# GATE 2023 EC-14

## EE23BTECH1205 - Avani Chouhan\*

### **Question: 14**

The value of the contour integral,  $\oint_C \frac{z+2}{z^2+2z+2} dz$ , where the contour C is  $\{z: |z+1-\frac{3}{2}i|=1\}$ , taken in the counter clockwise direction, is

A 
$$-\pi(1+j)$$

B 
$$\pi(1+j)$$

B 
$$\pi(1+j)$$
  
C  $\pi(1-j)$ 

D 
$$-\pi(1-j)$$

#### **Solution:**