



Course Title:	Artificial Intelligence	Course Code:	CSC462	Credit Hours:	3
Course Instructor	Dr. Atifa Athar, Dr. Zeeshan, Ms. Khola	Programme Name:	BS. Computer Science		
Time Allowed:	90 mins	Maximum Marks:	25		
Name & Registration No					

Question No 1.

Marks: 8

CLO: <1>; Bloom Taxonomy Level: <Understanding>

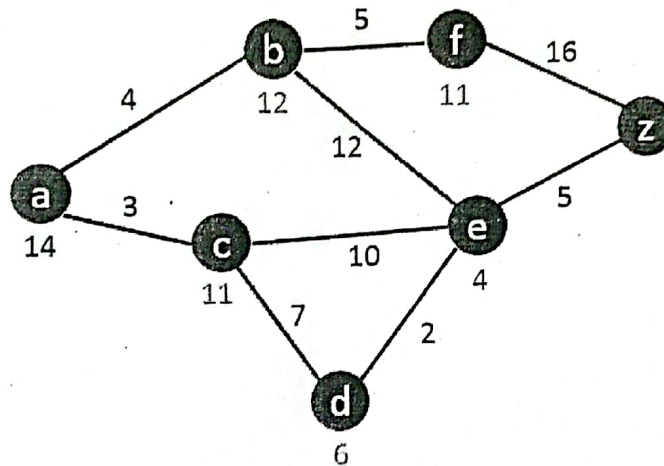
While designing an Autonomous Drone Agent for Package Delivery you need to identify the PEAS that can be used to operate within this specific context.

Question No 2.

Marks: 9

CLO: <2>; Bloom Taxonomy Level: <Applying>

Consider the following Graph with cost and heuristic values. "a" is the Start State and "z" is the Goal State. You are required to find the path along with total cost from a to z by applying the A* algorithm.



Question No 3.

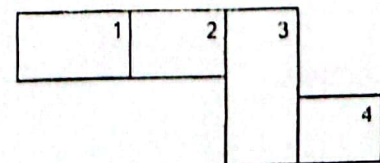
Marks: 8

CLO: <3>; Bloom Taxonomy Level: <Applying>

For CUI FA22, a visit is planned to Lahore Safari Park. There are seven animals and four enclosures. Because there are more animals than enclosures, some animals have to share the enclosures with others. However, the animals are very picky about who they live with. The Lahore Safari administration is having trouble assigning animals to enclosures. You are required to plan where each animal goes.

The animals chosen are a Lion, Antelope, Hyena, Evil Lion, Hornbill, Meerkat, and Boar.

They have given you the plans for the zoo layout. All enclosures need not to be filled.



Each animal has restrictions about where it can be placed.

1. The LION and the EVIL LION hate each other and do not want to be in the same enclosure.
2. The MEERKAT and BOAR are best friends and have to be in the same enclosure.

3. The HYENA smells bad. Only the EVIL LION will share his enclosure.
4. The EVIL LION wants to eat the MEERKAT, BOAR, and HORNBILL.
5. The LION and the EVIL LION want to eat the ANTELOPE so badly that the ANTELOPE cannot be in either the same enclosure or in an enclosure adjacent to the LION or EVIL LION.
6. The LION annoys the HORNBILL, so the HORNBILL doesn't want to be in the LION's enclosure.
7. The LION is king, so he wants to be in enclosure No. 1.