

1. What are the minimum and maximum voltage tapping available for the UHD transformer system? **380 VAC to 480 VAC.**
2. When should you check the secondary taps in the PDU? **Both A and B. After a tether & umbilical reterm.**
3. Which node(s) monitor water alarms? **Subsea nodes.**
4. Which is not a component in the PDU? **All of them are components in the PDU. Contactor, Circuit breaker, 230V control transformer.**
5. If a PDU panel is removed or PDU door open, can you turn on control power? **Yes.**
6. What is used to test the network communication path for computers? **Ping.**
7. The SFP modules in a subsea node fiber dome PORT B transmit (TX) and receive (RX) at what wavelengths in the DTS? **TX: 1550 / RX: 1310.**
8. In which application do you change the offset of the Depth Sensor if moved on the ROV? **UserConfigApp.**
9. What voltage is dispersed to each port on the LCU? **120 VAC.**
10. What device is typically NOT directly connected to Node 1 or Node 2? **Ethernet switch.**
11. What is the max power rating for any port on a subsea node? **15 A.**
12. Torque requirements for bolted assemblies can be found where? **Upper left hand corner of assembly drawing.**
13. What functions) does the Master Override bypass? **All of the above. Tether can be payed out past the software set limit, Tether can be payed out while the latches are closed, Depth interlock where the ROV needs to be 5M or deeper.**
14. Topside NIMs (client) are equipped with a cable whip with what type of connector? **RJ45.**
15. What are a few things the DVL is used for? **All of the Above. Station-Keep, X-Y Measurement and Displacement, Altitude Hold.**
16. ROV pump HPU accumulators are charged with Nitrogen, to what psi? **1900 psi.**
17. What is the budget current draw on one node? **30A.**
18. True or False: 2.2-liter compensators are calibrated to 0%, 50%, and 100%. **True.**
19. Which device has the TTL In/Out connection? **SIM.**
20. What supply voltage does a subsea node require? **26VDC.**
21. Which Megacon resistance value below would trigger a GFD alarm? **500 kΩ.**
22. The SFP modules in the fiber dome PORT A transmit (TX) and receive (RX) at what wavelengths in the DTS? **TX: 1310 / RX: 1550.**

23. Approximately how much measured light power should be read at the Node fiber port? **-6 dBm.**
24. What module would you connect to access serial communication with a subsea UCM via a test port? **Rack SIM.**
25. What is the terminology for creating a connection between two ports thru software? **Tunneling.**
26. Which device is considered an essential system device? **TCU.**
27. Which type of Module(s) can be associated with the AUX Power panel and a port on the AC J-box? **Both A and C. NIM, SIM.**
28. What is the maximum current draw for a NIM? **15A.**
29. What is the name of the file that configures the ports when the system is started? **Flat-file.**
30. What is the pin-out of the Seanet penetrator/cable end? **1: +26vdc 2: -26vdc Return 3: Ground 4: Data Spare 5: Slave to Master 6: Master to Slave 7: Video.**
31. If communication is lost between the server and PDU PLC, the ROV max pressure will be? **2000 psi.**
32. A LOW SIDE is a ground fault that occurs between which seanet pins? **Pins 2 and 3.**
33. What indicator identifies that a thruster cannot reach its commanded RPM? **The Thruster Limit light.**
34. What happens to a thruster when a thruster speed sensor signal is lost? **Thruster ramps to full speed.**
35. What is the IP scheme for the topside UHD computers? **192.168.0.xxx.**
36. What is the normal max operating pressure of the ROV AUX circuit? **3000 psi.**
37. True or False: FLOW-through penetrators allow fluid to pass through from the seanet and FEED-Through penetrators do not. **True.**
38. How do you test the integrity of the node fiber dome seal? **1Pull a vacuum test on the dome and monitor the vacuum gauge.**
- What is the recommended pressure to operate the T-4 Manipulator with? **3000 psi.**
39. When voltage is applied across L1 & L2... **Lamp 1 will light up.**
40. True or False: The DTS serves as the hub of communications on the ROV systems and can also provide power to various subsea devices used on the ROV. **True.**
41. Fill in the definitions on the acronyms below:
- A. **HUD: Heads Up Display**
 - B. **LCU: Lighting Control Unit**
 - C. **NIM: Network Interface Module**
 - D. **PCB: Printed Circuit Board**
 - E. **DTS: Digital Telemetry System**
 - F. **VIM: Video Interface Module**

- G. **UCM: Universal Control Module**
- H. **RTC: Real Time Computer**
- I. **GFD: Ground Fault Detect**
- J. **TCU: Thruster Control Unit**

42. True or False: Fiber domes on subsea nodes are compensated with oil. **False.**
43. A HIGH SIDE is a ground fault that occurs between which seanet pins? **Pins 1 and 2.** This contradicts the Schilling manual which states its +26vdc to chassis ground, pins 1 & 3.
44. True or False: In the computer rack, on the back of the Right Client computer, there are ethernet cable connections to both the Network switch and Node 1. **False.**