

Diploma in Civil Engineering

Term-End Examination

June, 2012

**BCE-062 : CONSTRUCTION SUPERVISION
AND BUILDING MAINTENANCE**

Time : 2 Hours

Maximum Marks : 70

Note : Question number 1 is compulsory. Answer any four from the remaining questions.

1. Fill in the blanks by choosing the most appropriate word / words from the options given in the bracket : **14x1=14**
- (a) A drawing representing all the three dimensions of an object is _____ .
(plan / elevation / isometric view)
 - (b) The drawing size 594mm x 841mm refers to _____ drawing.
(A₁ / A₂ / A₃)
 - (c) The information given in the drawing is usually supplemented by _____ .
(highlights / information / notes)
 - (d) The drawings that provide information regarding layout and details of sewage are _____ drawings.
(utility / service / piping)

- (e) The stock register which shows daily receipts and issue of items is closed _____ .
(annually / monthly / quarterly)
- (f) The work awarded to a contractor on the basis of execution of the said work in totality refers to _____ contract.
(lump sum / price rate / item rate)
- (g) Filling with excavated earth shall be done in regular horizontal layers not exceeding _____ cm in depth.
(10 /20 / 35)
- (h) Aggregate which passes through _____mm IS sieve is known as fine aggregate.
(3.50 / 4.75 / 6.00)
- (i) The sap stain defect in timber by fungi generally occurs where moisture content exceeds _____ %.
(20 / 25 / 30)
- (j) The jointing of SW pipes is done by _____.
(MS bolting/ CM caulking / Gas welding)
- (k) The tap used in the bathroom is also known as _____.
(stop cock/ bib cock / check cock)
- (l) The water closet which has no provision of foot rest is called _____ .
(IWC / EWC / FWC)

(m) _____ wood does not with stand the attack of white ants.

(teak / deodar/ mango)

(n) The side overlap is CGI sheet roofing must not be less than _____ corrugation.

$$\left(\frac{3}{4} / 1 / 1\frac{1}{2} \right)$$

2. (a) Explain the method of repairs of concrete floor, terrazzo floor and marble floor. 3+3+2=8

(b) Discuss the need of water proofing. Enlist the types of water proofing and explain single ply materials used in water proofing.

$$2+2+2=6$$

3. (a) Discuss the importance of PVC pipes used for water supply and explain any three types of jointing methods. 2+6=8

(b) Describe the methods of protecting reinforcement steel from chloride ion. 6

4. (a) Explain the functions of bib cock and stop cock. What are the probable defects in manufacturing and construction of these fittings? 3+5=8

(b) Discuss the position of the construction supervisor on a construction site. What are the responsibilities of a construction supervisor? 3+3=6

5. (a) Generate points of the check list for inspecting ACC roofing and ceiling. 8
- (b) Describe the guide lines for proper compaction of concrete using a poker vibrator. 6
6. (a) Explain the basic principle of anti - termite treatment. Discuss the treatment of foundations and basements for masonry. $4+4=8$
- (b) What do you understand by progress measurement ? Discuss the methods to display the progress of a project. $2+4=6$
7. Write short notes on *any four* of the following :
- (a) Conflicting dimensions $4 \times 3\frac{1}{2} = 14$
- (b) Site diary
- (c) Curing
- (d) Chromium plating
- (e) Scrapper
- (f) Nitomortar.
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