

V30/BID102/EE/20160519

Time : 3 Hours

Marks : 80

Instruction :

1. All Questions are Compulsory.
 2. Each Sub-question carry 5 marks.
 3. Each Sub-question should be answered between 75 to 100 words. Write every questions answer on separate page.
 4. Question paper of 80 Marks, it will be converted in to your programme structure marks.
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1. Solve any **four** sub-questions.
 - a) What is Lumen candle power and Lux? 5
 - b) What are different types of artificial lighting? 5
 - c) What are LED and fibre optic lights? 5
 - d) What are modern ways of communication systems? 5
 - e) What is HVAC? Why air-conditioning is important? 5
2. Solve any **four** sub-questions.
 - a) What is natural ventilation? What are different ways of getting natural ventilation? 5
 - b) What is window ac and split ac? What is the difference? 5
 - c) Explain about ductable air conditioning system. Where it is used? What shapes and materials are used for this system. 5
 - d) What is Up lighting, down lighting, front lighting and back lighting? 5
 - e) What is CFL? How they are different from traditional incandescent bulbs? What are advantages and disadvantages? 5
3. Solve any **four** sub-questions.
 - a) What are the principals of air conditioning or cooling? 5
 - b) Explain in detail about forced air system and radiant heat system in Heater. 5
 - c) What is natural ventilation? 5

- d) Why duct installation and sealing are important? 5
- e) What are different types of electrical wires used in houses and commercial buildings? 5

4. Solve any **four** sub-questions.

- a) What aspects need to be taken into consideration while selecting a wire. 5
- b) Explain what is earthing. Why it is important. 5
- c) Write a note on modem, its unit and speed. 5
- d) What is Ethernet, fibre optic cable and wireless network? 5
- e) What is air conditioning air cycle? 5

