#### (Abstract)

Post Graduate Diploma in Data Science and Analytics (PGDDSA) Programme - Model Question paper of Second Semester Elective Courses -implemented w.e.f 2022 admission-Orders issued.

# ACADEMIC C SECTION Acad/C5/PGDDS/2020

Dated: 04.03.2023

Read:-1. UO No Acad/C5/PGDDS/2020 dated 12/05/2022

2. UO Note No EXC 1/EXC 1-1/2338/2023 dated 02/02/2023

3. Email dated 14/02/2023 from Head of the Department, Department of Information Technology

#### ORDER

1. As per paper read (1) above, modified Regulation, Scheme and Syllabus of Post Graduate Diploma in Data Science and Analytics (PGDDSA) was implemented in the Department of Information Technology, Managattuparamba Campus w.e.f 2022 admission onwards.

2. As per paper read (2) above, Examination Branch requested to provide the Model Question Papers for PGDDSA Programme implemented w.e.f 2022 admission onwards.

3. As per paper read (3) above, Head of the Department, Department of Information Technology forwarded the Model Question Papers of Second Semester Elective Courses **PGDDSE03: BIG DATA ANALYTICS** and **PGDDSE05: DEEP LEARNING** for implementation w.e.f 2022 admission.

4. The Vice-Chancellor, after considering the matter in detail and in exercise of the powers of the Academic Council conferred under section 11(1), Chapter III of Kannur University Act 1996 accorded sanction to implement the Model Question papers of two Elective Courses in Second semester of Post Graduate Diploma in Data Science and Analytics (PGDDSA) programme, with effect from 2022 admission, and to report to the Academic Council.

5. The Model Question paper of the second semester Elective Courses of Post Graduate Diploma in Data Science and Analytics (PGDDSA) programme, implemented with effect from 2022 admission, are appended and uploaded on the University website *www.kannuruniversity.ac.in* 

6. Orders are issued accordingly.

![](_page_0_Picture_15.jpeg)

Sd/-

Narayanadas K DEPUTY REGISTRAR (ACAD) For REGISTRAR

To:

The Head, Department of IT Mangattuparamba Campus

Copy To: 1. The Examination Branch (through PA to CE)

- 2. PS to VC/PA to PVC/PA to R/PA to FO
- 3. The web Manager (For uploading on the web site)
- 4. Computer Programmer
- 5. DR/AR I & II Academic /EXC I Section
- 6. SF/DF/FC.

Forwarded / By Order

Nam	e	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Reg.No.....

## SECOND SEMESTER PGDDSA EXAMINATION (Model Question Paper)

#### PGDDSE03: BIG DATA ANALYTICS

## Time: 2 Hrs.

#### Max Marks: 40

**PART A** (Answer any five of the following Each question carries 2 marks)

- 1. Define Big Data
- 2. What are the various phases in text mining process pipeline.
- 3. What is the core component in Hadoop.
- 4. What is grid computing?
- 5. List types of data.
- 6. What are the Conventional challenges in Big Data.

**PART B** (Answer any three of the following Each question carries 4 marks)

- 7. List and explain the features, drawbacks of grid computing
- 8. What are the various phases involved in Big Data Analytics
- 9. What are the functions of MangoDB query language.
- 10. What is the main feature of Hive
- 11. Discuss the pig Latin data types and examples

**PART C** (Answer any three of the following Each question carries 6 marks)

- 12. Explain the Evolution of Big Data and their characteristics
- 13. Discuss the functions of each of the five layers in Big Data architecture design
- 14. Illustrate the Hadoop core components with neat diagram
- 15. Discuss the NoSQL data stores and their characteristic features
- 16. Describe the MapReduce execution steps with neat diagram

Name.....

Reg.No.....

## SECOND SEMESTER PGDDSA EXAMINATION (Model Question Paper)

#### **PGDDSE05: DEEP LEARNING**

# Time: 2 Hrs.

#### Max Marks: 40

**PART A** (Answer any *five* of the following Each question carries 2 marks)

- 1. What is deep learning?
- 2. What are stacking and striding?
- 3. List the application of CNN.
- 4. What is bidirectional RNN?
- 5. Write a note on NLP.
- 6. Define autoencoders.

**PART B** (Answer any three of the following Each question carries 4 marks)

- 7. Write the steps to create and implement a machine learning model
- 8. Explain gradient decent and backpropagation algorithm.
- 9. What is a hyperparameter? explain hyperparameter turning.
- 10. What is Reinforcement learning?
- 11. Write a note on recurrent neural network

PART C (Answer any three of the following Each question carries 6 marks)

- 12. Write the stages of building a Deep Learning model with an example
- 13. Explain CNN architecture.
- 14. Which are the libraries used for implementing a CNN model?
- 15. Explain distributed word representation
- 16. Explain GAN network