



JIS COLLEGE OF ENGINEERING

NAAC 'A' Accredited Autonomous Institution

Affiliated by MAKAUT

DEPARTMENT OF MATHEMATICS

COURSE CODE: M(IT)392

COURSE NAME: NUMERICAL METHOD AND STATISTICS LAB

ASSIGNMENT - VI

Total Marks: 10

| QUESTION NO . | | QUESTION | MARKS | CO | BLOOM' S TAXONOMY LEVEL | | | | | | | | | | | | | | | | |
|--------------------------|-----|--|------------------|------|-------------------------|----|----|---|----|----|--------------------------|---|----|----|----|----|----|----|--|--|--|
| 1. | | <p>Suppose a man is going to a place by driving a car along the straight road. The velocity of the car at a time interval is given by the following table.</p> <table><tr><td><i>Time(min)</i></td><td>0</td><td>2</td><td>4</td><td>6</td><td>8</td><td>10</td><td>12</td></tr><tr><td><i>Velocity(km /hrs)</i></td><td>0</td><td>10</td><td>16</td><td>18</td><td>22</td><td>25</td><td>26</td></tr></table> | <i>Time(min)</i> | 0 | 2 | 4 | 6 | 8 | 10 | 12 | <i>Velocity(km /hrs)</i> | 0 | 10 | 16 | 18 | 22 | 25 | 26 | | | |
| <i>Time(min)</i> | 0 | 2 | 4 | 6 | 8 | 10 | 12 | | | | | | | | | | | | | | |
| <i>Velocity(km /hrs)</i> | 0 | 10 | 16 | 18 | 22 | 25 | 26 | | | | | | | | | | | | | | |
| | (a) | Using C-programming of Newton Forward interpolation, what will be the velocity of the car at the time 3.2 minutes? | 10 | CO 3 | Apply | | | | | | | | | | | | | | | | |
| | | or | | | | | | | | | | | | | | | | | | | |
| | (b) | Using C-programming of Newton Backward interpolation, what will be the velocity of the car at the time 11.5 minutes? | 10 | CO 3 | Apply | | | | | | | | | | | | | | | | |