


| Name: | |  | |
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| Enrolment No: | | | |
| UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, May 2022 | | | |
| Course: Cloud Application Development Program: B.Tech CS-CCVT Course Code: CSVT3006 | | Semester: VI Time: 03 hrs. Max. Marks: 100 | |
| SECTION A (5Qx4M=20Marks) | | | |
| S. No. | | Marks | CO |
| Q 1 | What is parallelism? How parallelism can be achieved in distributed computing? Explain. | 4 | CO1 |
| Q 2 | What are the different ways for building Aneka clouds? Explain. | 4 | CO2 |
| Q 3 | What is concurrent computing? Discuss this concept using a sample task computing scenario. | 4 | CO3 |
| Q 4 | Draw the labelled program structure of MPI. | 4 | CO4 |
| Q 5 | Discuss the use of Aneka cloud platform in multiplayer online gaming applications. | 4 | CO5 |
| SECTION B (4Qx10M= 40 Marks) | | | |
| Q 6 | Discuss different architectural styles for distributing computing in detail. | 10 | CO1 |
| Q 7 | Discuss and describe the anatomy of the Aneka container with the labelled diagram. | 10 | CO2 |
| Q 8 | How multiple tasks can be computed using Aneka cloud platform? Discuss the task based programming model of Aneka cloud platform. OR Differentiate between Object model and Parameter sweep model. | 10 | CO3 |
| Q 9 | Discuss the prototype of workflow system of how dependent tasks can be handled using Aneka cloud platform with the help labelled diagram. | 10 | CO4 |
| SECTION-C (2Qx20M=40 Marks) | | | |
| Q 11 | What are the different phases of Aneka thread life cycle? In what ways the thread life cycle of Aneka threads differs from the local threads. | 20 | CO3 |

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| | OR | | |
| | What is MapReduce programming model? Represent the computation workflow of this model using some real world use case and scenario. | | CO4 |
| Q 12 | Discuss the application of Aneka cloud platform in social networking and health care domain. Draw labelled diagrams of some real world use cases and scenarios related to these domains. | 20 | CO5 |