20U5116　　　　　　　　(Pages: 2)　　　　　　Name: ……………………..

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FIFTH SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2022
(Regular/Supplementary/Improvement)
CC18U SDC5 BC21 – BIG DATA AND CLOUD PLATFORM FOR IOT
(Information Technology)
(2018 Admission onwards)

Time: Three Hours　　　　　　　　　　　　　　　　　　Maximum: 80 Marks

PART A
Answer *all* questions. Each question carries 1 mark

1. SOA stands for _____

2. _____ is a Network operator that provides packet-switched service.

3. A big data _____ contains only cleaned, structured and matched data.

4. _____ provides the runtime environment for applications, development and deployment tools, etc.

5. Two type of nodes in Hbase are -Master and _____

6. The Hadoop language written in _____

7. The _____ allows systems and services to be accessible by a group of organizations.

8. Which one is not an IOT data protocol or standard?

　a. DDS　　　　　　b. MQTT　　　　　　c. WIFI　　　　　　d. AMQP

9. Microsoft Azure is completely based on the concept of _____

10. Cloud gateway facilitates _____ and secure data transmission between field gateways and cloud IoT servers.

(10 × 1 = 10 Marks)

PART B
Answer any *eight* questions. Each question carries 2 marks

11. List out and explain emerging big data technologies.

12. Explain about the two categories of big data technology.

13. Define divide and conquer Algorithm.

14. What are the tools used for Data Science?

15. Differentiate between RDBMS and HBase.

16. What are the different types of cloud?

17. Write about HBase Architecture.

18. Write a note on cloud service models.

19. Define Local Area Networking.

20. Define AMQP in IoT.

21. What is IOT device map?

22. List the different cloud computing service providers.

(8 × 2 = 16 Marks)

PART C
Answer any *six* questions. Each question carries 4 marks.

23. Write note on Big O Notation.

24. What are the factors that increases the scale of statistical Analysis?

25. Illustrate Hadoop Ecosystem and explain its components.

26. Write notes about PIG, MapReduce, YARN and HDFS.

27. What are the Characteristics of Cloud Computing?

28. Describe how to build an architecture in IoT.

29. Explain about Everything as a service (XaaS).

30. Explain IOT security threats.

31. Define Virtualization. What is the concept behind the Virtualization?

(6 × 4 = 24 Marks)

PART D
Answer any *two* questions. Each question carries 15 marks.

32. a) Explain in detail of the architecture, data storage and applications of HBase.

   b) Explain execution and implementation of Hadoop MapReduce.

33. Illustrate Hive architecture and explain its features and mechanism for data organization.

34. Briefly explain the Cloud Computing Architecture. Explain Advantages and applications of cloud computing.

35. Explain about IoT communication Protocols. Write About Network Protocols for IoT.

(2 × 15 = 30 Marks)

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