Reg No.:_____ Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

B.Tech Degree S6 (S, FE) Examination January 2024 (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		List any two purposes of recommendation system?	(3)
2		How is a collaborative recommendation system categorized?	(3)
3		Differentiate between Dependent default and derived default?	(3)
4		Explain what is TF-IDF?	(3)
5		Explain about feature combination hybrids	(3)
6		What are the limitations of hybridization strategies?	(3)
7		How can we differentiate Confidence and Trust?	(3)
8		Explain evaluation paradigms?	(3)
9		What is product push attack and nuke attack?	(3)
10		Specify the effect of base recommendation algorithm.	(3)

PART B

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

Module I

11	a)	Describe the two types of outputs generated with pure collaborative approaches that takes matrix of given user–item ratings as the only input?	(14)

OR

12	a)	Explain similarity based retrieval and other text classification methods?	(14)

Module II

13	a)	How can we deal un-satisfiable requirements and empty results sets?	(7)
	b)	Explain QuickXPlain algorithm that calculates one conflict set at a time for a given set of constraints.	(7)

OR

14	a)	Describe Critiquing algorithms	(14)

Module III

15 a) Explain about feature combination hybrids. (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) Explain about offline and online evaluations in recommender systems. (7)

b) Describe the general goals of evaluation design (7)

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) How do you quantify attack impact on recommender system? (7)

b) Discuss about different attacks on recommender system. (7)

OR

20 a) Discuss about different methods available to detect attacks on recommender system (7)

b) Explain how to design robust recommendation algorithms. (7)

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