

MANIPAL UNIVERSITY**SIXTH SEMESTER B. ARCH. DEGREE EXAMINATION – JULY 2017****SUBJECT: SPECIFICATION AND ESTIMATION (ARC-312)
(2010 SCHEME)**

Friday, July 14, 2017

Time: 14:00-17:00 Hrs.

Max. Marks: 50

- ✍ **PART- I is Compulsory.**
✍ **Answer any THREE questions from PART – II.**

PART – I

1. Work out the quantities of the following items of the building shown in Fig Q.1
- 1A. Earthwork excavation
 - 1B. Cement concrete bed
 - 1C. Random rubble masonry
 - 1D. Coursed rubble masonry
 - 1E. Laterite masonry
- (3 marks × 5 = 15 marks)
2. Work out the rate of first class brick work in foundation and plinth with $20 \times 10 \times 10$ cm brick with cement mortar 1:6. Take 10 cu.m for calculation.
- (5 marks)

PART-II

- 3A. Write detailed specification of damp proof course 1:3:6.
 - 3B. Explain preliminary estimate and plinth area estimate.
 - 3C. Write detail specifications of cement as a material.
- (4+3+3 = 10 marks)
- 4A. Write detailed specification of external plastering.
 - 4B. Write detailed specification of brick work first class.
 - 4C. Write short notes on tender.
- (4+3+3 = 10 marks)
- 5A. Write general specification of first class building.
 - 5B. What are specifications? Explain the different types of specifications.
 - 5C. Write detail specifications of timber as a material.
- (4+3+3 = 10 marks)

- 6A. Write detailed specification of woodwork in doors and windows.
 6B. Write detailed specification of random rubble masonry.
 6C. Write short notes on white washing and colour washing.

(4+3+3 = 10 marks)

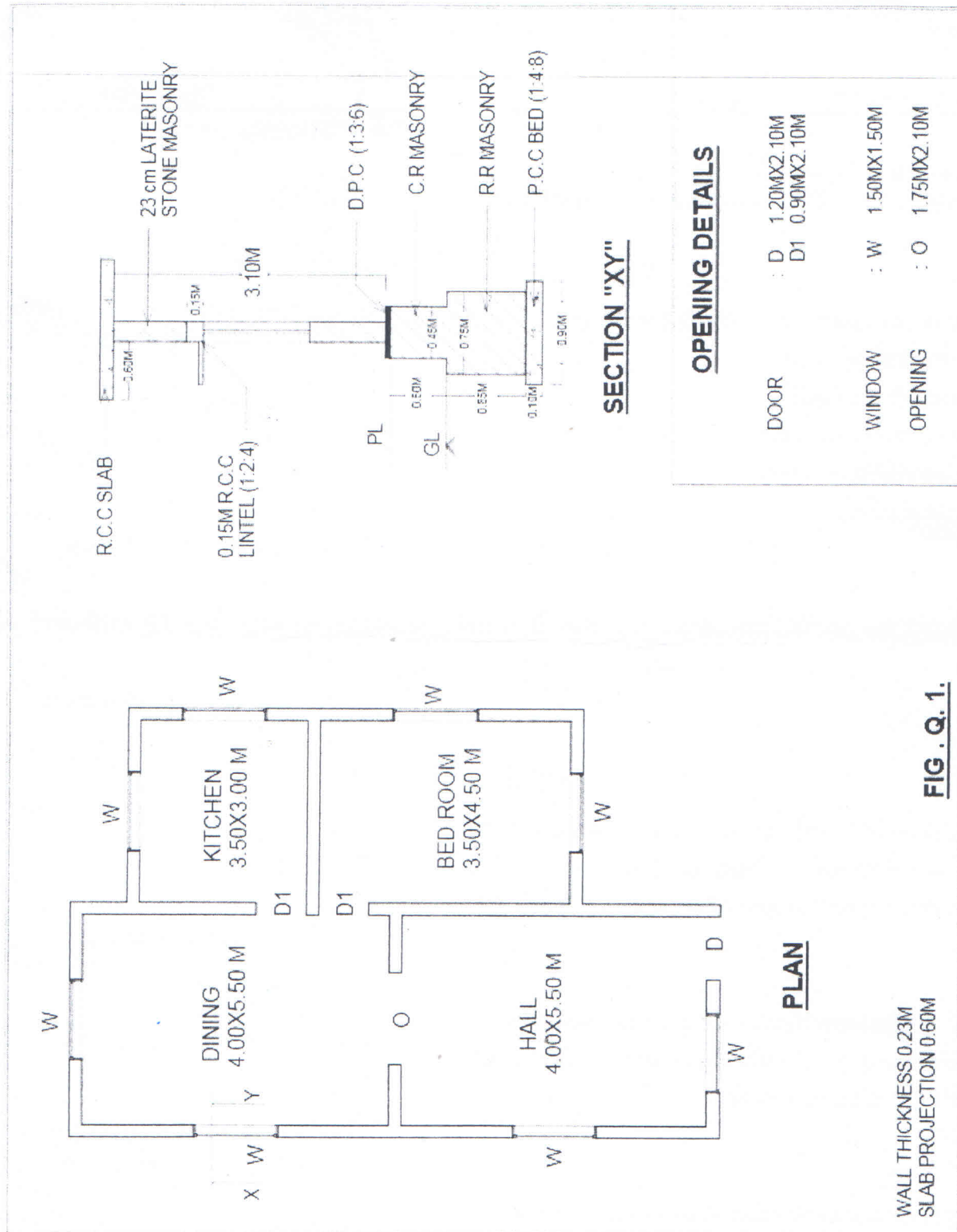


FIG. Q. 1.

