

PARUL UNIVERSITY
FACULTY OF ARCHITECTURE & PLANNING
B.Arch. Winter 2019-20 Examination

Semester: 7**Subject Code: 01101403****Subject Name: Advance Services****Date: 10/12/2019****Time: 2:00 pm to 4:00 pm****Total Marks: 50****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever required.
4. Draw suitable sketches wherever required.

Q.1 Explain the advance building services required in Institutional campuses with relevant example. **(10)**

Q.2 Attempt any five out of the following six: **(20)**

- 1) Write a note on EPABX/PBX/PABX along with system components and their roles.
- 2) Fill in the Blanks:
 1. 36,000 BTU =Tons.
 2. is the full form of EER.
 3.is the main component in HVAC system.
 4. Class D type fire occurs due to.....
 5. distribution system of gas is preferable for urban areas.
- 3) Explain Smoke and Heat detecting systems.
- 4) Explain the supply and services related to domestic cooking gas (PNG).
- 5) Explain the concept of Building Management System
- 6) Explain the following:
 - a) Open wiring system
 - b) Concealed wiring system

Q.3 Explain the following: Any 5 **(10)**

- a) Water supply in high rise buildings
- b) Components of HVAC
- c) Collection, Storage and Disposal of waste in High rise buildings (Solid / Liquid).
- d) Fire detection and fire alarm system.
- e) Any Four types of Gas Distribution Systems.
- f) Components of AHU

Q.4 Explain the following: Any 2 **(10)**

- a) Explain the concept of Building Information Modeling (BIM).
- b) Differentiate between Nuclear and Hydropower plant.
- c) Explain the concept of Integrated Energy Management System and energy recovering techniques associated with it.