Ans to the Que. No: 1

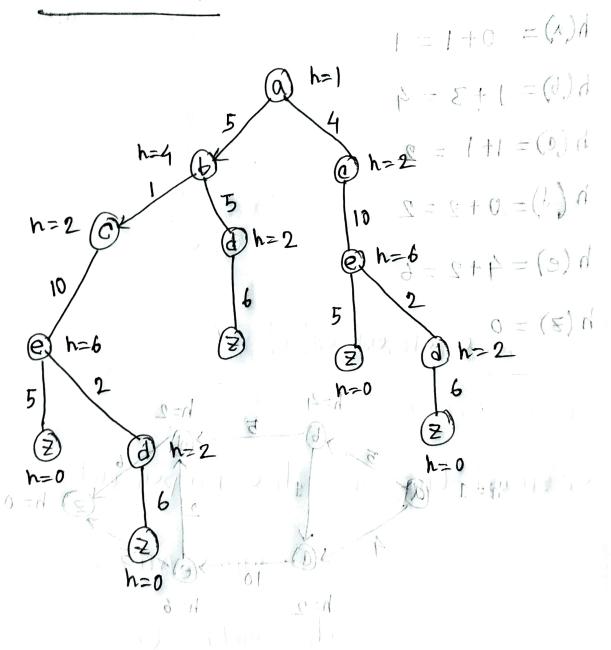
Secrety Tries:

$$h(a) = 0 + 1 = 1$$
 $h(b) = 1 + 3 = 4$
 $h(c) = 1 + 1 = 2$
 $h(d) = 0 + 2 = 2$
 $h(e) = 4 + 2 = 6$
 $h(z) = 0$
 $h = 4$
 $h = 2$
 $h = 2$
 $h = 0$

PART PROPERTY

Ans to the Owe. No. 1

Search Tree:



A* Search:		- Ala?	
Itercation	0-F	(b) G-F	
1	a	b, C 5+4 4+2	
2,	0,0,	b. e. 5+4, 14+6	
3//	ofere /	5/4 10+2 /1/+0 / 1	
3	are, b, ont of of en	10+2. 01 14+6	
4	a.c.b.tod	7, e 16+0 14+6	
Bitalina	a. 616, 1.72 Monor	A	
	11: 9:11:	ETYTH ONN!	

Path Return: A-2B-20143/2

Cost : 16

1) consis-leme

		1 1/57	032 ¥ A
tath:			moltons
		S	1
5+12 (b) a		0,10	
5-10-10-10-10-10-10-10-10-10-10-10-10-10-	1 2	D , RD	1-
CHY 2401 12/2		10-10-	3/
S Ans to th	e Que, No	· 2	3.1
9 5	bard		N
Two nequirments	for goo	d hear	i's tie
functions are:			
1) Admissibl	E-A:	Re-luter	Path
2) consistence	J	0/:	1200

Mathematical Relation of Admissible:

0 < h(n) < n* (n)

here, ho con is estimated cost that means heurustic value h(h) should be greater than on equal to o (Zero).

and h(n) should be equal on less than the estimated cost value of h(n)

Mathmatical Relation of consistency:

h (h) -h (m) = cost (nim)

That means n node and m node heuristic value difference must be less than on equal to total east of node m and