

M.C.A.(Sem-II)

April-2023

(3Hours)

[Total Marks: 80]

N.B.: (1) Question No.1 is Compulsory.

(2) Attempt any three out of remaining five questions.

(3) Each Question carries 20 marks.

Q1) Attempt any four questions.

[20M]

a) List different forms of knowledge required for natural language understanding?

[5M]

b) State differences between NLU and NLG?

[5M]

c) What are important terminologies used in syntax analysis process?

[5M]

d) Explain context-free grammar with suitable example?

[5M]

e) How can Regular Expressions be used in NLP?

[5M]

Q2)

a) State and explain the different applications and challenges in NLP?

[10M]

b) Write a short note on “Stemming and Lemmatization”.

[10M]

Q3)

a) What is Lexicon free FST Porter stemmer?

[10M]

b) Explain the types of Sentiment Analysis in detail?

[10M]

Q4)

a) Write short note on “Transformation-based Tagging”

[10M]

b) Write short note on “Stages in NLP”

[10M]

Q5)

a) Write short note on “Text Classification”.

[10M]

b) Write short note on “Morphology Analysis”

[10M]

Q6) Solve any two questions

a) What are the different approaches to Word Sense Disambiguation (WSD)?

[10M]

b) Explain issues and challenges of Aspect-based Sentiment Analysis in detail?

[10M]

c) Explain the different levels of NLP in detail?

[10M]

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