Department of Computer Science & Engineering Study and evaluation Scheme

B.Tech CSE (CLOUD TECHNOLOGY AND INFORMATION SECURITY)

Semester III

| Sl. Subject | | | | Perio | ds | | | Eval | Subject | | | |
|-------------|--------|----------|--|-------|----|---|----|-------|---------|-----|------|-------|
| No | Code | | | | | | | Sessi | onal | | Exam | Total |
| | | Category | Subject | L | T | P | C | CT | TA | CA | ESE | 7 |
| 1 | CS-230 | НМ | Introduction to Communication Skills | 2 | 1 | 0 | 3 | 40 | 40 20 | 60 | 40 | 100 |
| 2 | CS-231 | DC | Computer Architecture | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 3 | CS-232 | DC | Data Structures & Algorithms | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 4 | CS-234 | DC | Object Oriented Programming using JAVA | | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 5 | CS-254 | DC | Introduction to | | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 6 | CS-252 | DC | Python Programming | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 7 | CS-239 | DC | Operating System Building Blocks | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 8 | BM-226 | НМ | Human Values and Professional Ethics | 3 | 0 | 0 | - | - | - | - | 50 | 50 |
| 9 | CS-233 | DC | Data Structures& Algorithms Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 10 | CS-235 | DC | Object Oriented Programming using JAVA Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 11 | CS-237 | DC | Information Security Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 12 | CS-286 | DC | Comprehensive Annual Assessment - I | 0 | 0 | 0 | 0 | | | 100 | | 100 |
| | | | TOTAL | 16 | 6 | 8 | 27 | 370 | 230 | 700 | 450 | 1150 |

L – Lecture T – Tutorial P – Practical C – Credits CT – Class Test TA – Teacher Assessment

Sessional Total (CA) = Class Test + Teacher Assessment

Subject Total = Sessional Total (CA) + End Semester Examination (ESE)

BS – Basic Sciences DC – Departmental Core HM – Humanities OE – Open Elective

Department of Computer Science & Engineering Study and evaluation Scheme

B.Tech CSE (CLOUD TECHNOLOGY AND INFORMATION SECURITY)

Semester IV

| Sl. Subject | | | | Perio | ds | | | Eval | Subject | | | |
|-------------|--------|----------|--|-------|----|---|----|-------|---------|-----|------|-------|
| No | Code | | | | | | | Sessi | onal | | Exam | Total |
| 1 | | Category | Subject | L | T | P | C | CT | TA | CA | ESE | 7 |
| 1 | CS-240 | DC | Desktop Operating System | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 2 | CS-242 | DC | Relational Database Management Systems | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 3 | CS-244 | DC | Network Security Basics | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 4 | CS-246 | DC | Enterprise Network Engineering | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 5 | CS-248 | DC | Introduction to Linux | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 6 | MT-206 | BS | Mathematical | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 7 | CS-247 | DC | Enterprise Network Engineering- Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 8 | CS-243 | DC | Relational Database Management Systems Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 9 | CS-249 | DC | Introduction to Linux Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 10 | CS-245 | DC | Network Security Basics Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 11 | CS-241 | DC | Desktop Operating System Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| | | | TOTAL | 16 | 6 | 8 | 26 | 390 | 270 | 660 | 440 | 1100 |

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Department of Computer Science & Engineering

Study and evaluation Scheme B.Tech CSE (CLOUD TECHNOLOGY AND INFORMATION SECURITY)

| | | | | | | | | | | | Semes | ter V |
|--------|--------------|----------|--|--------|---|---|---|--------|----------|---------------|-------|-------|
| Sl. No | Subject Code | | | Period | s | | | Evalu | ation Sc | Subject Total | | |
| | | | | | | | | Sessio | nal | | Exam | |
| | | Category | Subject | L | T | P | C | CT | TA | CA | ESE | |
| 1 | CS-361 | DC | Logical Reasoning and Thinking | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 2 | CS-353 | DC | Storage Technologies | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 3 | | DE | Departmental Elective I | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 4 | CS-357 | DC | Installation & Configuration of Server | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 5 | CS-355 | DC | Ethical Hacking | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 6 | CS-351 | DC | Cloud Technology | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 7 | CS-354 | DC | Storage Technologies Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 8 | CS-356 | DC | Ethical Hacking Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 9 | CS-358 | DC | Installation & Configuration of Server Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 10 | CS-352 | DC | Cloud Technology Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |

6

8 26

360

240

600

400

1000

Departmental Elective I

- Security Architecture CS-359
- Database Security CS 363
- Server Security CS 364
- · Any Online MOOC from the suggested list by the Department. Duration should be of at least 12 weeks so as to fulfil 4 credits

16

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TOTAL

Department of Computer Science & Engineering Study and evaluation Scheme

B.Tech CSE (CLOUD TECHNOLOGY AND INFORMATION SECURITY)

Semester VI

| | ~ | | | ъ. | | | | Evalu | | | | |
|--------|-----------------|----------|---|---------|---|---|----|-----------|-----|-----|------|------------------|
| Sl. No | Subject Code | | | Periods | | | | Sessional | | | Exam | Subject Total |
| | Coue | Category | Subject | L | T | P | C | CT | TA | CA | ESE | Total |
| 1 | | OE | Open Elective-1 | - | - | - | 4 | 40 | 20 | 60 | 40 | 100 |
| 2 | CS 371 | DC | Web Technology | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 3 | CS 372 | DC | Theory of Automata and Compiler Design | | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 4 | CS 373 | DC | Cloud Security | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 5 | CS 374 | DC | Principles of Virtualization | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 6 | CS 375 | DC | Infrastructure Solutions on Cloud | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 7 | | DE | Departmental Elective II | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 8 | CS 376 | DC | Infrastructure Solutions on Cloud Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 9 | CS 377 | DC | Principles of Virtualization Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 10 | CS 399 | P | Mini Project-I | 0 | 0 | 2 | 1 | | | 60 | 40 | 100 |
| | | | TOTAL | 16 | 6 | 6 | 29 | 340 | 260 | 600 | 400 | 1000 |

Departmental Elective II

- Information Security Emerging Trends CS 378
- Cyber Security Incident Response Management CS 379
- Application Security CS 380
- Any Online MOOC from the suggested list by the Department. Duration should be of at least 12 weeks so as to fulfil 4 credits

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BS – Basic Sciences DC – Departmental Core HM – Humanities OE – Open Elective

Department of Computer Science & Engineering Study and evaluation Scheme B.Tech CSE (CLOUD TECHNOLOGY AND INFORMATION SECURITY)

| | | | | | | | | | | | | Semester VII |
|-----------|-------------------|------------------------------------|---|----------|---------|----------|---------|-----------|----------|-----------|------------|---------------|
| | | | | Periods | | | | E | valuatio | n Schen | | |
| Sl. No | Subject Code | Category | Subject | | | | | | Sessiona | ıl | Exam | Subject Total |
| | | | | L | T | P | C | CT | TA | CA | ESE | |
| 1 | | DE | Departmental Elective III | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 2 | CS 461 | DC Cyber Forensics & Investigation | | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 3 | CS 462 | DC | DC Cloud Web Services | | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 4 | CS 463 | DC | Linux Administration | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 5 | CS 464 | DC | Disaster Recovery and Bu | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 6 | | DE Departmental Elective | | 3 | 1 | 0 | 4 | 40 | 20 | 60 | 40 | 100 |
| 7 | CS 465 | DC | DC Cyber Forensics & Investigation- Lab | | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 8 | CS 466 | DC | Cloud Web Services Lab | | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 9 | CS 467 | DC | Linux Administration Lab | 0 | 0 | 2 | 1 | 30 | 30 | 60 | 40 | 100 |
| 10 | CS 479 | P | Mini Project – 2 | 0 | 0 | 2 | 1 | - | - | 60 | 40 | 100 |
| 11 | CS300 | P | Industrial Training* | - | - | - | 0 | 0 | 0 | 100 | 0 | 100 |
| | | | TOTAL | 16 | 6 | 8 | 26 | 330 | 210 | 700 | 400 | 1100 |
| | *A student must | clear this pap | per with 50% passing ma | rks up t | o the f | inal ye | ded in | | | | | |
| | | | | | | | | | | | | |
|)epartmei | ntal Elective III | | | | | | | | | | | |
| | | erver Administ | tration CS 468 | | | | | | | | | |
| | · Advanced V | 'irtualization | CS 469 | | | | | | | | | |
| | · Infrastructur | e Automation | CS 470 | | | | | | | | | |
| | · Any Online | MOOC from t | he suggested list by the Dep | partment | t. Dura | tion sho | ould be | of at lea | st 12 we | eks so as | s to fulfi | 1 4 credits |
| Departmei | ntal Elective IV | | | | | | | | | | | |
| | | | nformation Security Manag | ement | CS 4 | 71 | | | | | | |
| | · COBIT VAI | | CS 472 | <u> </u> | | | | | | | | |
| | , | PCI DSS & H | | | | | | | | | | |
| | · Any Online | MOOC from t | he suggested list by the Dep | partment | t. Dura | tion sho | ould be | of at lea | st 12 we | eks so a | s to fulf | il 4 credits |
| | 1 | I | 1 | 1 | I | I | I | I | I | I | 1 | 1 |

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Department of Computer Science & Engineering Study and evaluation Scheme B.Tech CSE (CLOUD TECHNOLOGY AND INFORMATION SECURITY)

Semester VIII

| | | | Perio | E | Subj | | | | | | |
|--------|----------|---------------------|--------|---|---------|------|-----|-----|-----|-----|-------|
| Sl. No | Category | Subject | 1 6110 | | Session | Exam | ect | | | | |
| | | | L | Т | P | C | CT | TA | CA | ESE | Total |
| 1 | DC | IT Infrastructur | 2 | 1 | 0 | 3 | 40 | 20 | 60 | 40 | 100 |
| 2 | OE | Open | - | - | - | 4 | 40 | 20 | 60 | 40 | 100 |
| 3 | DC | B. Tech | 1 | - | 8 | 4 | - | 60 | 60 | 40 | 100 |
| 4 | DC | B. Tech | - | - | 8 | 4 | - | 60 | 60 | 40 | 100 |
| 5 | DC | B. Tech | 1 | - | 8 | 4 | - | 60 | 60 | 40 | 100 |
| 6 | DC | Comprehens | - - | - | - | 0 | - | 100 | 100 | | 100 |
| | | TOTAL | 2 | 1 | 24 | 19 | 80 | 320 | 400 | 200 | 600 |

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BS – Basic Sciences DC – Departmental Core HM – Humanities OE – Open Elective

DE – Departmental Elective ESA – Engineering Sciences & Arts (Foundation Course & Engineering Courses)

Total Credit of the Course: 24+24+26+26+26+29+26+19=200