1. What type of bar support would you use in a beam
   a. SB
   b. HC
   c. CB
   d. BB

2. How many classes of bar support are there?
   a. 3
   b. 4
   c. 5
   d. 6

3. What color would you use to identify elements of a wall
   a. Yellow
   b. Orange
   c. Pink
   d. White

4. What class of bar supports provide the least amount of protection?
   a. D
   b. A
   c. B
   d. C

5. How far apart is an appropriate space to spread out supports?
   a. 1000mm
   b. 800mm
   c. 1200mm
   d. 300mm

6. What lengths do WWF rolls come in?
   a. 20 meters
   b. 50 meters
   c. 60 meters
   d. 100 meters

7. What are the stock lengths of shipped rebar?
   a. 5,10,15,20 meters
   b. 6,12,18,20 meters
   c. 5,12,16,18 meters
   d. 6,9,12,18 meters

8. What is the metric equivalent to the imperial #8 bar
9. What is the lap length for a 25mm bar in a column?
   a. 750mm
   b. 600mm
   c. 625mm
   d. 800mm

10. How do you reinforce against punching force?
    a. Add bar between columns
    b. Add bars in slab
    c. Add integrity bars
    d. Add more top bars

11. A capitol is added in a slab for what reason?
    a. Spread out shear force
    b. Increase head room
    c. To protect rebar
    d. Fire proofing building

12. What is an abutment?
    a. Superstructure
    b. Supporting structure at ends of bridge
    c. Footings
    d. Pile cap reinforcement

13. Where would you find a corbel?
    a. Slab
    b. Beam
    c. Airport
    d. Bridge

14. Where would you locate a spandrel beam?
    a. Supporting the girders
    b. Being supported by girders
    c. In the interior of the project
    d. On the exterior of the project

15. What is a girder?
    a. Secondary supporting beam
    b. Structural beam
    c. Primary supporting beam
    d. Column
16. What does “15-20m-5000@200” refer to?
   a. Diameter, size, space, length
   b. Quantity, diameter, length, space
   c. Space, quantity, diameter, length
   d. Length, space, quantity, diameter

17. What diameter is a bar marked AA25020
   a. 20mm
   b. 15mm
   c. 25mm
   d. 10mm

18. Temperature reinforcing is meant for
   a. Shear force
   b. Tensile force
   c. Crack control
   d. Weight deflection

19. Concrete is strong in __________ but weak in __________
   a. Compression, tension
   b. Tension, shear
   c. Shear, compression
   d. Compression, torsion

20. Rebar is strongest against
   a. Compressive forces
   b. Tensile forces
   c. Shear forces
   d. Torsion forces

21. What ingredient is not required to make concrete?
   a. Fine aggregates
   b. Course aggregates
   c. Water
   d. Mortar

22. What are the stresses experienced in reinforced concrete?
   a. Compression, torsion, shear
   b. Compression, tension, torsion
   c. Tension, compression, shear
   d. Shear, torsion, extension
23. If the cross sectional value of 20mm rebar is 300 and the cross sectional value of 15mm rebar is 200, how many 15 mm bars would I need in order to replace 200 20mm of the same length?
   a. 200
   b. 300
   c. 400
   d. 500

24. When making a test specimen for 1 type of rebar, how many test specimens would I need for 40 ton?
   a. 2
   b. 4
   c. 6
   d. 8

25. What is the standard mill length of 10 mm rebar in Canada?
   a. 12meters
   b. 18meters
   c. 16meters
   d. 20meters

26. What size is normally used for a stirrup
   a. 10mm
   b. #5
   c. 15mm
   d. Both A & B

27. Epoxy coated rebar is designed to aid in concrete spalling
   a. True
   b. False

28. Rebar cast against and permanently exposed to earth must have ___mm cover unless otherwise posted
   a. 30mm
   b. 40mm
   c. 50mm
   d. 75mm

29. How many bars tied together make a bundle?
   a. 3
   b. 6
   c. 4
   d. 5

30. With bundled bars, the minimum cover is
   a. 40mm
   b. 50mm
   c. Same as a single bar
   d. None of the above
31. The abbreviation for FF means
   a. Far face
   b. Fotting face
   c. First face
   d. None of the above

32. What type of tie might replace a (wrap and snap) tie when tying to a wall?
   a. Saddle
   b. Figure eight
   c. Saddle with wrap
   d. Double snap

33. The three methods of splicing rebar are mechanical, welded, and ________
   a. Lapping
   b. Stitching
   c. Wedging
   d. Dowelling

34. How long is a piece of rebar used to make a 8” X 10” tie?
   a. 36”
   b. 38”
   c. 41”
   d. 38 ½”

35. The number of each bar size corresponds to the number of eights in the bar
   a. True
   b. False

36. What is the spacing required to make a mat of 16 bars, 8 each way of #5 bars 17-1/2” in length?
   a. 12”
   b. 16”
   c. 18”
   d. 30”

37. How often should a bar support (plastic chair) be placed on the BLL of a slab?
   a. 2 ft
   b. 3 ft
   c. 4 ft
   d. 5 ft

38. Any type of tie can be made stronger by
   a. Making an extra vertical wrap
b. Making an extra horizontal wrap
c. Doubling the wire
d. Twisting more than 4 times

39. The word ________ covers just about all horizontal members except trusses
   a. Column
   b. Brace
   c. Beam
   d. None of the above

40. What is the abbreviation for footing?
   a. F
   b. FF
   c. Foot
   d. Ftg

41. List in order the colors used to code rebar in order
   0
   1)
   2)
   3)
   4)
   5)
   6)
   7)
   8)
   9)

42. How many 1/8’s are equivalent to a 10m piece of rebar?
   a. 1
   b. 2
   c. 3
   d. 4

43. How would you rig epoxy rebar?
   a. Wire rope choked
   b. Wire rope basket
   c. Nylon sling choked
   d. Nylon sling basket
1) D
2) C
3) A
4) B
5) C
6) C
7) D
8) D
9) A
10) C
11) A
12) B
13) D
14) D
15) C
16) B
17) C
18) C
19) A
20) B
21) D
22) C
23) B
24) B
25) A
26) A
27) A
28) D
29) A
30) C
31) A
32) A
33) A
34) A
35) A
36) D
37) C
38) C
39) C
40) D
41) Pink
    White
    Red
    Dark Green
    Yellow
    Dark Blue
    Light Green
    Orange
    Light Blue
    Brown/Black
42) C
43) C