Reg No.:_____ Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Sixth Semester B.Tech Degree Regular and Supplementary Examination June 2023 (2019 Scheme)

Course Code: AIT312

Course Name: RECOMMENDATION SYSTEM

Max. Marks: 100 Duration: 3 Hours

PART A

Answer all questions, each carries 3 marks. Marks

1		Indicate the main idea of collaborative recommendation approaches.	(3)
2		Discuss the cases in which content-based recommendations will not perform as well as collaborative filtering.	(3)
3		Define classical constraint satisfaction problem (CSP).	(3)
4		Differentiate between Dependent default and derived default?	(3)
5		What are the limitations of hybridization strategies?	(3)
6		Explain about feature combination hybrids	(3)
7		Differentiate RMSE versus MAE?	(3)
8		Explain evaluation paradigms?	(3)
9		What is product push attack and nuke attack?	(3)
10		Illustrate different methods used to detect attacks on existing recommendation system?	(3)

PART B

Answer one question from each module, each carries 14 marks.

Module I

11	a)	Discuss content-based recommendation, in light of explicitly asking the user for his or her interests?	(14)

OR

12	a)	Describe about user-based nearest neighbour recommendation system which deals with new items for which no ratings exist.	(7)
	b)	Summarize the implicit and explicit rating mechanism in collaborative recommendation approaches.	(7)

Module II

13 a) Explain QuickXPlain algorithm that calculates one conflict set at a time for a given set of constraints. (7)

b) Explain about the ranking of items/utility-based recommendation. (7)

OR

14 a) Describe ***Critiquing*** algorithms. (14)

Module III

15 a) Explain recommendation paradigm? (7)

b) Describe feature augmentation hybrid. (7)

OR

16 a) Explain about different parallelized hybridization strategies. (7)

b) Differentiate between cascade hybrids and meta- level hybrids? (7)

Module IV

17 a) Discuss about the general goals of evaluation design? (14)

OR

18 a) Discuss about the design issues in offline recommender evaluation. Illustrate with a case study. (7)

b) Explain about accuracy metrics in offline evaluation. (7)

Module V

19 a) Discuss about different attacks on recommender system? (14)

OR

20 a) How do you quantify attack impact on recommender system? (14)

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