2000

Timo : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Answer any five incostions out of which Q. No. 1 is compulsory.

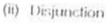
- (a) Which search strategy is simulated by A*
 search algorithm fixe take h(n) = 0 and one
 assumes no further restrictions on the cost
 function g?
 - (i) Depth first
 - (ii) Breadth urst
 - (iii) Uniform cost
 - (iv) None of thes3
 - (b) Tuning test was done for:
 - (i) Check and correct the weight of NN

VM - 3/4

(Turn over)

(ii) Check and correct entry of knowledge	eoge	
base		
(iii) Check whether a computer can ac	shieve	
the behaviour like a human being	1	
(iv) To check the correct answer of	water	
jag problem		
(c)system uses forward reason	oning.	
(I) AI		
(ii) A problem solving		
(iii) Vision		
(iv) Game playing		
(d) A problem space consists of		
、(i) States		
(ii) Operation		
(iii) Both (i) and (ii)		
(iv) None of these		1,2)
(e) Uniformed search is also called:	10	
(i) Hill climbing		20
(ਹੋ) ∕ Best first search		8.8
(2)	Co	ntd.
de		

	0.8	1277
(iii) Worst cas	e search	* 7, 7, 3
(iv) Brute fore	so septrob .	
(f) A formal graties the express	ammar recursive	of the
language.	ÿ.	
(i) Wils		a 80 ²
(ii) Pffs		
(iii) Dffs		
(iv) None o		-
100	allows qualificati	on over finite
subsets.		
-107	cate logic	
(ii) Forma		
رننز) Weal	second order log	jic
(iv) None		
(b) The form	ula is in conjunctive	e normal form if it
is a conju	inction of clauses, t	Where a clause is
/	of literal.	1.00
(i) Cor	ijunction	
VM - 3/4	(3)	(Turn over)
AM - DIM	W 10 10	



(iv) Negative

- 18 2 What is an agent ? Explain the structure of an agent. Solve a problem of your choice using agents.
 - 3/ What is heuristic function ? What are the characteristics of a good heuristic? Discuss with suitable example.
 - Differentiate between informed and uninformed search. Explain Best first search with suitable example. 5

Solve the Cryptarithematic problem:

SEND

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MONEY

Discuss Max-Min algorithm with example and discuss the significance of α , β prusing.

VM - 3/4

(4)

Contd.

- Assume the following lacts:
 - Ram only likes easy courses.
 - Engineering courses are hard.
 - All the courses in BCA dept are easy.
 - BCA 603 is a Al course.

Use resolution to answer, 'What course would Ram like"?

- State the cases where you like the forward chaining and backward chaining. What is semantic network?
- Write short notes on the following :
 - (a) Knowledge representation
 - (b) Planning with state search
 - (c) Uncertain knowledge reasoning 💂

VM ~ 3/4 (100)

(5) BCA(VI)--603