K26U 0245

Reg. No. : .....

Name : .....

Sixth Semester B.Sc. Artificial Intelligence and Machine Learning Degree (C.B.C.S.S.– O.B.E. – Regular) Examination, April 2026

(2023 Admission)

Core Course

6B17 AIML : NATURAL LANGUAGE PROCESSING

Time : 3 Hours Max. Marks : 40

PART – A

(Short Answer)

Answer **all** questions. **Each** question carries **1** mark. **(6×1=6)**

1. Define Regular expression.
2. What is meant by morphology of a language ?
3. What is the purpose of n-grams ?
4. What is Probabilistic CFG ?
5. Define Anaphora.
6. What is text coherence ?

PART – B

(Short Essay)

Answer **any six** questions. **Each** question carries **2** marks. **(6×2=12)**

7. Give two uses of NLP.
8. Define a tag set.
9. Mention two applications of Natural Language Understanding.

P.T.O.

10. Define context free grammar.

11. Define Feature structures.

12. Explain the role of dialogue acts in plan inference.

13. Explain briefly about discourse processing.

14. Explain any two applications of NLP.

PART – C

(Essay)

Answer **any four** questions. **Each** question carries **3** marks. **(4×3=12)**

15. Explain the rules of word formation.

16. Explain Syntax level language analysis.

17. Explain bottom up parsing.

18. Differentiate between polysemy and homonymy with examples.

19. Explain the importance of POS tagging in NLP with an example

20. Explain the working principle of Finite State Transducers in NLP.

PART – D

(Long Essay)

Answer **any two** questions. **Each** question carries **5** marks. **(2×5=10)**

21. Explain the key concepts of lexical semantics.

22. Explain POS tagging.

23. Give a short note on any 2 applications of Natural Language Generation.

24. Explain the different stages involved in NLP process with suitable examples.
