

Sandip foundation's Sandip Institute of Technology & Research Center, Nashik. DEPARTMENT OF COMPUTER ENGINEERING Subject : DSA

## **Course Educational Objectives(CEO):**

- 1. To understand the standard and abstract data representation methods.
- 2. To acquaint with the structural constraints and advantages in usage of the data.
- 3. To understand the memory requirement for various data structures.
- 4. To operate on the various structured data.
- 5. To understand various data searching and sorting methods with pros and cons.
- 6. To understand various algorithmic strategies to approach the problem solution.

## **Course Outcomes(CO):**

- 1. To discriminate the usage of various structures in approaching the problem solution.
- 2. To design the algorithms to solve the programming problems.
- 3. To use effective and efficient data structures in solving various Computer Engineering domain problems.
- 4. To analyze the problems to apply suitable algorithm and data structure.
- 5. To use appropriate algorithmic strategy for better efficiency

## Mapping of Course Educational Objectives to Course Outcomes

| Sr.<br>No. | Course Educational Objectives (CEO)  | Course Outcomes(CO) |              |              |   |   |  |  |  |  |
|------------|--|---------------------|--------------|--------------|---|---|--|--|--|--|
|            |  | 1                   | 2            | 3            | 4 | 5 |  |  |  |  |
| 1          | To understand the standard and abstract data representation methods.             | ✓                   |              |              |   |   |  |  |  |  |
| 2          | To acquaint with the structural constraints and advantages in usage of the data. |                     | $\checkmark$ |              |   |   |  |  |  |  |
| 3          | To understand the memory requirement for various data structures.                |                     |              | $\checkmark$ |   |   |  |  |  |  |

| 4 | To operate on the various structured data.                                     |  | ~            |              |
|---|--|--|--------------|--------------|
| 5 | To understand various data searching and sorting methods with pros and cons.   |  | $\checkmark$ |              |
| 6 | To understand various algorithmic strategies to approach the problem solution. |  |              | $\checkmark$ |

## Mapping of Course Objectives to Program Outcomes

| Sr.     | Course Outcomes (CO)  | Program Outcomes (PO) |   |   |   |   |   |   |   |   |   |   |   |
|---------|---|-----------------------|---|---|---|---|---|---|---|---|---|---|---|
| No.     |   | Α                     | В | С | D | Ε | F | G | Η | Ι | J | K | L |
| 1       | To discriminate the usage of various structures in approaching the problem solution.                        | ✓                     |   |   |   |   |   |   |   |   |   |   |   |
| 2       | To design the algorithms to solve the programming problems.   |                       |   |   |   | ✓ |   |   |   |   |   |   |   |
| 3<br>do | To use effective and efficient data structures in solving<br>various Computer Engineering<br>main problems. |                       |   |   | ~ |   |   |   |   |   |   |   |   |
| 4       | To analyze the problems to apply suitable algorithm and data structure.                                     |                       | ✓ |   |   |   |   |   |   |   |   |   |   |
| 56.     | To use appropriate algorithmic strategy for better efficiency   |                       | ✓ |   |   |   |   |   |   |   |   |   |   |