



QP CODE: 24804318

Reg No :

Name :

B.ARCH DEGREE REGULAR/SUPPLEMENTARY EXAMINATIONS, AUGUST 2024

Sixth Semester

BACHELOR OF ARCHITECTURE

19AR06006 - BUILDING SERVICES - III

2019 Admission Onwards

D0CD7672

Time: 3 Hours

Max. Marks : 100

Part A

Answer any six questions out of Eight.

Each question carries 5 marks.

1. Difference between active and passive cooling.
2. Materials with low thermal conductivity.
3. GRIHA.
4. Air handling unit (AHU).
5. How is sound propagated?
6. How sound isolation can be done?
7. Write short note on Air borne and structural borne noise.
8. What are the effects of noise?

(6×5=30)

Part B

Answer any four questions out of six.

Each question carries 10 marks.

9. Differentiate between natural ventilation and mechanised ventilation with uses.
10. Discuss all types of heating load while designing any HVAC system.
11. Role of dampers in duct system.
12. Differentiate between threshold of hearing and threshold of pain.





13. Explain signal to noise ratio and how it effects intelligibility.
14. Describe the properties of sound insulation materials, support your answer with examples.
(4×10=40)

Part C

Answer any two questions out of Four.

Each question carries 15 marks.

15. Discuss the importance and relationship between temperature, humidity and ventilation for thermal comfort also discuss its use in HVAC system design.
16. What are the types of refrigerants used in District cooling? Why?
17. Explain the relationship between room shape and acoustical performace with examples.
18. How landscape play an important role in external sound isolation? Explain with sketches.
(2×15=30)

