

## **Math-1153 Class Test 02 Section BB**

1. Describe the set of points  $z$  in the complex plane that satisfies  $|z - 1| = |z - i|$ . [3]
2. Find the modulus and argument of  $\frac{-3(-1-i)^3}{i+i^4}$ . [2]
3. Write  $\frac{3e^{1+\pi i}}{e^{\frac{\pi}{2}i}}$  in the  $a + ib$  form. [2]
4. Find all the values of  $\left(\frac{\sqrt{3}-i}{i}\right)^{\frac{1}{5}}$ . [3]