396 Register No.:

April 2019

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. Define solar radiation quantity.
2. What is a polar wind?
3. What is micro climatic effect?
4. List out the various types of climates.
5. Define isopleth.
6. What s solar passive design?
7. Define an egg crate shading device.
8. What are insulating materials?

PART – B

9. Classify the solar radiation quantity.
10. Write a note on relative humidity.
11. What are the uses of CET?
12. What are equal comfort lines and how are the named?
13. How stone will react with different climates?
14. Explain passive solar heating with reference to the orientation of a building.
15. How shading devices are designed?
16. Describe about orientation for wind.

[Turn over.....

PART – C

17. (a) Explain in detail the various elements of climate.

(Or)

(b) How a building is oriented with respect to climate zones?

18. (a) Describe the bio climatic chart with sketches.

(Or)

(b) Explain about the analysis of climate with CET.

19. (a) Describe in detail the three basic types of shading devices.

(Or)

(b) Elaborate passive solar heating and cooling.

20. (a) Explain the effects of wind on climate.

(Or)

(b) Describe the various wind protection devices.

21. (a) Explain about the suitable materials for warm humid climate.

(Or)

(b) Explain about the insulating materials used in detail.
