***Mock Test for Networking Fundamentals***

**You need to score 15 to Pass**

1. Which device enables a host to communicate with another host on the same network? **(Select all that apply)**
2. **Host**
3. **Hub**
4. **Router**
5. **Switch**
6. Which of the following cable types are designed to carry up to 100Mbps?

**(Select all that apply)**

1. **Cat 3**
2. **Cat 5**
3. **Cat 5e**
4. **Cat 6**
5. How many twisted pairs are contained within a cat 5e network cable?
6. **2**
7. **3**
8. **4**
9. **5**
10. Which communications channel media is capable of communication over distances in excess of 40km?
11. **Cat 5e**
12. **Multimode Fibre Optic**
13. **Cat 6**
14. **Single mode Fibre Optic**
15. Which layer of the OSI model receives data direct from the user?
16. **Physical Layer**
17. **Session Layer**
18. **Application Layer**
19. **Presentation Layer**
20. Which layer of the OSI model deals with TCP protocol?
21. **Data Link Layer**
22. **Transport Layer**
23. **Presentation Layer**
24. **Session Layer**
25. What is the default sub-mask for an IPv4 Class C address?
26. **255.255.255.255**
27. **255.0.0.0**
28. **255.255.0.0**
29. **255.255.255.0**
30. In the OSI model which is the correct order of data decapsulation by a receiving host?
31. **Segment, Packet, Data, Frame**
32. **Frame, Packet, Segment, Data**
33. **Packet, Frame, Data, Segment**
34. **Frame, Data, Packet, Segment**
35. At what layer of the OSI model does a Switch operate?
36. **Layer 1**
37. **Layer 2**
38. **Layer 3**
39. **Layer 4**
40. How many Network ID bits are involved with IPv4 Class B addressing?
41. **16**
42. **8**
43. **24**
44. **32**
45. Which protocol deals with IP addresses and MAC addresses?
46. **UDP**
47. **TCP**
48. **ARP**
49. **DNS**
50. Which of the following will affect the communication of data over copper media?

**(Select all that apply)**

1. **Attenuation**
2. **Dispersion**
3. **Crosstalk**
4. **EMI**
5. Which one of the following is the main standard for Wireless communication?
6. **IEEE 802.15**
7. **IEEE 802.3**
8. **IEEE 802.16**
9. **IEEE 802.11**
10. Which of the following communication modes describes Half-Duplex?
11. **Two-way simultaneous communication**
12. **One-way communication**
13. **Three-way simultaneous communication**
14. **Two-way communication, one direction at a time**
15. Which of the following situations would need a crossover network cable?
16. **Host to Switch**
17. **Host to Host**
18. **Switch to Router**
19. **Host to Hub**
20. How many Host bits are involved with the Classless IPv4 address 192.162.10.0/26?
21. **2**
22. **4**
23. **6**
24. **8**
25. Which one of the following is a valid host range for the Network ID 192.30.10.0?
26. **192.30.10.0 - 255**
27. **192.30.10.1 - 254**
28. **192.30.10.0 - 254**
29. **192.30.10.1 – 255**
30. Which one of the following IP addresses is reserved for local loopback?
31. **192.140.30.0**
32. **134.255.255.255**
33. **10.255.0.0**
34. **127.0.0.1**
35. What is the range of the category “Well Known” Ports in a host?
36. **0 - 1023**
37. **0 - 49151**
38. **1024 - 49151**
39. **49152 – 65535**
40. For the well-known associated ports which port number is used for SMTP?
41. **Port 21**
42. **Port 80**
43. **Port 25**
44. **Port 443**
45. For the Classless IPv4 address 200.110.10.0/26 what is the required sub-net mask?
46. **255.0.0.0**
47. **255.255.255.192**
48. **255.255.255.128**
49. **255.255.255.0**
50. What is the first octet range for a Class E IPv4 address?
51. **128 - 191**
52. **192 - 223**
53. **240 - 255**
54. **224 – 239**
55. What is the first octet range for Class D Multicasting?
56. **224 - 239**
57. **0 - 127**
58. **192 - 223**
59. **240 – 255**
60. How many bytes are in a MAC address?
61. **4**
62. **5**
63. **6**
64. **7**
65. How many bits are in an IPv6 address?
66. **32**
67. **64**
68. **100**
69. **128**