

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**DIPLOMA ENGINEERING – SEMESTER –III • EXAMINATION – WINTER 2015**

**Subject Code: 3336206**

**Date: 08- 12- 2015**

**Subject Name: Building services**

**Time: 10:30 AM TO 12:30 PM**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

Q.1 Answer any five from the following: 10

1. What is evaporator?
2. What is Earthing?
3. Write full forms. 1) CFL 2) LED
4. Sketch triangle of fire.
5. What is condenser?
6. Mention the components of a lift.
7. What is a dumb waiter?
8. What is air circuit breaker?

Q.2 (a) What is fire fighting system? 3

OR

(a) Explain with sketches refrigeration. 3

(b) Describe passenger lift with neat sketch. 3

OR

(b) What is fire? Describe types of fire. 3

(c) What is HVAC? Describe purpose and uses of it. 4

OR

(c) What are the sources of light? Explain each. 4

Q.3 (a) List noncombustible materials. 3

OR

(a) What is the advantage of air conditioning? 3

(b) Explain types of wiring.	3
OR	
(b) What is a window AC? Describe with neat sketches.	3
(c) What is an escalator? Where is it used?	4
OR	
(c) What is the difference between natural light and artificial light?	4
Q.4 (a) What do you understand by uninterrupted power supply?	3
OR	
(a) What are sprinklers? How does it help in fighting fire?	3
(b) What is the basic principle on which an air conditioner works?	3
OR	
(b) Write common causes of fire.	3
(c) Explain in detail types of air conditioners.	4
OR	
(c) What is High Intensity Discharge lamp? Where is it used?	4
Q.5 (a) Draw an electrical layout of a bed room 4m X 3m along with its attached toilet measuring 1.5m X 2m. Indicate all possible fixtures and fittings.	5
OR	
(a) Describe an incandescent lamp with detailed sketch.	5
(b) Explain working of a lift with neat n labeled section and plan.	5
OR	
(b) Explain possible fire risk in office building.	5