

**April 2019**

Time - 3 hours  
(Maximum Marks: 75)

*[N.B: (1) Q.No. 8 in PART - A and Q.No. 16 in PART - B are compulsory.  
Answer any FOUR questions from the remaining in each PART - A  
and PART - B*

*(2) Answer division (a) or division (b) of each question in PART - C.*

*(3) Each question carries 2 marks in PART - A, 3 marks in Part - B  
and 10 marks in PART - C.]*

**PART - A**

1. Define buffer in lift car.
2. State the types of escalator.
3. Classify ventilation.
4. Define diffuser.
5. What is sprinklers?
6. Define noise to echo.
7. What is non structural cracks?
8. What are the causes of fire?

**PART - B**

9. What are the types of lift? Mention their location.
10. Differentiate lift and escalator.
11. Write about heating equipments.
12. What is the purpose of air filters and blowers?
13. State any three requirements of good acoustical materials.
14. Name any four sound absorption material.
15. Explain defects in buildings.
16. What are the different methods of fighting fire?

PART – C

17. (a) Sketch the hospital lift and explain its components.  
(Or)  
(b) Write the construction procedure for an escalator with sketch.
18. (a) Draw the split type air conditioning and explain.  
(Or)  
(b) Write short notes on (i) Natural ventilation (ii) Cooling towers.
19. (a) Explain the code of safety and fire regulation.  
(Or)  
(b) Write short notes on (i) Fire fighting equipments (ii) Fire escape routes and elements.
20. (a) What are the practical consideration of noise control and sound insulation of buildings?  
(Or)  
(b) Prepare a sound insulation layout for a conference hall.
21. (a) Write the general precautions to prevent cracks in buildings.  
(Or)  
(b) What are the major causes of defects? Write about the prevention of defects in buildings.

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