

Roll No.

24702

**B. Tech. 3rd Semester (Fire Tech. &
Safety) Examination – December, 2018**

FIRE ENGINEERING

Paper : FT-203-F

Time : Three Hours] [Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in total. Question No. 1 is *compulsory*. One question must be attempt from each Section. All questions carry equal marks.

1. (a) How do you mean by Evacuation ?
(b) Why the Fire alarm system is necessary in any type of Building ?
(c) What is NBC ?
(d) Discuss the Fire Extinguisher. 4 × 5 = 20

SECTION – A

2. Explain the Designing method of the evacuation for the Theater . 20

24702-150 -(P-2)(Q-9)(18)

P. T. O.

3. Write short notes on the following : 10, 10
- (a) Mechanical Ventilation
 - (b) Tactical Ventilation

SECTION – B

4. Discuss the general requirements and guidelines for the installation of fire detection and alarm system. 20
5. How will you classify the building according to the occupancy ? 20

SECTION – C

6. How will you determine the number and width of exit as per NBC for different occupancy ? 20
7. How will you design the following part of the building as per NBC : 20
- (a) Horizontal Exit
 - (b) Internal Stair case

SECTION – D

8. Explain the working principle and construction detail of the following fire fighting equipment : 10, 10
- (a) CO₂ System
 - (b) Foam System
9. How will you provide the Training and Education to protect the arson. 20