Registration no: | | | | | | | | | | |

Total Number of Pages: 3

B.Tech
PECI5405

7th Semester Regular / Back Examination 2016-17
ESTIMATION, COSTING AND PROFESSIONAL PRACTICE
BRANCH: CIVIL
Time: 3 Hours
Max Marks: 70
Q.CODE: Y425

Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.

Q1 **Answer the following questions:** **(2 x 10)**

a) What is the difference between preliminary estimate and detailed estimate?
b) What are the purposes of approximate estimate?
c) How the following items of work are measured?
i) Painting Doors and Windows. ii) Brick work in super structure
d) What are the basic data to be known before analysing the rate of a particular item?
e) How are general specifications different from detailed specifications?
f) Calculate the requirement of labour for 100 cu ft cement concrete work.
g) What are the resources required for the completion of any project?
h) What is project scheduling?
i) Distinguish between an activity and an event.
j) What is slack time?

Q2 Estimate the quantities of following items of work for a building as shown in ***Fig 1***

a) Earthwork excavation in foundation **(5)**
b) 2.5cm Damp proof course **(5)**

Q3 Estimate the following quantities of a 1.20m span slab culvert as shown in ***Fig-2***.

a) 1:4:8 Cement concrete in foundation. **(5)**
b) I-class brickwork in foundation and superstructure. **(5)**

Q4 Draw the network corresponding to the following and determine **(10)**
i) The critical Path
ii) The total, free and independent floats for each of the activities.

Activity	1-2	1-3	1-4	2-3	2-6	3-5	3-6	4-5	5-6
Duration(days)	4	5	15	11	6	5	7	2	2

Q5 **a)** Find out the rate analysis of cement concrete with 4cm gauge stone **(5)**

basalt, coarse sand and cement in 4:2:1 proportion.

b) Give the rate analysis of Random Rubble stone masonry in super structure in cement sand mortar in 1:6 proportion. **(5)**

Q6 **a)** Write the detailed specification for Plastering with Terrazo finish. **(5)**

b) Outline the detailed specification for Random Rubble Masonry. **(5)**

Q7 **a)** What is float and how is it useful in a CPM network? **(5)**

b) What is three time estimates of PERT activity? **(5)**

Q8 **Write short answer on any TWO:** **(5 x 2)**

a) Degree of accuracy in Estimating

b) General specification of a second class building

c) Errors in a network

d) CPM

PLAN

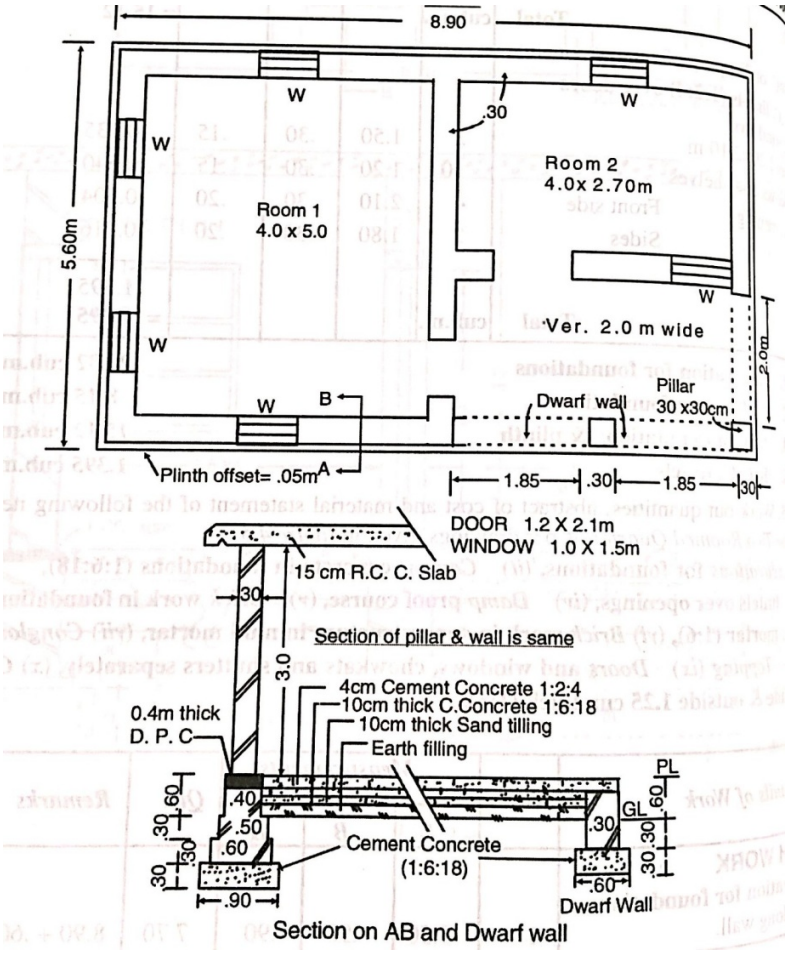

Fig – 1

1.2 Metre span slab culvert

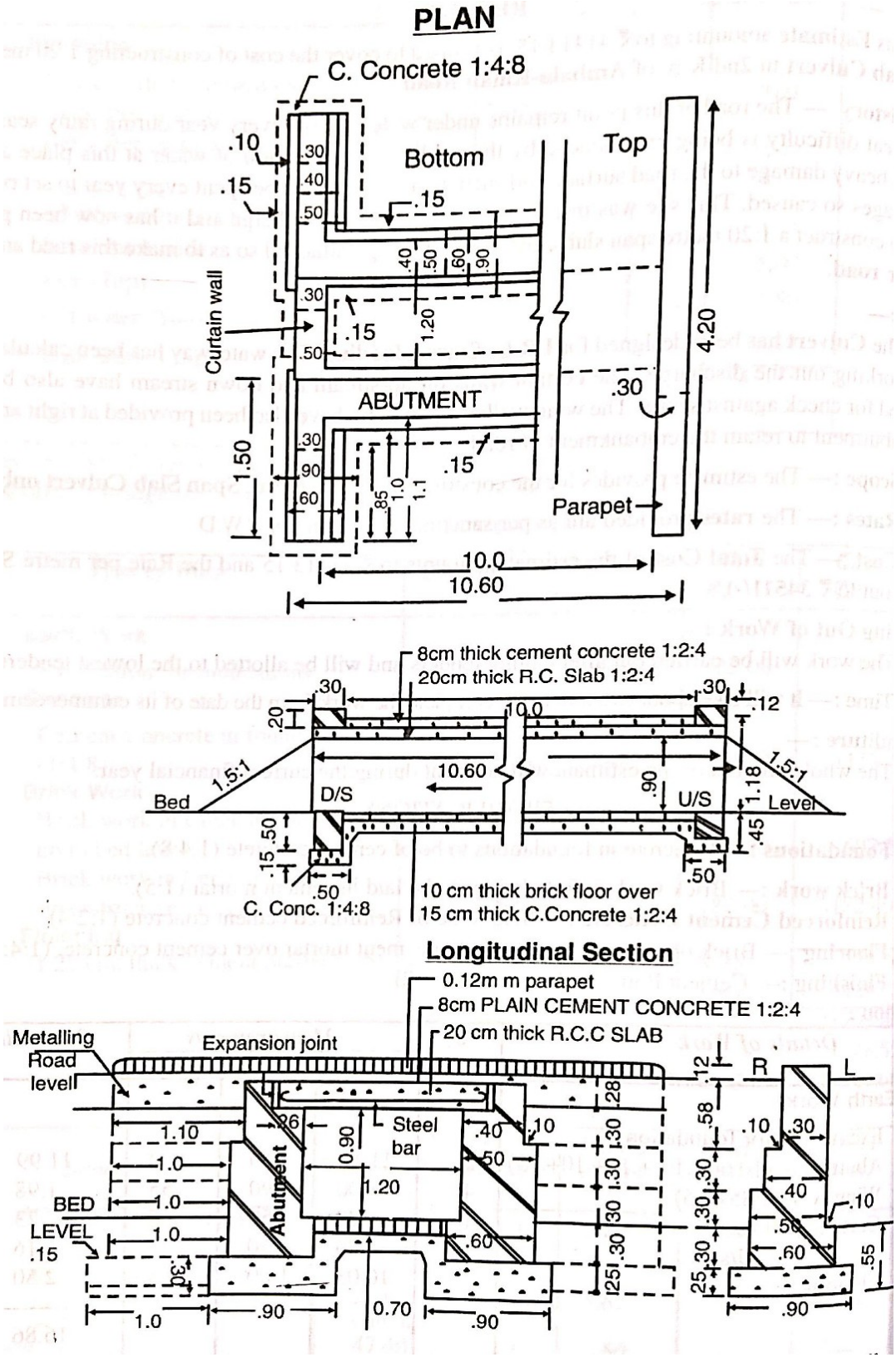

Fig - 2