

October 2018

*Time – Three 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. What is the use of change over switch?
2. Differentiate cut-out and circuit breaker.
3. What is meant by daylight penetration?
4. What is meant by renewable energy? Name the various types.
5. State any two advantages of fossil fuels.
6. What is the purpose of vent pipe in a house drainage system?
7. Define building automation.
8. What is meant by candlea?

PART – B

9. Explain kit-kat type fuse with a neat sketch.
10. Write short notes on cleat wiring.
11. Write any three principles of openings to afford good natural lighting.
12. Differentiate luminous flux and luminous intensity.
13. Write short notes on solar cell.
14. Enumerate the requirements of a surface drain.
15. Define intruder alarm. Where it is used?
16. State any three advantages of renewable energies.

[Turn over.....

PART - C

17. (a) How electricity is generated, transported and distributed? Explain.
(Or)
(b) Explain the use of generator and inverter in a residential building.
18. (a) (i) Enumerate the necessity of good lighting.
(ii) What are the components of day light factor? Explain.
(Or)
(b) Describe the construction and working of a mercury vapour lamp with illustration.
19. (a) How a hydropower plant works? Explain with a neat sketch. What are its merits?
(Or)
(b) Explain the various types of biomass fuels in detail.
20. (a) Differentiate the following: (i) Refuse and garbage (ii) Sewage and sullage (iii) Soil pipe and waste pipe (iv) Storm water and subsoil water (v) Dry weather flow and wet weather flow.
(Or)
(b) Explain in detail garbage disposal.
21. (a) Explain with sketches the components of CCTV system.
(Or)
(b) Explain in detail the benefits of BMS.
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