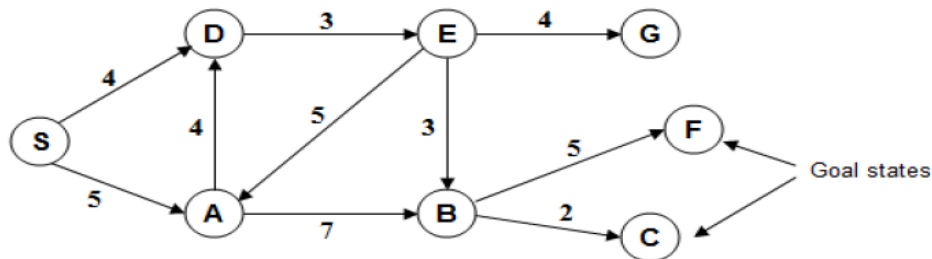# GRETSA UNIVERSITY

## SCHOOL OF COMPUTING AND INFORMATICS

### ASSIGNMENT 1 – SEPTEMBER - DECEMBER 2023

**COURSE CODE: BSCS 401**                    **COURSE TITLE: ARTIFICIAL INTELLIGENCE**

a) Consider the Google search engine. Explain the context in which it can be considered an intelligent agent.                                                          [4 mks]

b) Using the Uniform-Cost search strategy, find a path from a city S to goal states/cities F & C.                                                                      [6 mks]



c) Using examples, discuss briefly how artificial intelligence is applied in the following fields:                                                                    [6 Marks]

    (i) Natural language processing

    (ii) Unmanned vehicles

    (iii) Decision support

d) Write a logical expression in FOL that describes the following sentence: ***If I pass the test and I pass the coursework then I will pass the course*** . State the meaning of any terminology you introduce.                                                         (4 mks)
    Build the truth table for the expression above                           (4 mks)

**e)** Convert the following English statements into first order predicate logic    (6 mks)

    i.      Anyone who abuses drugs kills himself

    ii.     Everyone who is works hard will succeed

    iii.    Every boy who is tall and dark is handsome