Information Section Rigging

1. What are the three general categories of rigging? Moving an object from one place to another, one position to another, and restraining an object for a period of time.

2. What factors affect the hazards in rigging? Weight, size, and center of gravity.

3. What are the two most important factors in avoiding rigging accidents? Correct equipment and procedures.


5. What rope type is best suited for areas where chemicals are present? Saran.

6. What rope type is most resistant to abrasion? Saran.

7. What type of rope is best able to stretch without breaking? Polyethylene (Elasticity).

8. Which type of rope is most resistant to sunlight? Orlon.


10. What are some common tasks where electricians use rope? Hoisting, safety lines, slings, snubbing a load, guiding a load, raising tools, and temporary scaffolds.

11. Where should rope be stored? Dry unheated room with air circulation.

12. What is the safety factor for new rope? Five to one.

13. What is the purpose of reversing the rope periodically in pulleys? So all parts receive equal wear.

14. How does the breaking strength of a rope compare to the safe working load? Breaking strength is divided by 10 to get the safe working strength.

15. How do knots affect the strength of rope? Reduced by as much as 50%.

16. What are the four factors for good rope fastening? Secure against slippage, suitability and strength, ease of tying, and ease of untying.

17. What are the three parts of a rope when tying knots? Running end-working end, standing part-inactive length, and bight-central part of the rope.
18. What are some of the most common knots? Backsplice, figure eight, bowline, half-hitch, double half-hitch, clove hitch, snubbing hitch, timber hitch

19. What is the purpose of the shoulder on an eye bolt? Increase strength for forces that are not straight ahead

20. What is a safety hook? Hook with a spring-loaded safety snap

21. What is the difference between an anchor and a chain shackle? Anchor shackle is bowed out and not U shaped

22. How are shackles sized? Diameter of the steel in the bow part (Not the pin)

23. What are spreader bars? Steel channel or I-beam bars that allow for different width loads to be lifted due to slots or holes along the bar

24. What is the purpose of a snatch block? Change the direction of a pull

25. What is a “traveling” or “fall” block? One that travels as the load is lifted

26. What precaution must be taken when lifting objects with a sling? If it is not balanced, it could slip out of the sling

27. What is a tagline? Line used to manually guide a load that is being lifted

28. What is the signal for raising a load with a crane? Forearm vertical, forefinger up move in small horizontal circles

29. What is the minimum distance that must be maintained when hoisting loads with a crane near electrical wires? 2 m

30. Is a chain hoist designed for a horizontal pull? No (Use a lever hoist)

31. What is the weak point in a cable winch? Handle

32. What are the two basic types of jacks? Screw and hydraulic

33. Are jacks designed for safely jacking metal against metal? No (Use wooden blocks)

34. What precaution must be taken when using a jack in the horizontal position? Should be lashed or blocked

35. What is an extension trestle ladder? Trestle ladder with a center piece which can be extended for extra height
36. What is the safety ratio for a load on a scaffold? 4/1 (Rated 4 times the anticipated load)

37. What two features must be added to a scaffold for safe operation? Guard rails and toe boards

38. When is a safety harness required by someone working on a stage? Above 3 m (10’)

39. How often must scaffold be attached to the building structure? Every third lift

40. What are some of the advantages of tubular steel sectional scaffold? Ease of assembly, universal parts, special tools not required, superior strength and durability

41. What features must a rolling scaffold possess? Braking and locking devices

42. One advantage of rolling scaffold is the ability to remain on the platform while the scaffold is moved from place to place. True or False?

43. How many workers are allowed on a swing stage? 2