

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF COMPUTER APPLICATIONS
(Specialization in Artificial Intelligence & Machine Learning)
EXAMINATION :MAY - 2024
SEMESTER - II

Sub: Natural Language Processing (MCAI 23-204)

Date :25/05/2024

Total Marks :60

Time: 10.00 am to 12.30 pm

Instruction:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

Q.1. Answer the following in 2-3lines. (Any 5) (10)

1. Define tokenization. Give types of tokenization.
2. Describe the concept of derivation.
3. Describe text schema.
4. What is corpus representativeness and balance?
5. Define discriminative model and give example.
6. What is parser? Give the role of the parse.
7. What is the difference between morphology and lexical analysis?

Q. 2. Answer the following in short. (Any 4) (20)

1. What is natural language processing? Give various NLP techniques.
2. Explain the types of dynamic filtering.
3. What are the function of speaker?
4. What is corpus markup? What is their importance?
5. Explain global discriminative model for sequence prediction.
6. Explain the elements of semantic analysis.

Q. 3. Answer the following in detail. (Any 3) (30)

1. Describe text processing in NLP.
 2. Explain CKY algorithm with suitable example.
 3. What is natural language generation? Explain various stages of natural language generation
 4. What are types of annotation? Give advantages of standalone annotation.
 5. Describe naïve bayes model with example.
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