3 | | CO3 | Apply |
| b | Explain in detail about normal, binomial distributions. | CO3 | Understand |
| 2 | a | Explain in detail about Poisson distribution. | CO3 | Understand |
| b | If there are twelve cars crossing a bridge per minute on average, find the probability of having seventeen or more cars crossing the bridge in a particular minute? | CO3 | Apply |
| 3 | a | Explain about usage of summary() function in R with examples. | CO3 | Understand |
| b | Assume that the test scores of a college entrance exam fits a normal distribution. Furthermore, the mean test score is 72 and the standard deviation is 15.2. What is the percentage of students scoring 84 or more in the exam? | CO3 | Apply |
| 4 | a | Discuss about the significance of ANOVA test. | CO3 | Understand |
| b | Distinguish between correlation and covariance. | CO3 | Understand |
| 5 | a | Write the code to plot “random normal variables and their densities”, which results in a bell curve. | CO3 | Apply |
| b | Write a short note on one-sample test, two-sample t-test and paired sample two-test. | CO3 | Understand |
| 6 | a | Explain in detail about sorting and order in R with examples | CO3 | Understand |
| b | Write about the following with suitable examples.   1. Cumulative Sum 2. Cumulative product 3. Cumulative Min 4. Cumulative Max | CO2 | Understand |