

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
Department of Computer Science and Engineering (CSE)

SEMESTER FINAL EXAMINATION

WINTER SEMESTER, 2016-2017
FULL MARKS: 150

DURATION: 3 Hours

CSE 4105: Computing for Engineers

Programmable calculators are not allowed. Do not write anything on the question paper.

There are 8 (eight) questions. Answer any 6 (six) of them.

Figures in the right margin indicate marks.

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| ✓ 1. | a) State the names of different types of storage devices. | 3 |
| | b) Describe the storage and retrieval mechanism of optical memory device. | 12 |
| | c) Discuss various parameters for drive performance. | 10 |
| ✓ 2. | a) Briefly discuss the various ways of enhancing power of operating system. | 15 |
| | b) State the various features of network operating system. | 6 |
| | c) Discuss important aspects of LINUX. | 4 |
| 3. | a) State different methods of acquiring software. | 12 |
| | b) Briefly describe a Personnel Information manager. | 3 |
| | c) Discuss various graphics file formats and mention names of common file formats. | 10 |
| 4. | a) Describe various steps for working with database management systems. | 15 |
| | b) Describe different functionalities of enterprise software. | 10 |
| ✓ 5. | If you want to computerize any system, you have to follow some steps, which is called system development life cycle. Briefly describe the systems development life cycle. | 25 |
| ✓ 6. | a) State the relationship between machine code and programming language. | 6 |
| | b) State the concept of pseudo code, algorithm and flowchart. | 9 |
| | c) Draw a flowchart for sorting exam marks of a class of students. | 10 |
| ✓ 7. | a) Discuss various aspects of basic security concept. | 10 |
| | b) Describe cyber terrorism. | 5 |
| | c) Discuss on cookies and spyware. | 10 |
| ✓ 8. | a) Briefly discuss the importance of linear algebra and geometry in computer science and engineering. | 15 |
| | b) Write short notes on artificial Intelligence and bio-informatics. | 10 |