

**Total number of printed pages: Programme(D)/4<sup>th</sup> Semester/DCE 405**

**2025**

**Building Construction**

*Full Marks : 100*

**Time : Three hours**

***The figures in the margin indicate full marks for the questions.***

*Answer any five questions.*

1.		What are the functions of foundation? Discuss various types of shallow foundations and deep foundations with figures.	5+15 = 20
2.	a)	Define brick masonry. Why brick masonry is preferred over other types of masonry? Write notes on rules for bonding of brick work.	2+4+4=10
	b)	Write short notes on i)) Stretcher Bond ii) Header Bond iii) English Bond iv) Flemish Bond	2.5X4 =10
3.	a)	What are the functions served by a floor of a building? Write in brief the factors that effect the choice of a flooring materials. What are the different materials used for construction of ground floor base.	4+4+2=10
	b)	Differentiate between Lintels and Arches? Discuss reinforced cement concrete lintels in brief.	3+3+4 =10
4.	a)	Define staircase and briefly describe the various functions served by a staircase?	2+5=7
	b)	Write notes on dimensions of a step of a staircase. Briefly describe various types of stairs with figure.	3+10=13
5.	a)	Briefly describe roofs and roof covering. What are the essential requirements of a good roof? What are the advantages and disadvantages of a flat roof? What are the various functions served by a roof?	3+3+4+2= 12
	b)	Write a note on sizes of doors and windows as per Indian standard recommendations. What are the main functions served by the doors and windows?	4+4=8
6	a)	Define Scaffolding and Formwork? What are the various component parts and various types of scaffolding? Write the requirements of formwork to be a good formwork.	2+4+4=10
	b)	What are the causes of dampness in buildings? What are the ill effects of dampness? Write the various methods adopted to make a building damp proof.	3+3+4=10