NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY
FACULTY OF HEALTH AND APPLIED SCIENCES

DEPARTMENT OF HEALTH SCIENCES

QUALIFICATION: BACHELOR OF ENVIRONMENTAL HEALTH SCIENCES	
QUALIFICATION CODE: 08 BEHS	**LEVEL:** 7
COURSE CODE: OHS 711S	**COURSE NAME:** OCCUPATIONAL HEALTH AND SAFETY
SESSION: JUNE 2019	**PAPER:** THEORY
DURATION: 3 HOURS	**MARKS:** 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER	**MR. SHEPHERD MUZIRA**
MODERATOR:	**PROFESSOR OMOTAYO AWOFOLU**

INSTRUCTIONS
1. Answer ALL the questions. 2. Write clearly and neatly. 3. Number the answers clearly.

THIS PAPER CONSISTS OF 3 PAGES (Excluding this front page)

SECTION A [22 MARKS]

QUESTION 1 [12 MARKS]

1. Write the appropriate voltage on the answer sheet that correspond to the response and current highlighted in the table below

	Voltage	Response	Current
1.1		Threshold of feeling	0.002-0.005A
1.2		Threshold of pain	-
1.3		Muscular spasm (non-release)	0.015A
1.4		Minimum for death	0.1A
1.5		Maximum for safety	0.002A
1.6		Most serious/fatal accidents	0.2A

NB: Each correct answer is 2 marks.

QUESTION 2 [10 MARKS]

2. Match the terms in Column A with the appropriate explanations in Column B and write the answers in the exam answer sheet.

Column A	Column B
2.1 Direct causes of accidents	**1)**Safety Officer, Safety Representative, Section supervisor, lawyer, MD of the Company
2.2 Indirect causes of accidents	**2)** fires involving ordinary combustible materials such as wood, cloth, paper
2.3 The following members **must** be included in the accident investigation team	**3)** a narrow excavation. The depth is greater than the width, but not wider than 15 feet
2.4 Excavation	**4)** a man-made cut, or depression formed by earth removal
2.5 Trench	**5)**failure to use PPC/E, horseplay, leaving equipment in a dangerous position
2.6 Fire point	**6)** lowest temperatures at which a flammable liquid gives off vapors and just 'flashes' upon application of external sources of ignition followed by extinguishment
2.7 Class A fires	**7)** Temperature at which flame propagation is sustained after ignition. This temperature characteristics the ability of a substance to burn independently
2.8 Class B fires	**8)** lack of policies and procedures; lack of resources and training

2.9 Class C fires	**9)**Safety Officer, Section Supervisor, independent person from another section
2.10 Flash point	**10)** Electrical fire e.g. cables, transformers, generators e.t.c
	11) Fires involving flammable liquids e.g. petrol, paints, oils

SECTION B [22 MARKS]

QUESTION 3 [9 MARKS]

3. The construction industry is known for its high incidence of accidents due to the hazards associated with the industrial sector.

3.1 State and briefly any three possible hazards that may occur when carrying out the demolishing work of a building. [6]

3.2 Outline any three corrective measures that can be put in place to mitigate the hazards you have identified above. [3]

QUESTION 4 [13 MARKS]

4. A mining industry is characterised by different hazards.

4.1 Identify hazards associated with machinery malfunctioning. [6]

4.2 Describe two boiler safety fittings. [3]

4.3 Explain how dust can be controlled in a mining sector. [4]

SECTION C [56 MARKS]

QUESTION 5 [20 MARKS]

5. Designing and implementing an Occupational Health and Safety programme is not an easy task as several steps need to be followed.

5.1 Following the order of events, identify steps that you will follow in developing and implementing an OHS programme. [10]

5.2 Explain the need of every step you have identified above on 5.1. [10]

QUESTION 6 [20 MARKS]

6. Occupational Health and Safety programme.

6.1 Outline the benefit of effectively developing and implementing a Safety and Health programme within an organization. [6]

6.2 Identify precautions to be taken into consideration during storage and handling of flammable liquids. [6]

6.3 Provide exposures routes for chemicals in a workplace. [3]

6.4 Enumerate the roles and responsibilities of the safety committee? [5]

QUESTION 7 [16 MARKS]

7. Risk Management.

7.1 Outline steps involved in risk management process. [6]

7.2 In your own understanding explain why it is important to classify work station according to risk levels. [2]

7.3 Discuss risk control methods. [8]

[TOTAL: 100 MARKS]