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