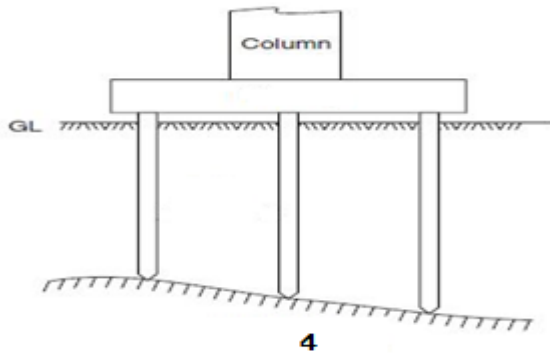
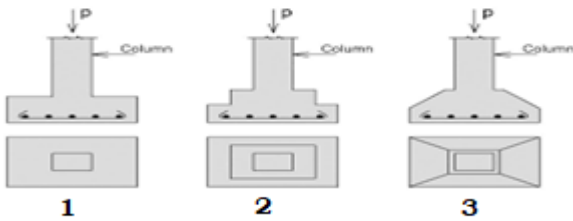


CON/N3601: Mark layout for foundation, walls, soak pit/septic tank and monitor earthwork activities for rural construction

1. Identify the following from given sketch and write in the given boxes. (5 X 4 = 20)

- i. Stepped Footing
- ii. Pile Foundation
- iii. Pad Footing
- iv. Sloped Footing



2. Which of the following method is used to check right angle of a layout? (5)

- i. With Measurement Tape
- ii. 3-4-5 Method
- iii. With Line Dori
- iv. None of the above

3. Which among the following methods is used for ensuring correctness of base? (5)

- i. Dipping
- ii. Ramming
- iii. Backfilling
- iv. None of the above

CON/N3602: Build brick/block masonry structures for rural construction

4. Which of the following method is used to check verticality of a brickwork? (5)

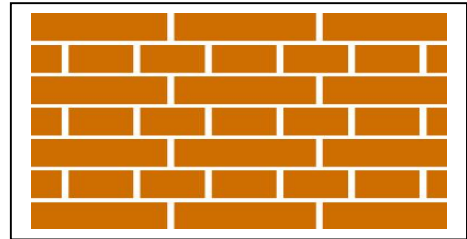
- i. With Measurement Tape
- ii. 3-4-5 Method
- iii. With Line Dori
- iv. With Plumb Bob

5. Which of the following defines 1:3 mortar ratio? (5)

- i. 1-part cement + 3-part sand
- ii. 3-part cement + 1-part sand
- iii. All of the above
- iv. None of the above

6. Identify type of bond from given sketch? (5)

- i. Header Bond
- ii. Stretcher Bond
- iii. English Bond
- iv. Flemish Bond



7. What kind of surface/ platform is suitable for mixing cement mortar? (5)

- i. Grass surface
- ii. Waterproof hard surface
- iii. Sand bed
- iv. Rock bed

8. What is the function of Lintel? (5)

- i. To provide support to foundation
- ii. To provide architectural looks
- iii. To provide support to base of doors & windows
- iv. To provide support to the above wall of openings

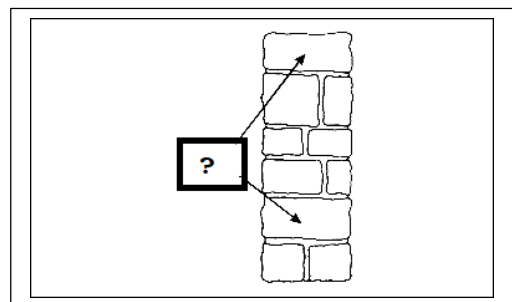
9. What are the methods by which you can check for quality of brick on site? (5)

- i. By dropping from 1-meter height (Check for braking)
- ii. By striking two bricks together (Check for metallic sound)
- iii. Texture of bricks (check for presence of free water-soluble salts)
- iv. All of the above

CON/N3603: Build structures using random rubble masonry

10. Identify the stone. (5)

- i. Bond Stone
- ii. Brick
- iii. Gravel
- iv. Uncoursed stone



11. In RR masonry, raking is done _____. (5)

- i. To identify the location of joints
- ii. To seal the joints
- iii. To repair cracks in the wall
- iv. When pointing or plastering is required to be done

12. What are hearting stones? (5)

- i. Hammer dressed stones
- ii. Chips or spalls of stones used for filling the voids between adjacent stones
- iii. Heart shape stones
- iv. Stones more than 150mm in size

13. Identify given tool. (5)

- i. Measurement Tape
- ii. Bolster Chisel
- iii. Line Dori
- iv. None of the above



14. Precaution to be taken during RR masonry is _____. (5)

- i. To provide bond stones at regular interval
- ii. Pointing should be done with rich mortar.
- iii. Continuous vertical joints should be avoided.
- iv. All of the above

15. Which curing method is most suitable of curing of RRM? (5)

- i. By wet Hassen clothes
- ii. By ponding
- iii. By sprinkling water
- iv. None of the above is suitable

CON/N3604: Carry out IPS flooring in rural construction

16. Which among the following will lead to a more durable and higher strength concrete? (5)

- i. High water-cement ratio
- ii. Low water-cement ratio
- iii. All of the above
- iv. None of the above

- 17. Why slope is provided in IPS floor? (5)**
- i. To make it good looking
 - ii. For curing
 - iii. For water drainage
 - iv. None of the above
- 18. Write correct sequence of the following steps of IPS in the given boxes. (5)**
- i. Concreting
 - ii. Glass/ PVC strip fixing of panels
 - iii. Button Marking
 - iv. Level Transfer
- 19. Which of the following is a preparatory task before IPS flooring? (5)**
- i. Level Transfer
 - ii. Material Inspection
 - iii. Removal of loose materials from the surface
 - iv. Tools inspection
 - v. All of the above
- 20. It is advisable to pour concrete from lower height, Why? (5)**
- i. It gives more strength
 - ii. It helps in less consumption of concrete
 - iii. It avoids segregation of aggregate
 - iv. None of the above
- 21. What do you understand by segregation in concrete? (5)**
- i. Segregation of aggregates from mortar
 - ii. It is green coloured
 - iii. It does not contain any aggregate
 - iv. None of the above

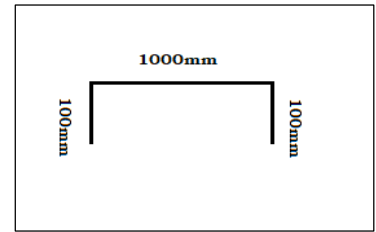
CON/N3605: Carry out Reinforcement steel works for R.C.C. structures in rural construction

- 22. Identify tool from given sketch/photo? (5)**
- i. Hack Saw
 - ii. Bar Cutting Machine
 - iii. Power Saw
 - iv. Bar Bending Machine



23. Find the cut length of bar (10mm Φ) given in sketch? (5)

- i. 1200mm
- ii. 1240mm
- iii. 1160mm
- iv. None of the above



24. What deduction is done at 90° bend in reinforcement bar? (5)

- i. 2X Φ of bar
- ii. 1X Φ of bar
- iii. 3X Φ of bar
- iv. No deduction

25. Which of the following tie is recommended for lapping of rebar? (5)

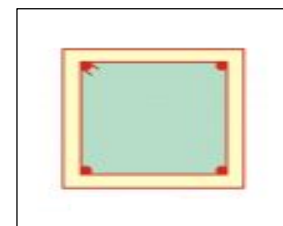
- i. Crown Tie
- ii. Slash Tie
- iii. Hair Pin Tie
- iv. Splice Tie

26. Why reinforcement bars are provided in Concrete? (5)

- i. To provide ductility
- ii. To provide more strength
- iii. To provide tensile strength to concrete
- iv. All of the above

27. Identify the type of stirrup from given fig? (5)

- i. 2 legged
- ii. 4 legged
- iii. 6 legged
- iv. 8 legged



CON/N3606 Carry out shuttering works for RCC structures in rural construction

28. What is the function of releasing agent in shuttering? (5)

- i. For easy removal the form work
- ii. To provide more strength
- iii. To keep bond between shutter and concrete
- iv. All of the above

- 29. Slab shuttering is removed after _____ days. (5)**
- i. 2 days
 - ii. 5 days
 - iii. 7 days
 - iv. 14 days
- 30. What precautions need to be taken during dismantling shuttering? (5)**
- i. Proper Barication
 - ii. Lookout
 - iii. Personnel Protective Equipment
 - iv. All of the above
- 31. What type of ground is required for scaffolding erection? (5)**
- i. Flat Ground Surface
 - ii. Undulated Ground
 - iii. Grass Surface
 - iv. All of the above
- 32. _____ is provided for more stable scaffold. (5)**
- i. Ramp
 - ii. Ladder
 - iii. Cross Bracing
 - iv. None of the above
- 33. What are the tools required for to check alignment & plumb of shuttering? (5)**
- i. Plumb bob
 - ii. Line dori
 - iii. Measuring Tape
 - iv. All of the above

CON/N3607: Carry out manual concreting in rural construction

- 34. What is the importance of concrete cover for reinforcement? (5)**
- i. Protects rebar from corrosion
 - ii. Provide resistant against fire
 - iii. Both
 - iv. None of the above

35. What are the factors which may affect concrete strength? (5)

- i. Proper Vibration
- ii. Water Cement Ratio
- iii. Slump
- iv. All of the above

36. Workability of concrete is tested by _____. (5)

- i. Water content test
- ii. Compression test
- iii. Slump test
- iv. Penetration test

37. Identify the process from the given photo. (5)

- i. Concreting
- ii. Shuttering
- iii. Erection of scaffold
- iv. Grove cutting



38. What are the causes of honeycombing? (5)

- i. Inadequate vibrating
- ii. Low workability of concrete
- iii. Inadequate gap filling causing leakage of slurry
- iv. All of the above

39. After placement of concrete, what plays important role in gaining the strength to concrete? (5)

- i. Adequate concreting
- ii. Removal of shuttering within an hour
- iii. Removal of shuttering after one month
- iv. None of the above

CON/N3608: Install sanitary fittings and fixtures in rural toilets

40. What is the minimum safe distance between potable water sources and soak pit? (5)

- i. 3 meters
- ii. 30 meters
- iii. 300 meters
- iv. 3000 meters

41. Which among the following is used to maintain water level of toilet pan? (5)

- i. S trap
- ii. P trap
- iii. Both
- iv. None of the above

42. Gradients for floor are important for which among the following? (5)

- i. Water accumulation
- ii. Water drainage
- iii. Water collection
- iv. All of the above

43. What are the common problems that might arise in the sanitation system? (5)

- i. Oil and grease get accumulated
- ii. Non-biodegradable items clog the tank
- iii. Roots of tree may clog the pipes
- iv. All of the above

44. Which of the following method can be used for testing of pipes for any leakage? (5)

- i. By water pressure testing
- ii. By smoke testing
- iii. Both
- iv. None of the above

45. What of the following is the advantage of double pit and septic tank system? (5)

- i. It does not contaminate ground water system
- ii. Eliminates mosquito and fly breeding.
- iii. Maintenance is easy
- iv. All of the above