

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

FOURTHYEAR EXAMINATION FOR THE AWARD OF DEGREE
OF BACHELOR OF ARTS IN CRIMINOLOGY AND SECURITY STUDIES

CRSS 425: FIRE SAFETY AND PROTECTION

STREAMS: BA (CRSS) Y4S1

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 06/12/2017

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

- Q1. (a) (i) Outline the significance of fire components. [8 marks]
(ii) State the tactical objectives of fire suppression. [6 marks]
(b) Outline components of fire safety Audit Checklist. [8 marks]
(c) (i) State the factors for consideration when selecting a fire protection system. [4 marks]
(ii) Outline factors that can impair the effectiveness of a fire protection system. [4 marks]

SECTION B (ANSWER ANY TWO QUESTIONS)

- Q2. (a) Discuss the flash over stage of a fire cycle and state its significance. [12 marks]
(b) Define a fire load and describe factors that influence it. [8 marks]
- Q3. (a) (i) Define back draught. [2 marks]
(ii) Discuss how a backdraught condition can be created. [9 marks]
(b) Warning signs of a backdraught. [9 marks]
- Q4. Discuss the suitability and unsuitability of the following fire extinguishers for various fire scenarios.
(i) Water mist extinguishers
(ii) Carbon dioxide extinguishers
(iii) Foam forming extinguishers
(iv) Potassium Bicarbonate (PKP)

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- Q5. (a) Fires have been classified into five groups based on the types of fuels. Complete the table below. [10 marks]
- (b) Smoke and heat detectors play a complementary role in fire protection system. Justify. [10 marks]
- Q5. Discuss the following Fire Safety Strategies
- (i) Fire Drills
 - (ii) Fire Safety Committees
 - (iii) Fire assembly points
 - (iv) Emergency response [20 marks]
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