

Registration Number: _____

Name: _____

CN503 – INTERNET of THINGS (INITIAL ASSESSMENT)

1. State the difference between a public and a private IPv4 address by providing one IP address (example) belonging to each category.

2. Which of the following is/are correct IPv6 address(es)? (Encircle your answer).

- (a) 2001:0db8:85a3:0000:0000:8a2e:0370:7334
- (b) 2001:db8:85a3:0:0:8a2e:370:7334
- (c) 2001:db8:85a3::8a2e:370:7334
- (d) ::1

3. Briefly state the difference between SSL (Secure Socket Layer) and TLS (Transport Layer Security) protocols, which one do you think is more popular?

4. If we wanted to check the kernel name or version/release on a Linux based system, what command would we use?

5. State some of the key attributes of Internet of Things (devices) in general. Can mobile cell-phones, laptops, smart electricity meters and RFID security fobs, all be classified as IoT-ware?

6. What does the term software defined networking imply?

7. Define real-time systems? What is the key property that distinguishes such systems from general purpose consumer/everyday computing devices?

8. What is the prevalent operating system being used on Raspberry Pi?

- (a) Windows IoT
- (b) Chromium
- (c) Raspbian
- (d) Ubuntu MATE
- (e) Etcher

9. How difficult was this quiz?

- (a) Very difficult
- (b) Difficult
- (c) Easy
- (d) Nailed it!

10. Among the following avenues, which one(s) in your opinion you are the most comfortable with?

- (a) Programming (Python, C/C++, Java, etc.)
- (b) Networking

- (c) Operating Systems
- (d) Security
- (e) Basic electronics/circuit analysis
- (f) Reading existing literature/research papers