Gurugram University Gurugram Curriculum for UG Degree Course in Computer Science and Engineering (ARTIFICIAL INTELLIGENCE

& MACHINE LEARNING)

B. Tech. (Computer Science and Engineering- Artificial Intelligence & Machine Learning) Scheme of Studies/Examination w.e.f. 2023-24

Semester - III

| S.No. | Category | Course Code | Course Title | Hours Per week | | | Total Contact Hrs. per | Credits | Examination Schedule (Marks) | | | | |
|-------|----------|----------------|--|-------------------|---|---|---------------------------------|---------|------------------------------|--------|-----------|-------|--|
| | | | | L | Т | P | week | | Marks of classwork | Theory | Practical | Total | |
| 1. | ESC | | Digital Electronics | 3 | 0 | 0 | 3 | 3 | 30 | 70 | | 100 | |
| 2. | PCC | | Advanced- Data Structure | 3 | | 0 | 3 | 3 | 30 | 70 | | 100 | |
| 3. | PCC | | Database Management Systems with SQL | 3 | 0 | 0 | 3 | 3 | 30 | 70 | | 100 | |
| 4. | PCC | | Programming for Data Science and AI | 3 | 0 | 0 | 3 | 3 | 30 | 70 | | 100 | |
| 5. | PCC | | Artificial Intelligence | 3 | 0 | 0 | 3 | 3 | 30 | 70 | | 100 | |
| 6. | BSC | | Discrete Mathematics | 3 | 0 | 0 | 3 | 3 | 30 | 70 | | 100 | |
| 7. | LC | | Digital Electronics Lab | 0 | 0 | 2 | 2 | 1 | 50 | | 50 | 100 | |
| 8. | LC | | Advanced- Data Structure Lab | 0 | 0 | 2 | 2 | 1 | 50 | | 50 | 100 | |
| 9. | LC | | Database Management Systems Lab | 0 | 0 | 2 | 2 | 1 | 50 | | 50 | 100 | |
| 10. | LC | | Programming for Data Science & AI Lab | 0 | 0 | 2 | 2 | 1 | 50 | | 50 | 100 | |
| 11. | MC | | Constitution of India* | 2 | 0 | 0 | 2 | 0 | 30 | 70 | | 100* | |
| i | | | Total | 20 | 0 | 8 | 28 | 22 | 380 | 420 | 200 | 1000 | |

NOTE*: The examination of the regular students will be conducted by the concerned college/Institute internally. Each student will be required to score a minimum of 40% marks to qualify in the paper. The marks will not be included in determining the percentage of marks obtained for the award of a degree. However, these marks will be shown in the detailed marks certificate of the students.

B.Tech. (Computer Science and Engineering- Artificial Intelligence & Machine Learning) Scheme of Studies/Examination w.e.f. 2023-24

Semester - IV

| S.N. | Category | Course Code | Course Title | Hours Per week | | Total Contact Hrs. | Credits | Examination Schedule (Marks) | | | | |
|------|----------|----------------|--------------------------------------|-------------------|---|--------------------------|---------|------------------------------|--------------------|--------|-----------|-------|
| | | | | L | Т | P | week | | Marks of classwork | Theory | Practical | Total |
| 1. | PCC | | Operating System | 3 | 0 | 0 | 3 | 3 | 30 | 70 | | 100 |
| 2. | ESC | | R-Programming | 3 | 0 | 0 | 3 | 3 | 30 | 70 | | 100 |
| 3. | PCC | | Programming in Java | 3 | 0 | 0 | 3 | 3 | 30 | 70 | | 100 |
| 4. | PCC | | Design & Analysis of Algorithms | 3 | 0 | 0 | 3 | 3 | 30 | 70 | | 100 |
| 5. | PCC | | Computer Organization & Architecture | 3 | 0 | 0 | 3 | 3 | 30 | 70 | | 100 |
| 6. | PCC | | Computer Networks | 3 | 0 | 0 | 3 | 3 | 30 | 70 | | 100 |
| 7. | LC | | Operating System Lab | 0 | 0 | 2 | 2 | 1 | 50 | | 50 | 100 |
| 8. | LC | | Programming in Java Lab | 0 | 0 | 2 | 2 | 1 | 50 | | 50 | 100 |
| 9. | LC | | Design & Analysis of Algorithms Lab | 0 | 0 | 2 | 2 | 1 | 50 | | 50 | 100 |
| 10. | LC | | R-Programming Lab | 0 | 0 | 2 | 2 | 1 | 50 | | 50 | 100 |
| | | | Total | 18 | 0 | 8 | 26 | 22 | 380 | 420 | 200 | 1000 |

NOTE: At the end of 4th semester each student has to undergo Practical Training of 4/6 weeks in an Industry /Institute/ Professional Organization/Research Laboratory/ training centre etc. and submit the typed report along with a certificate from the organization & its evaluation shall be carried out in the 5th Semester.