



# education

Department:  
Education  
REPUBLIC OF SOUTH AFRICA

## NATURAL SCIENCE MARKING GUIDELINES

**August 2011**

BUILDING ADMINISTRATION N5  
4090045

**Augustus 2011**

BOUADMINISTRASIE N5

## DEPARTMENT OF HIGHER EDUCATION REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE  
BUILDING ADMINISTRATION N5  
TIME: 3 HOURS  
MARKS: 100  
AUG 2011  
MEMORANDUM

### QUESTION 1

- 1.1 Working drawings
- 1.2 Architect
- 1.3 Purchasing department
- 1.4 Agent / General foreman
- 1.5 Engineer / Rep. Engineer
- 1.6 Foreman
- 1.7 Clerk of works
- 1.8 Plant engineer
- 1.9 Unbais
- 1.10 Owner / employer (10)

### QUESTION 2

- 4.2 The specification: which describes in words the works to built (2)
- 4.3 Bills of quantities: which sets out the expected measure of each operation of construction as calculated from drawing. (2)
- 4.4 Form of tender: which is the signed financial offer of the contractor to construct the work in accordance with documents mentioned above.(2)
- 4.5 Form of agreement: which is signed by both parties confirming their respective intention to have a contract. (2)
- 4.6 Condition of contract: defines the terms under which the work is to be carried out, the relationship between the owner and the contractor. (2)
- 4.7 Performance bond: is a document whereby a bank, insurance company or other acceptable guarantor undertakes to pay a specified sum if the contractor fail to discharge his obligation.(2)

4.8 Letter of explanation: define the terms under which condition or terms the two parties entered into. (2)

( Any 5 for 2 marks each)  
(10)

### QUESTION 5

- 5.1
- 5.1.1 Oral instruction
- 5.1.2 Written instruction
- 5.1.3 Memorandum
- 5.1.4 Letter
- 5.1.5 Computer E-mails (5)

- 5.2
- 5.2.1 Information sharing
- 5.2.2 Problem solving
- 5.2.3 Decision making
- 5.2.4 Planning (5)
- 5.2.5 Evaluation (10)

### QUESTION 6

- 6.1 Forecast: a projection of what will happen by a certain time. (2)
  - 6.2 Planning: is determining what needs to be done, by whom, and by when, in order to fulfill one's assigned responsibility. (2)
  - 6.3 Organizing: design of the number and kind of positions, along with corresponding duties and responsibilities, required to achieve objectives.(2)
  - 6.4 Co-ordinating; to co-ordinate means binding together, unifying, and harmonizing all activities effort. (2)
  - 6.5 Controlling: who judges results and by what standards? In this function the manager monitors, evaluates, and controls the effectiveness and efficiency in the utilization of organizational resources. (2)
- (10)

### QUESTION 7

- 7.1 Variations are changes in the works. (1)
- 7.2 Additional work is the work that is appear in the bills of quantities and extras does not appear in the bills of quantities. (1)
- 7.3 Dayworks; due to site conditions or type of work is immeasurable and architect's opinion to carry out that work on daywork basis. (1)
- 7.4 Architect (1)
- 7.5 If it is demolition or extras (1)
- 7.6 Daywork schedule should be included in schedule of quantities. (1)
- 7.7 The period where you do not carryout the actual activity(je waiting for delivery, weather conditions, finish activity one and prepare for the next.(1)
- 7.8 Schedule of rates/ Special condition of contract.(1)
- 7.9 when there is variation in excavating for trenches(je dig beyond to what was measured in the bills of quantities)(1)
- 7.10 Workmanship specified in the specification might permit variation(je demolition of part of works to permit working space)(1) (10)

### QUESTION 8

- 8.1 Extension of construction time is allow to the contractor authorize by the architect only for unforeseen circumstances and penalt for non-completion due by contractor when he/she fail to hand-over on specified time. (2)

8.2 Practical completion certificate is the document which certifies the handing-over and completion list is the document which listed all defect due by contractor during the handing-over. (2)

8.3 Insurance liabilities: the contractor shall insure the workmen, public or plant against the risk which might arise due to execution of the works and defect liabilities are for contractor to make good all defects of poor workmanship on the works. (2)

8.4 Date of possession is the date when the contractor occupies the site for starting execution of the works and practical completion is at the end of construction work, where the has been practically completed. (2)

8.5 Latent liability period is the period of 5 years after practical completion for the contractor to make good of the defect and patent liability is 3 months period after practical completion for the contractor to make good of the defect. (2)

(10)

#### QUESTION 9

9.1 Adding the volume algebraically gives the following mass-haul ordinates

Chainage m	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
		+2.1	+4.9	+6.5	+5.6	+3.6	-1.0	-5.7	-8.1	-7.0	-3.1	+0.4	+3.2
Volume $\times 3 \times 10$													

(6)

9.2

9.2.1 Balance line AB gives a surplus at chainage 1200 but none at 0 (1)

9.2.2 Balance line CD gives a surplus at chainage 0 at 1200 (1)

9.2.3 Balance line EF situated mid-way between AB and CD will give equal surplus at either ends (1)

9.2.4 Cost of freehaul =  $(LM+LM) \times 50$   
=  $(6500+8100) \times 50$   
= R 7300,00

For mass-haul diagram ( see the hard copy)

#### QUESTION 10

Guy and scotch derrick crane ( see the hard copy ) (10)