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SUBJECT CODE NO: H-1743 FACULTY OF SCIENCE AND TECHNOLOGY M.E. (Comp. Sci. & Engg.) Machine Learning (REVISED)

[Time: Three Hours] [Max.Marks:80] Please check whether you have got the right question paper. N.B i) Solve any two questions from each section. ii) Assume suitable data if necessary and state clearly. SECTION - A a) Discuss Find –s algorithm along with its application. 10 Q.1 b) What do you mean by a well-posed learning problem? Explain the important features that are 10 required to well – define a learning problem. Q.2 a) Explain decision tree learning method with tree representation. Enlist few problems that can 10 be solved using decision tree learning. b) Explain hypothesis space search in decision tree learning. 10 Q.3 a) What is multilayer perceptron? Explain Perceptron rule & Delta Rule. 10 b) How to estimate hypothesis accuracy. 10 SECTION - B a) Explain prior probability, likelihood and marginal likelihood in context of Naive Bayes 10 Q.4 algorithm. b) Explain EM algorithm. 10 Q.5 a) Explain K – nearest neighbour learning algorithm with example. 10 b) Explain: 10 I) **Radial Basis Functions** II) Case – Based Reasoning.

Examination NOV/DEC 2018

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Q.6	a) Exp	plain Bayes optimal classifier with example.		10
	b) Exp	plain following models of Evolution and learn	ning.	10
	i) ii)	Lamarckian Evolution Baldwin Effect		

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