

**April 2019**

Time – Three hours  
(Maximum Marks: 75)

- IN.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. Draw and name any four conventional symbols for electrical installations.
2. Write the uses of inverter.
3. How air velocity is controlled in AC?
4. What are dumbwaiters?
5. Define lux and luminous flux.
6. Name any two sound absorbing material.
7. Write any two maintenance work in building.
8. Define fire exit.

PART – B

9. Explain about distribution box and junction box.
10. Write notes on earthing.
11. What are the advantages of mechanical ventilation?
12. State the causes of fire.
13. What are the common acoustical defects?
14. Explain the types of cracks in concrete.
15. Write the defects in buildings.
16. Explain any three components of lift.

PART – C

17. (a) (i) Explain any five wiring accessories  
(ii) Differentiate cleat wiring and conduit wiring.  
(Or)  
(b) With a neat electrical layout, estimate the electrical load for a small residence.
18. (a) Draw a neat sketch of an escalator and explain the location and its functions.  
(Or)  
(b) What are the types of air conditioner? Explain any one in detail.
19. (a) (i) What are the general principles of openings to afford good lighting?  
(ii) Explain the necessity of artificial lighting.  
(Or)  
(b) Write the general rules for natural ventilation.
20. (a) Explain the general requirements for fire resisting buildings.  
(Or)  
(b) Write the factors to be considered for noise control in residential buildings.
21. (a) Write short notes on (i) Maintenance of sinking of floor  
(ii) Common methods of crack repair.  
(Or)  
(b) How will you repair the following: (i) Toilet sunken portion  
(ii) Improper laying of weathering course.

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