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REGINA PACIS INSTITUTE OF HEALTH SCIENCES

MAIN EXAMINATION

JANUARY – APRIL 2019 TRIMESTER

FACULTY OF SCIENCES

DEPARTMENT OF COMMUNITY HEALTH AND DEVELOPMENT

REGULAR PROGRAMME

CHD 215: OCCUPATIONAL HEALTH AND SAFETY

Date: APRIL 2019

Duration: 3 Hours

INSTRUCTIONS: Answer ALL Questions

Write your Student ID number ONLY on every page

Answer ALL Questions as instructed in each section.

Use an INK PEN, not PENCIL to write your answers LEGIBLY

SECTION ONE: MULTIPLE CHOICE QUESTIONS (20 Marks)

For each of the following questions indicate the alphabet of the most appropriate answer on your booklet.

Q1. OHS is an abbreviation for which one of the following?

- A. Occupational Health and Science
- B. Occupational Health and Safety
- C. Occupations, Health and Security
- D. Occupations, Health and Society

Q2. The main goal of the hazard communication standard is to _____

- A. Create awareness for both employers and employees about work place health and safety
- B. Be displayed on the wall at the reception for the OSH inspector
- C. Meet the requirements of the OSH Act as stipulated in the Kenyan Laws
- D. Protect workers from chemical hazards at the work place

- Q3. The best long-term strategy for protecting employees against unforeseen emergencies in the workplace is to develop:
- A. An Emergency Management Plan
 - B. A Fire Safety Plan
 - C. A Hazard Communication Plan
 - D. An Emergency Response Plan
- Q4. These hazards are any living organism or its properties that can cause an adverse response in humans:
- A. Chemical hazards
 - B. Biological hazards
 - C. Ergonomic hazards
 - D. Physical hazards
- Q5. The effects of noise on humans include all of the following, except_
- A. Psychological effects
 - B. Interference with communications
 - C. Physiological effects
 - D. Physical effects
- Q6. The harmfulness of a material depends on all of the following, except:
- A. Chemical composition
 - B. Type and rate of exposure
 - C. Fate of the material in the body
 - D. Half-life of the chemical
- Q7. What are the first physiological signs of oxygen deficiency?
- A. Agiddy feeling and forgetfulness
 - B. Dizziness and euphoria
 - C. Increased depth and rate of breathing (anoxia)
 - D. Confusion and giddiness
- Q8. The “Buddy System” does not subscribe to_____
- A. Organizing employees into groups
 - B. Accountability for each employee in case of an accident
 - C. Employees reporting on each other’s shortfalls
 - D. Disaster management
- Q9. A toxic effect is the result of_____
- A. Contact with a harmful substance
 - B. Exposure to harmful substances
 - C. Interaction with a harmful substance

- D. Influence of a harmful substance
- Q10. The construction safety manager should consider all of the following criteria for prioritizing job safety analyses, EXCEPT _____
- A. Frequency of accidents and injuries
 - B. Probability for accidents
 - C. New or modified tasks
 - D. Infrequently performed tasks
- Q11. Which one of the following may not complicate the ability of the construction manager (CM) to give attention to project safety?
- A. Concern over liability issues
 - B. Hiring the CM after the start of the project
 - C. The absence of a competent safety engineer
 - D. Coordinating numerous project issues
- Q12. The main purpose of workers' compensation law is to _____
- A. Compensate the worker
 - B. Relieve employer burden
 - C. Excuse liability
 - D. Ensure smooth administration
- Q13.
- Which one of the following factors has a direct impact on the risks associated with work?
- A. Supervision exercised by the boss over the worker.
 - B. Health and Safety Plan (H&S Plan).
 - C. Workplace design.
 - D. Workers' union
- Q14. The objective of a task risk analysis is to _____
- A. Assist the worker to understand the risks of job
 - B. Control the risks associated with the work.
 - C. Prepare for the proper execution of the work.
 - D. Eliminate risks by educating the worker.
- Q15. When an accident occurs in the work place, the person who should be notified immediately is _____
- A. The immediate supervisor
 - B. The medical personnel on duty
 - C. The OSH inspector
 - D. The police

- Q16. All of the following types of chemical airborne contaminants may enter the body via inhalation, absorption or ingestion, except _____
- A. Mists
 - B. Allergens
 - C. Gasses
 - D. Dusts
- Q17. What is the best way to avoid tripping and falling at the workplace?
- A. Make sure the floor is uneven.
 - B. Have the floor cleaned extra often.
 - C. Make sure the workplace is tidy.
 - D. Put up warning signs
- Q18. What is an explosion-hazardous environment?
- A. An environment with too much gas and too little air.
 - B. An environment where many explosions happen.
 - C. An environment in which an explosive mixture can arise.
 - D. An environment with too much oxygen
- Q19. A chemical liquid can be classified as either combustible or flammable depending on its _____
- A. Flash point
 - B. Boiling point
 - C. Open cup test
 - D. Vapour
- Q20. The risk of fire at a factory increases when at normal temperature, a chemical matter has a _____
- A. Low boiling point
 - B. High boiling point
 - C. Low flash point
 - D. High flash point

SECTION TWO: SHORT ANSWER QUESTIONS (40 Marks)

Complete all questions on the answer sheets of paper provided.

- Q21. Identify three psychosocial hazards in the work place that may result in ill health
(3 marks)

Q22. Identify any three rules to consider when planning for storage of chemical liquids in a plant. **(3 marks)**

Q23. State five (5) reasons why it is important to conduct spray finishing of industrial products in a spray booth: **(5 marks)**

Q24. Explain four ways a fire fighter can contribute to a positive safety environment in the work place **(8 marks)**

Q25. The following signs are commonly found on labels as warnings for safety as required by occupational health and safety regulations. Indicate the meaning of each sign **(5 marks)**



i) _____



ii) _____



iii) _____



iv) _____



v) _____

Q26. Name the components of a chemical container label in the provided spaces **(6 marks)**

Components Of A GHS-Compliant Label

i	product identifier	AMMONIA	
ii	signal word	DANGER	
iii	hazard statement	TOXIC IF INGESTED	
iv	precautionary statements	<p>Wash hands thoroughly after handling. Keep container tightly closed when not in use. Keep away from heat, sparks and open flames - may explode when exposed to high heat. Use in an open area that is well-ventilated. Breathing in ammonia is irritating and corrosive. Wear protective gloves and safety goggles to prevent burns and irritation.</p> <p>If swallowed: Immediately call Poison Control or doctor/physician. Drink water or milk to dilute ammonia.</p>	
v	supplier information	<p>ABC Chemicals - 123 Main Street - Cincinnati, OH - www.abcchem.com - 800-733-5252</p> <p style="text-align: right;">See Safety Data Sheet (SDS) for further details regarding safe use of this product.</p>	pictograms

Q27. In the following chart, indicate **two** occupational / environmental (O/E) disease, injury or condition that may result from the O/E. **(10 marks)**

	O/E	Disease / Injury / Condition
i.	Using the computer screen for over 8 hrs daily	
ii.	Sitting at a desk for over 8 hrs daily	
iii.	Packing flowers in a cold room for over 8 hrs daily	
iv.	Climbing ladders during construction	
v.	Fire fighter	

SECTION THREE

MODIFIED ESSAY/ ESSAY QUESTIONS (40 MARKS)

Q28. **Compulsory Question**

a) Explain the purpose of a Hazard communication standard **(4 marks)**

b) Explain 'ergonomic risk factors' **(10 marks)**

- c) The coexistence of hazards and OSH presents three categories of problems; Explain the three categories **(6 marks)**

Answer Question any ONE of the following Questions

EITHER

- Q29. Illustrate and discuss the triangle for the prevention of occupational disease and injury **(20 marks)**

OR

- Q30. Explain four premises (beliefs) of the OSHA enforcement theory for OSH offenses **(20 Marks)**

END