

	<p>Pimpri Chinchwad Education Trust's Pimpri Chinchwad College of Engineering An Autonomous Institute (Affiliated to Savitribai Phule Pune University)</p>	<p>SET – III</p> <p>SEMESTER- VI</p>
<p align="center">End Term Examination</p>		

Third Year B. Tech. (Computer/IT/Mech/EnTC)
[Open Elective III] Building Services & Maintenance (BCI6603B)

Even ~~Odd~~ Semester (2022-23)

Total No. of Questions- 4

Total No. of Printed Pages-II

[Time: 02 Hr. 30 min.]

[Max. Marks: 80]

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Instructions:

IMP: Verify that you have received a question paper with correct course, code, branch etc.

- All questions are compulsory.
- Assume suitable data wherever necessary.
- Neat labelled diagrams must be drawn wherever necessary.
- Figure to right indicates full marks.
- Use of a non-programmable calculator is allowed.

		Marks	CO No.
Q.1 Attempt any three of the following		15	
A Explain Elevators describing its types & different components.		5	CO1
OR			
B Explain a note on Escalators with a neat diagram.		5	CO1
C Justify the necessity of ventilation in buildings and state the functional requirements of a ventilation system.		5	CO3
OR			
D Discuss the following factors required to be considered for a lighting scheme:		5	CO3
i. Utilization factor			
ii. Daylight factor			
Maintenance factor			
E Identify the reason for short circuit occur and how can it be avoided?		5	CO3
OR			
F Differentiate between summer & winter air conditioning? Explain using neat diagrams.		5	CO3
		Marks	CO No.
Q.2 Attempt any four of the following		20	
A Explain the use of Fire resisting materials explaining their characteristics & types.		5	CO4
B What are the general measures of Fire safety?		5	CO4
C Examine different causes of fire in buildings.		5	CO4
D Explain Sound Absorption mentioning the requirements of a good sound absorbent.		5	CO4
E Interpret different ways of effective noise control for buildings.		5	CO4

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A	Explain the important of rainwater harvesting.	5	CO2
B	Differentiate between one pipe system and two pipe system.	5	CO2
C	Demonstrate the water treatment process before it is used for home consumption.	5	CO2
D	List different water quality parameters that are considered for water quality assessment. Explain any one in detail.	5	CO2
E	Justify the parameter to be considered for planning of water supply scheme for a city.	5	CO2

		Marks	CO. No.
Q.4	Attempt any five of the following	25	
A	Differentiate the classification of building maintenance and explain any 2 of them.	5	CO2
B	Explain Building maintenance and its objective & factors influencing the decision to carry it out.	5	CO2
C	“Preventive maintenance costs markedly less than repairing extensive building damage”. Draw a detailed diagram explaining the above sentence.	5	CO2
D	Examine the main reason of maintenance planning to maintain the building	5	CO2
E	What are the different causes of errors in building construction? Expand on any 2 of them.	5	CO2
F	As a building manager, how would you prepare a budget for your building maintenance?	5	CO2

**** End of Question Paper****