Dr Sangeet-Shu 6/12023

Name of student:

Scholar No.:

National Institute of Technology Hamirpur Department of Computer Science & Engineering End-Semester Exam April-2023

Branch: BTech (CSE) 8th Sem

Subject: Topics in Cloud Computing

Code: CS-461

Max Marks: 50 Max Time: 03:00 hrs

Note: 1. All questions are compulsory.

2. Draw neat diagrams wherever necessary.

- 3. Direct answers will not be evaluate, only completely described answers will be consider.
- 4. In case of any confusion in any terminology, preference will be given to whatever has been taught in the class.
- 5. Handwriting should be clean. The answers will not be checked if handwriting is not legible.
- 6. Write all the answers in the sequence of question numbers.

Q.1 Explain virtual machine (VM) live migration in detail, which covers following points, types of VM migration, different techniques of VM migration, performance parameters, and its issues.

[9 Marks]

- Q.2 What do you mean by federation of cloud. Explain in detail with federation stack and its example. [9 Marks]
- Q.3 Describe Aneka Cloud Application Platform with all its services.

[9 Marks]

- Q.4 Describe all three basic Parallel Programming Models i.e. Task Model, Thread Model, and MapReduce Model. [9 Marks]
- Q.5 Give cloud best practices to build an application in the cloud. Explain in terms of GREPTHEWEB application. [9 Marks]
- Q.6 Write MapReduce function to find common friends between two persons for the given friend list. Assume the friends are stored as Person->[List of Friends]. [5 Marks]

A -> B C D

B -> A C D E

C -> A B D E

D -> A B C E

E -> B C D