**BCSL203**

(An Autonomous Institution)

**2020-2021 ODD TERM**

**CAE-II EXAMINATION FOR SPLIT-II COURSES WINTER-2020 (ONLINE MODE)**

**Third Semester B.Tech(Artificial Intelligence)**

**Data Structures and Algorithms**

**Time: 1 hr.] [Max. Marks : 15**

1) [CO1/CO2/CO…] indicates the question related to specific course outcome.

2) All questions carry marks as indicated

3) Assume suitable data wherever necessary.

4) Due credit will be given to neatness and adequate dimensions.

5) Illustrate your answer wherever necessary with the help of neat sketches.

6) Use of non-programmable calculator is permitted.

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| C03 | a | Differentiate between a binary tree and a B tree with a neat sketch? Explain? | 4 |
|  | b | Write a short notes on:   1. Weighted graphs 2. Directed acyclic graph | 4 |
| C04 | a | Consider the following diagram, explain Kruskal's Algorithm and covert it to a minimum spanning tree? | 7 |

**\*\*\*\*\*\*\*\*\*\*\*\* All the best \*\*\*\*\*\*\*\*\*\*\*\*\*\***