TM244582F

Reg. No :.............................

Name :.............................

MASTER'S DEGREE (C.S.S) EXAMINATION, MARCH 2024
2022 ADMISSIONS REGULAR
SEMESTER IV - CORE COURSE Applied Statistics and Data Analytics
ST4C16TM - Big Data Analytics and Artificial Intelligence

Time : 3 Hours

Maximum Weight : 30

Part A

I. Answer any Eight questions. Each question carries 1 weight

(8x1=8)

1. What is do you mean by the charachteristic ' volume' in Bigdata?

2. What do you mean by the charachteristic ' veracity' in Bigdata?

3. Define Bigdata.

4. What do you mean by Prescriptive Analytics?

5. What do you mean by Diagnostic Analytics?

6. What is the use of replication factor in HDFS?

7. Discuss the role of Reducer.

8. Why JVM is used in MapReduce?

9. Expand YARN.

10. Compare YARN and Mapreduce in Hadoop.

Part B

II. Answer any Six questions. Each question carries 2 weight

(6x2=12)

11. Write a note on Lamda Architecture with a neat daigram.

12. Write a note on Kappa Architecture with a neat daigram.

13. Explain the fault tolerance functionality of Hadoop.

14. What are the functions of NameNode?

15. What are the different schedulers used in MapReduce?

16. Briefly explain colocation of Code and Data.

17. Explain the different component managers of YARN.

18. Write a note on administrative commands of YARN with examples.

Part C

III. Answer any Two questions. Each question carries 5 weight

(2x5=10)

19. Explain different types of bigdata architecture.

20. Discuss the Hadoop ecosystem with a neat architecture and explanation.

21. Explain MapReduce Framework in detrail.

22. Discuss with a neat diagram the functions and components of Yet Another Resource Allocator.