Total No. of Questions: 6

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Enrollment 1	No
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Faculty of Engineering

End Sem (Odd) Examination Dec-2018 CE3CO04 Building Planning and Drawing

Programme: B.Tech. Branch/Specialisation: CE

Duration: 3 Hrs. Maximum Marks: 60

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		ould be written in full instead of only	a, b, c or d.				
Q.1	i.	The foundation in which loading on unchanged even after the construction as		l			
		(a) Step foundation	(b) Grillage foundation				
		(c) Raft foundation	(d) Inverted arch foundation				
	ii.	A Stair turning through one right ang	gle is known as a stair.	1			
		(a) Quarter- turn (b) Half-turn	(c) Dog-legged (d) Open navel				
	iii.	und insulation in a building is known	1				
		as					
		(a) Reverberation	(b) Transmission				
		(c) Acoustic	(d) Air borne				
	iv is used to indicate the architectural effect produced by e						
		in relation to width, height position of doors and windows, ma					
		employed in the construction of external walls, etc.					
		(a) Furniture requirements	(b) Elegance				
		(c) Roominess	(d) Grouping				
	v.	The term is used to indic	eate the science of controlling air with	Ĺ			
		respect to humidity, temperature, mo	evement of air, bacteria content, etc.				
		(a) Air conditioning	(b) Circulation				
		(c) Condensation	(d) Conditioning				
	vi.	is the process	by which the required amount of	l			
		moisture is taken out from the air.					
		(a) Condensation	(b) Dehumidification				
		(c) Humidification	(d) Absorption				

P.T.O.

	vii. It is a vertical projection plane used to obtain the object's Perspective		to obtain the object's Perspective is	1
		(a) Orthographic plane	(b) Vertical plane	
		(c) Perspective picture plane	, , <u> </u>	
	viii.	It is the line drawn through the star	· ·	1
		picture plane. It is also called axis of v		
		-	(b) X-axis	
		• '	(d) Z-axis	
	ix.	Which factor is not considered while	` '	1
		planning?	, , , , , , , , , , , , , , , , , , ,	
		(a) Number of gender ratio		
		(b) Study of site with respect to other	surrounding sites	
		(c) Study of geographical and geologi	9	
		(d) Location site		
	х.	What should the planner must	have an interaction with the	1
		master/residents to understand the following		
		(a) Aim/object/purpose of building		
		(b) Number of people using the buildi	ng	
		(c) Type of people, their education, av	_	
		(d) Dressing sense of the people		
Q.2	i	Define:		2
Q.2	1.	(a) Staircase (b) Foundation		_
	ii.	What are Foundations? Explain	all types of Shallow and Deen	8
	11.	Foundations with neat sketches.	an types of Shahow and Deep	U
OR	iii	Briefly explain any 4 types of door wi	th neat I abelled sketches	8
OK	111.	Briefly explain any 4 types of door wi	til heat Labelled sketches.	O
				_
Q.3	i.	Define:		2
		(a) FAR (b) Set Back		
	ii.	Explain in brief the Principles of build		8
OR	iii.	Define Principles of Architectural Con	mposition with example.	8
0.4		D ("		_
Q.4	i.	Define:	S	2
		(a) Manhole (b) Inspection (Chamber	

	ii.	For a square plot of size 800 m2, the owner allowed an equal setback of 5m on two opposite sides. Within the building lines thus formed, if he constructed a two-storey house (G+1) - with the upper storey having equal area as the ground floor - what is the resultant F.A.R.? Assume wall area as 15% of the built-up area.	8
OR	iii.	Write short note on electrification of building and sanitation of building (Principles of Internal and External drains).	8
Q.5	i.	What are the "Scale" considerations before drawing a Scale plan of various Buildings and Building elements?	2
	ii.	Explain and Differentiate one point and two-point perspective.	8
OR	iii.	Define and illustrate with a neat Sketch.	8
		(a) Station Point(b) Picture Plane(c) Vanishing Point(d) Parallel Perspective	
Q.6 OR	i. ii. iii.	What are the necessities of Planning a Town? Define and Enlist the Principles of Town Planning. Define Educational Buildings. What are the Planning Standards of Educational Buildings?	2 8 8

Marking Scheme

CE3CO04 Building Planning and Drawing

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Q.1	i.	The foundation in which loading on the soil beneath remains	1
		practically unchanged even after the construction of the building	
		is done is known as	
		(b) Grillage foundation	
	ii.	A Stair turning through one right angle is known as a stair.	1
		(a) Quarter- turn	
	iii.	The science which deals with the sound insulation in a building is	1
		known as	
		(c) Acoustic	
	iv.	is used to indicate the architectural effect produced by elevation in relation to width, height position of doors and	1
		windows, materials employed in the construction of external walls,	
		etc.	
		(b) Elegance	4
	v.	The term is used to indicate the science of controlling	1
		air with respect to humidity, temperature, movement of air, bacteria	
		content, etc.	
	•	(a) Air conditioning	_
	vi.	is the process by which the required amount of	1
		moisture is taken out from the air.	
		(b) Dehumidification	
	vii.	It is a vertical projection plane used to obtain the object's	1
		Perspective is	
		(c) perspective picture plane	
	viii.	It is the line drawn through the station point and perpendicular to	1
		the picture plane. It is also called axis of vision or line of sight or	
		(c) Perpendicular axis	
	ix.	Which factor is not considered while studying a site before	1
		construction planning?	
		(a) Number of gender ratio	
	х.	What should the planner must have an interaction with the master/residents to understand the following	1
		(d) Dressing sense of the people	
		(5) 2100mg bonds of the people	

Q.2	i.	Define:		2
		Staircase	1 mark	
		Foundation,	1 mark	
	ii.	Shallow Foundation Definition	1 mark	8
		Any 4 Types of Shallow Foundations (Minimum)	4 marks	
		Deep Foundation	1 mark	
		Any 2 Types of Deep Foundations (Minimum)	2 marks	
OR	iii.	Any 4 Types of door explained with neat sketch and	d labelling	8
		2 marks For each		
		Explanation 1 mark for each (1 mark *4)	4 marks	
		Diagram 1 mark for each type (1 mark *4)	4 marks	
0.0		D. C.		_
Q.3	i.	Define:	1 1	2
		FAR	1 mark	
		Setback	1 mark	0
	ii.	Principles of building planning.	(4 1 10)	8
0.5		1 mark for Each Principle (max. 8 Principles)	(1 mark *8)	•
OR	iii.	Principles of Architectural Composition with exam	•	8
		Definition and utility of Principles	1 mark	
		1 mark for each principle (7 Principles) (1 mark *7)) 7 marks	
Q.4	i.	Define:		2
		Manhole	1 mark	
		Inspection Chamber	1 mark	
	ii.	Given Data	1 mark	8
		Area Calculations	3 marks	
		FAR Result	4 marks	
OR	iii.	Electrification of building and sanitation of building	g	8
		(Principles of Internal and External drains).		
		Internal Drains	3 marks	
		External Drains	3 marks	
		Diagram	2 marks	
Q.5	i.	Definition of Scale Considerations	1.5 marks	2
Q.J	1.	Examples	0.5 mark	4
		Lamples	O.J IIIaIK	
	ii.	Definition One Point perspective	1 mark	8

		Definition Two Point Perspective 1 mark	
		Differences 2 marks for each Difference (3 Differences)	
		(2 marks *3) 6 marks	
OR	iii.	Define and illustrate with a neat Sketch.	8
		(a) Station Point 2 marks	
		(b) Picture Plane 2 marks	
		(c) Vanishing Point 2 marks	
		(d) Parallel Perspective 2 marks	
Q.6	i.	Necessities of Planning a Town Definition	2
	ii.	Principles of Town Planning.	8
		Definition 1 mark	
		1 mark For each principle(7 Principles) 7 marks	
OR	iii.	Define Educational Buildings. What are the Planning Standard	s of 8
		Educational Buildings?	
		Definition 1 mark	
		Enrolment per Class 1 mark	
		Floor Area 1 mark	
		Room Size 1 mark	
		School Area 1 mark	
		Site Location 1 mark	
		Basic Facilities 1 mark	
		Building Height 1 mark	
