Roll No…….. **Total No. of Printed Pages: [1]**

Total No. of Questions: [7]

B.Arch. (Semester – 9th)

ARCHITECTURAL BUILDING SERVICES

Subject Code: BARC1965

Paper ID: [120169]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Question no.1 is compulsory. All questions carry equal marks.
2. Attempt Four questions more with minimum One questions from each unit.

Q 1. Write short notes on the following: (02 marks each)

a) IBMS

b) Main objective of waste water management

c) 2 main uses of solar power

d) Environmental impact of solar panels

e) Internet Protocols

f) *Aeration*

UNIT-I (12 marks each)

Q2. How the Building automation systems work together?

Q3. How the automated parking system is installed in the buildings? Explain through appropriate example and sketches.

UNIT-II (12 marks each)

Q4. How do you ensure waste water treatment operations comply with regulatory standards?

Q5. What is bio medical waste? Discuss the strategies to manage the solid waste in hospitals.

UNIT-III (12 marks each)

Q6. Define the intelligent energy distribution system. Illustrate in detail installation process of solar power.

Q7. Differentiate between LPG and bio gas. How it is carried out the installation of Bio gas in buildings? Explain through sketches.