Ref No: EX/CON/T/215/2018

## B. CON. ENGG. 2ND YR 1ST SEM. EXAM.- 2018

Subject: **BUILDING SERVICES** 

Time: Three hours

Full Marks: 100

## Answer any Ten questions

- 1. Describe Simple Refrigeration Cycle system with a schematic diagram.
- 2. Write short note on any two of the followings:

2X5=10

- a) Desert Cooler.
- b) Air Handling Unit.
- c) Escalator.
- 3. Describe basic components of Elevator/ Lift system in cross sectional diagram (may not be in scale).
- 4. Describe different types of Elevators/ Lifts according to their usages.
- 5. Describe with neat sketches the different layouts used in Water Distribution System.
- 6. Describe different types of Fire Fighting System of a building.
- 7. Describe with sketches any two of the followings:

2X5=10

- a) Different types of Traps in Plumbing System.
- b) Difference of Manholes & Lamp holes.
- c) Different types of Taps or Cocks of Sanitary fittings.
- 8. Describe the different parts of Septic Tank with neat sketches (may not be in scale).
- 9. Describe in brief the general principles and factors in Acoustical Design of an Auditorium.
- 10. Write short note on the followings:
  - a) Reflection of Sound and Reflecting Surfaces.
  - b) Reverberation Time.
  - c) Open Air Theatre.
- 11. Draw with colour code the distribution of 3-phase Circuit in G+4 apartment with two flats in each floor by cross-section.
- 12. Show the Electricity distribution System from Regional Power Station to Consumers in a chart form.
- 13. Draw symbol used in Electrical Installation system of any five of the followings:

5X2=10

- a) Light Bracket.
- b) 3- Pin 15- Ampere Socket outlet.
- c) Ceiling Fan.
- d) Distribution Fuse Board without switch for power.
- e) Earthing Point.
- f) Two way Switch.
- 14. Write short note on any two of the followings:

2X5=10

- a) Fluorescent Lamp.
- b) Vapour Lamp.
- c) Pipe Earthing.