

CORK INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ

Semester 2 Examinations 2015/16

Module Title: Elemental Construction Technology

Module Code: BULD 6005

School: Building and Civil Engineering

Programme Title: Bachelor of Science in Construction – Year 1
Bachelor of Science (Honours) Quantity Surveying – Year 1
Bachelor of Science (Honours) Construction Management – Year 1

Programme Code: CCONS_7_Y1
CQTSU_8_Y1
CMNGT_8_Y1

External Examiner(s): Mr Ger Harrington, Mr Lawrence Slade,
Dr Mike Murray, Mr Pat Carter

Internal Examiner(s): Mr D. Cronin, Mr S. Lannin

Instructions: Answer **FOUR** questions.

The names, sizes, finishes and any other necessary particulars of each material should be noted on all sketches. All details should comply with the requirements of the building regulations. All questions carry equal marks.

Duration: 2 Hours

Sitting: Summer 2016

Requirements for this examination: Scientific Calculator/ Log Tables

Note to Candidates: Please check the Programme Title and the Module Title to ensure that you have received the correct examination. If in doubt please contact an Invigilator.

Q1. (a) State three functional requirements of a stairs. **(9 marks)**

(b) State three requirements imposed by Building Regulations on ramps that are used in situations other than in buildings **(8 marks)**

(c) Using notes and annotated sketches explain the following terms and their requirements, to comply with the Building Regulations for a Private Stairway.

I. Going of step

II. Rise of step

III. Pitch of stairs **(8 marks)**

Q2. (a) What are the functions of **(a)** internal plaster and **(b)** external plaster? **(10 marks)**

(b) State the basic functions of an upper floor. **(8 marks)**

(c) Name three different categories of paint that are available for domestic construction and elaborate on their purpose. **(7 marks)**

Q3. (a) Describe the main performance criteria for testing the degree of fire protection given by a fire door set. **(10 marks)**

(b) What are the functions of a fire door set? **(9 marks)**

(c) Explain how fire doors are classified. **(6 marks)**

Q4. (a) State three functions of a fireplace and flue. **(10 marks)**

(b) Explain how an open fire works. **(5 marks)**

(c) Describe how weather resistance is achieved for a chimney flue. **(10 marks)**

Q5. A variety of suitable types of precast concrete floor systems are available for use in suspended floor construction at both ground and upper floor levels for domestic construction. These floors fall into three broad categories:

(a) State two of these categories. **(5 marks)**

(b) Sketch a detailed and specified section through a suspended precast concrete floor at ground level, suitable for a domestic house. **(20 marks)**