

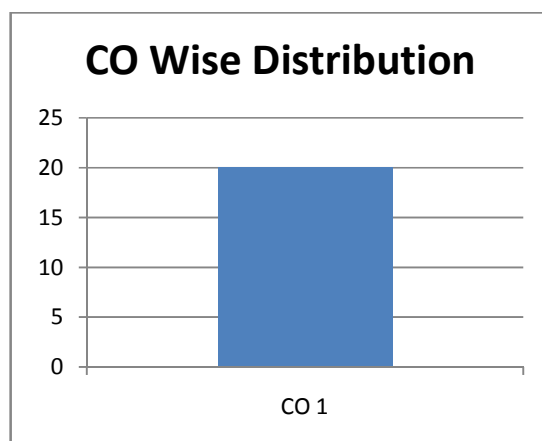
United College of Engineering & Research
Department of Computer Science & Engineering/ Information Technology
First Unit Test Paper, 2020-2021
B.Tech CSE (IV Semester)
Mathematics IV (KAS-402)

Time: 40:00 Minutes

Max Marks: 4*5=20

Note: Attempt any **four** questions and each question carries equal marks.

| Ques. No. | Questions | CO |
|-----------|--|----|
| 1. | Solve the following partial differential equation. $x^2 \frac{\partial z}{\partial x} + y^2 \frac{\partial z}{\partial y} = (x + y)z$ | 1 |
| 2. | Solve the following partial differential equation $zpq = p + q$ | 1 |
| 3. | Solve the following partial differential equation $(D + 1)(D + D' - 1)z = \sin x \cos 2y$ | 1 |
| 4. | Solve the following partial differential equation. $(D^3 - 7DD'^2 - 6D'^3)z = \sin(x + 2y) + e^{(3x+2y)}$ | 1 |
| 5. | Solve the following partial differential equation. $(D^2 - D'^2 - 3D + 3D')z = xy + e^{x+2y}$ | 1 |



CO - Course Outcome