Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII (NEW) - EXAMINATION – SUMMER 2017

Subject Code:2171713 **Date:09/05/2017**

Subject Name: BUILDING AUTOMATION

Time:02.30 PM to 05.00 PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Draw Block Diagram of Building Automation and explain in detail.	**07**
	(b)	Explain in detail about VAV &CAV and give difference between them.	**07**
Q.2	**(a)**	Explain functioning of HVAC system and explain its architecture with all components	**07**
	(b)	Explain typical Air Handling Unit with basic operation.	**07**
		OR	
	(b)	Explain HVAC sequence of operation	**07**
Q.3	**(a)**	Explain working principle and application of different type of Smoke detectors	**07**
	(b)	State the different criteria to determine layout of the fire detectors	**07**
		OR	
Q.3	**(a)**	Explain IBMS project cycle.	**07**
	(b)	Explain in detail Advantages & Applications of BMS	**07**
Q.4	**(a)**	Design consideration of EPBX system and its components in BMS.	**07**
	(b)	Write a note on integration of EPBX system with IBMS .	**07**
		OR	
Q.4	**(a)**	Explain concept of Green Building (LEED) & give its Examples.	**07**
	(b)	Explain Lighting control for Building Efficiency improvement.	**07**
Q.5	**(a)**	Explain in detail NVR and DVR.	**07**
	(b)	Draw and explain typical access control door wiring	**07**
		OR	
Q.5	**(a)**	Explain about different type of camera and their use in CCTV based surveillance system	**07**
	(b)	Write short note on: Energy Savings concept & methods,	**07**

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