

Total No. of Questions : 4]

SEAT No. :

P915

[Total No. of Pages : 2

[5257] - 5003
T.Y. B. Arch.
BUILDING SERVICES - III
(2015 Pattern)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:-

- 1) *ALL questions are COMPULSORY.*
- 2) *Answers to the Section - I and Section - II should be written in separate answer books.*
- 3) *Neat and labeled diagrams must be drawn wherever necessary.*
- 4) *Figures to the right [in brackets] indicate full marks.*
- 5) *Assume suitable data if necessary.*

SECTION - I

Q1) Explain in detail with sketches :

Explain different systems used in Mechanical Ventilation. **[15]**

OR

Explain working of an Evaporative Cooler stating advantages & disadvantages of Evaporative Cooling.

Q2) Write short notes (ANY FOUR)

[4 × 5 = 20]

- a) Stack effect
- b) Centrifugal fan
- c) Cross ventilation
- d) Indicators of human comfort conditions
- e) Psychometric Chart
- f) Axial flow fan

P.T.O.

SECTION - II

Q3) Explain with sketches :

What is “Refrigeration cycle”? How it is used in Air-conditioning? Explain different components of RAC (refrigeration & Air-Conditioning) with appropriate sketches [15]

OR

What is the function of an Air Handling Unit (AHU) of central Air Conditioning system of a building? Explain location criteria of AHU in the building & network of distribution ducts.

Q4) Write short notes (ANY FOUR)

[4 × 5 = 20]

- a) Water-cooled condenser
- b) Reflected Ceiling Plan
- c) Types of Cooling Towers
- d) Split Type Air Conditioner
- e) Central DX Plant
- f) Natural Ventilation

