

## TEST 2

DIRECTIONS: Each question or incomplete statement is followed by several suggested answers or completions. Select the one that BEST answers the question or completes the statement. PRINT THE LETTER OF THE CORRECT ANSWER IN THE SPACE AT THE RIGHT.

1. Which one of the following is the PRIMARY object in drawing up a set of specifications for materials to be purchased? 1. \_\_\_\_\_
  - A. Control of quality
  - B. Outline of intended use
  - C. Establishment of standard sizes
  - D. Location and method of inspection
  
2. In order to avoid disputes over payments for extra work in a contract for construction, the BEST procedure to follow would be to 2. \_\_\_\_\_
  - A. have contractor submit work progress reports daily
  - B. insert a special clause in the contract specifications
  - C. have a representative on the job at all times to verify conditions
  - D. allocate a certain percentage of the cost of the job to cover such expenses
  
3. If there is a small amount of water on the surface of a newly-laid concrete sidewalk, the RECOMMENDED procedure before finishing is to 3. \_\_\_\_\_
  - A. allow it to evaporate
  - B. remove it with a broom
  - C. sprinkle some dry cement on top
  - D. remove it with a float
  
4. Prior to the installation of equipment called for in the specifications, the contractor is usually required to submit for approval 4. \_\_\_\_\_
  - A. sets of shop drawings
  - B. a set of revised specifications
  - C. a detailed description of the methods of work to be used
  - D. a complete list of skilled and unskilled tradesmen he proposes to use
  
5. A specification on piles states that plumbness must be within 2% of the pile length. 5. \_\_\_\_\_

If the pile length is 30 feet, the MAXIMUM amount that the pile may be out of plumb is, in inches, most nearly

A. 5                      B. 6                      C. 7                      D. 8
  
6. The number of days that it will take high early strength concrete to equal the 28-day strength of normal portland cement concrete is most nearly 6. \_\_\_\_\_

A. 1                      B. 3                      C. 7                      D. 12

7. Specifications may state that a standpipe system will be provided in each building. 7. \_\_\_  
 The MAIN purpose of a standpipe system is to  
 A. supply the roof water tank  
 B. provide water for firefighting  
 C. circulate water for the heating system  
 D. provide adequate pressure for the water supply
8. The drawing which should be used as a legal reference when checking completed construction work is the \_\_\_ drawing. 8. \_\_\_  
 A. contract B. assembly  
 C. working or shop D. preliminary
9. Efflorescence may BEST be removed from brickwork by washing with a solution of \_\_\_ acid. 9. \_\_\_  
 A. muriatic B. citric C. carbonic D. nitric
10. The MAIN difference between sheet glass and plate glass is 10. \_\_\_  
 A. the surface finish of the two types of glass  
 B. the heat absorbing qualities of the two types of glass  
 C. plate glass is thinner than sheet glass  
 D. plate glass is tempered while sheet glass is not tempered
11. Construction joints in the concrete columns of a multi-story building are *usually* located 11. \_\_\_  
 A. at floor level  
 B. 1 foot above floor level  
 C. at the underside of floor slab  
 D. at the underside of deepest beam framing into the column
12. A contractor on a large construction project *usually* receives partial payments based on 12. \_\_\_  
 A. estimates of completed work  
 B. actual cost of materials delivered and work completed  
 C. estimates of material delivered and not paid for by the contractor  
 D. the breakdown estimate submitted after the contract was signed and prorated over the estimated duration of the contract
13. According to the building code, masonry footings shall extend at least 4' below finished grade. 13. \_\_\_  
 The PRIMARY reason for this is to  
 A. get below the frost line  
 B. make the foundation stronger  
 C. keep water out of the basement  
 D. reach a lower soil strata where better bearing material can be found
14. GOOD inspection methods require that the inspector 14. \_\_\_  
 A. be observant and check all details  
 B. constantly check with the engineer who designed the school  
 C. apply specifications according to his interpretation  
 D. permit slight job variation to establish good public relations

Questions 15-19.

DIRECTIONS: Questions 15 through 19 refer to the following specification for wood flooring. In answering these questions, refer to this specification.

2" x 4" wood sleepers laid flat @ 16" o.c.  
1" x 6" sub flooring, laid diagonally; cut at butt joints with parallel cuts; joints at center of sleepers, well staggered, no two joints side by side. Not less than 1/8" space between boards.

One layer of 15# asphalt felt on top of sub-floor.  
Finish floor - North Rock Maple, T & G, laid perpendicular to sleepers; 8d nails not more than 12" apart; end joints well scattered with at least 2 flooring strips between joints.  
Flooring 25/32" x 2 1/4" face - 1st quality.

15. It is *most likely* that the floor referred to in the specification is to be laid 15. \_\_\_\_\_  
 A. directly on the ground      B. on a concrete base  
 C. on wood joists              D. on steel beams
16. The BEST reason for specifying that the sub-flooring be parallel cut at butt joints is that this 16. \_\_\_\_\_  
 A. requires less material  
 B. provides staggered joints  
 C. provides more nailing surface  
 D. allows the joint to fall between sleepers
17. The BEST reason for specifying a minimum space between the sub-floor boards is that it 17. \_\_\_\_\_  
 A. saves on material              B. reduces creaking  
 C. allows for expansion          D. prevents dry rot
18. The BEST reason for specifying at least 2 flooring strips between joints in the finish flooring is that 18. \_\_\_\_\_  
 A. it looks better  
 B. it is more economical  
 C. each board is supported by two adjoining boards  
 D. each finish board is supported by at least two sub-floor boards
19. The BEST reason for placing asphalt felt on top of the sub-floor is to 19. \_\_\_\_\_  
 A. deaden noise                      B. preserve the wood  
 C. reduce dampness                  D. permit movement
20. Assume you are recommending in a report to your superior that a radical change in a standard maintenance procedure should be adopted. 20. \_\_\_\_\_  
 Of the following, the MOST important information to be included in this report is  
 A. a list of the reasons for making this change  
 B. the names of the other GSSM who favor the change  
 C. a complete description of the present procedure  
 D. amount of training time needed for the new procedure

21. Specifications require that the first floor beams of a building must be in place before backfill is placed against the foundation walls. 21. \_\_\_  
 The BEST reason for this requirement is that
- A. without the first floor beams in place, the wall may become overstressed
  - B. it is easier to inspect the first floor construction when the backfill is not in place
  - C. the utilities up to the first floor level should be in place before backfill is placed
  - D. the boiler setting hung from the first floor must be in place before backfill is placed
22. The frequency with which job reports are submitted should depend MAINLY on 22. \_\_\_
- A. how comprehensive the report has to be
  - B. the amount of information in the report
  - C. the availability of an experienced man to write the report
  - D. the importance of changes in the information included in the report
23. Assume that a contractor proposed to start the roofing three days after pouring the concrete roof slab. 23. \_\_\_  
 This proposal is
- A. *good*, mainly since it will speed the construction
  - B. *good*, mainly since it will assist in curing the concrete
  - C. *poor* in cold weather but is all right in warm weather
  - D. *poor*, mainly since excess water in the concrete may bulge the roofing
24. In performing field inspectional work, an inspector is the contact man between the public and the board, and it is his job to secure compliance through the maximum utilization of persuasion and education and the minimum application of coercion. 24. \_\_\_  
 According to the above statement, an inspector performing inspectional duties SHOULD
- A. seek to obtain voluntary compliance and use coercion only as a last resort
  - B. be conciliatory on all issues of non-compliance and not take an attitude of firmness and authority
  - C. maintain a strictly impersonal attitude in the exercise of his duties at all times
  - D. use the threat of legal action to secure conformance with specified requirements
25. A specification requires that brick should be thoroughly wet before using. 25. \_\_\_  
 Of the following, the BEST reason for this requirement is that
- A. wetting the brick uncovers hidden flaws
  - B. it is easier to shove wet brick into place
  - C. wetting cleans the pores of the brick ensuring a stronger bond
  - D. wetting decreases absorption of water from the mortar

## KEY (CORRECT ANSWERS)

1. A  
2. C  
3. A  
4. A  
5. C

6. C  
7. B  
8. A  
9. A  
10. A

11. A  
12. A  
13. A  
14. A  
15. B

16. C  
17. C  
18. C  
19. C  
20. A

21. A  
22. D  
23. D  
24. A  
25. D

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