30/5/11

AGJ 1st half (o) 5

BF (omp VIT (Rev) Robotic & Al

Con. 3361-11.

(REVISED COURSE)

RK-3357

(3 Hours)

[Total Marks: 100

(2	Attempt any four questions out of remaining six questions.	
Q.1	a) Give the classification of robot.	[5]
	b) What are PEAS descriptors? Give PEAS descriptor for part-picking robot	[5]
	c) What is uncertainty? What are the reasons of uncertainty?	[5]
	d) Compare different uninformed search strategies	[5]
Q.2	a) What is state space representation? Give state space representation for Four queens problem and water jug puzzle?	[10]
	b) Write a note on Four axis SCARA robot	[10]
Q.3	a) Explain various methods of knowledge representation with example	[10]
	b) What are the attributes of a sensor? Explain different types of sensors.	[10]
Q.4	a) Explain different Matrix path planning methods	[10]
	b) What is reactive paradigm? List the characteristics of reactive robotic system	m [10]
Q.5	a) Give and explain IDA* algorithm.	[10]
	b) What is resolution by refutation? Explain with example.	[10]
Q.6	a) Explain in detail the Knowledge based agents	[10]
	b) Define partial order planner? Explain STRIPS representation of planning p	roblem. [10]
Q.7	Write short note on any two of following;	[20]
	a) Agent Environments b) Belief Network	
	c) PROLOG d) Crypt Arithmetic	