

Department Computer Science and Engineering

3<sup>rd</sup> Year 1<sup>st</sup> Semester B.Sc. (Engg.) Mid term-1 Exam- 2022

Session: 2019-20, Course Code: CSE-3101

Course Course Computer Pe ipheral Device and Interfacing

Time: 1 Hour

- Marks: 15 ed? 1+2
- What do you mean by peripheral? Why peripheral anapter is required?
   List the ways by which peripheral devices connects CPU? Describe the programmed I/O instruction set to connect peripheral devices with CPU.
- 3. What do you mean by interrupt? Write a short note on Interrupt operation using daisy chain 1+5 fashion.

Department of Computer Science and Engineering 3<sup>rd</sup> Year 1<sup>st</sup> Semester, Mid Term-01 B.Sc. Examination-2022

Course Title: Operating Systems Course Code: CSE-3103

Time: 1 Hour

Marks: 15

[Answer the following questions. Figures in the right-hand margin indicate full marks.]



What is interrupt handling? Derive any Three types of computing environment based on operating system.

- 2) What is a process and what are the different states of a process?
- 3) Write a short note on following topic:
  - i. Batch Systems
  - ii. Clustered Systems
  - iii. Virtualization

Department of Computer Science and Engineering

3rd Year 1st Semester Science and Engineering

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Session: 2019-2020

Course Title: Theory of Computation;

Course Code: CSE 3105

Time-1 Hour

Total Marks-15

[Figures in the right-hand margin indicate full marks.]

Define Language and Symbol. Show that  $\sqrt{2}$  is not rational.

1+2=

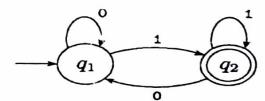
2. What is the purpose of the theory of computation?

1

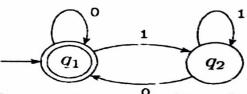
3. Give the formal definition of finite automata for the following state diagram.

3

a)



· b)



4. Define non deterministic finite automata. Construct NFA for the following languages where  $\Sigma = \{a,b\}$ 

4

- i.  $L(M) = \{w | w \text{ ends with 'a'}\}$
- ii. L(M)= {w| w containing "ab"}
- 5. Define Regular Expression. For the following regular expression, find an equivalent NFA.

4



Department of Computer Science and Engineering

Mid Term- 1, Session: 2019-20

Course Title: Compiler Designing, Course Code: CSE-3107

Time: 1 Hour

Full Marks: 15

iii. Token

2. Illustrate and explain different Phases of a Compiler.

Write short note on the following terms-

Compiler Interpreter

- 3. How does Lexical Analyzer work? Explain with suitable examples.
- 4. Briefly discuss about various types of input buffering in compiler designing with suitable diagrams.

Department of Computer Science and Engineering B.Sc(Hons.) 3<sup>rd</sup> Year 1<sup>st</sup> Semester Mid-Term 1 Examination 2022 Course Title: Sociology and Ethics and Legal Aspects of Information Course code: Sco-3109

Full Marks:15

Time:1 Hour

[Answer any three questions. All questions are of equal value]

1.	Explain the definitions of sociology given by A. Comte and K. Davis	.5
2.	Bring out the characteristics of early sociology.	5
3.	What do you know about the scope of sociology?	.5
	Why should the students of Computer Science study sociology?	

