

University of Asia Pacific
Dept. of Computer Science and Engineering
Lab Test – 01 (Part-1), Spring-2021

Course Code: CSE 404 Course Title: Artificial Intelligence and Expert Systems Lab
Total Marks: 20 Time: 25 (20 + 5) Min

Answer the following questions:

1. Consider a list $[A, B|C] = [a, []]$. Write a code segment to find out the values of A, B and C? [4]

2. Consider the following rules for a List Searching: [7]

`is_in(Item,[Item|Rest]).`
`is_in(Item,[DisregardHead|Tail]):- is_in(Item,Tail).`

Write a code segment to search **carrot** in a list of

`[corn, cucumber, eggplant, carrot, broccoli].`

3. Given the types and body styles of a car: [9]

`types(Car, sedan) :-`
`has(Car, four_doors),`
`trunk(Car, traditional).`

`types(Car, coupe) :-`
`has(Car, two_doors),`
`trunk(Car, traditional),`
`roof(Car, solid).`

`types(Car, sports) :-`
`has(Car, two_doors),`
`price(Car, high).`

Write a code segment to find out a **specific car type** with a query: **types(car, X)** after providing **necessary facts**.