



**UNIVERSITY EXAMINATIONS 2014/2015 ACADEMIC YEAR**

**3<sup>rd</sup> YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF  
SCIENCE IN NURSING AND PUBLIC HEALTH**

**COURSE CODE/TITLE: HNS 301: OCCUPATIONAL HEALTH**

**END OF SEMESTER: II**

**DURATION: 3 HOURS**

**DAY/TIME: TUESDAY: 8.00 - 11.00 AM**

**DATE: 16/12/2014 (PL9)**

**SECTION A: MULTIPLE CHOICE QUESTIONS (20 MARKS).**

1. The international labor organization defines occupational health and safety as
  - a) The highest degree of physical, mental and social well-being of workers in all occupations
  - b) The science of designing, implementing and evaluating comprehensively health and safety programs that may maintain and enhance employee's health, improve safety and increase productivity in the work place.
  - c) Promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations.
  - d) Study of diseases affecting workers
  
2. Which of the following correctly describes occupational diseases?
  - a) Have a specific or a strong relation to occupation generally with only one causal agent
  - b) Have multiple causal agents, where factors in the work environment may play a role, together with other risk factors, in the development of such diseases, which have a complex etiology
  - c) Are those without causal relationship with work but which may be aggravated by occupational hazards to health
  - d) Are those affecting majority of workers.
  
3. In Kenya the occupational safety and health act replaced which act
  - a) British factories act
  - b) Work injuries benefits act
  - c) Factories and other places of work act
  - d) Public Health Act CAP 242

4. The first study relating occupational hazards to specific diseases is attributed to
  - a) Sir Robert Peel
  - b) Bernardino Ramazzini
  - c) Dr. Percival Pott
  - d) Charles Thackrah
  
5. The work injuries benefits act and occupational safety and health act are implemented by
  - a) Safety and health committees
  - b) Labor cabinet secretary
  - c) The National Council on Occupational Safety and Health
  - d) Directorate of Occupational Safety and Health Services
  
6. The purpose of work injuries benefits act is
  - a) To secure the safety, health and welfare of people at work
  - b) To protect those not at work from risks to their safety and health arising from, or in connection with, the activities of people at work.
  - c) To provide compensation to employees for work-related injuries and diseases contracted in the course of their employment.
  - d) To establish separate but dependent responsibilities and rights for employers and employees for the achievement of better safety and health conditions.
  
7. The best way for a supervisor to improve safety in the workplace is to:
  - a) Award certificates to staff who do not have accidents
  - b) Publish articles about health and safety in the company newsletter
  - c) Give incentives to staff who have low absenteeism rates
  - d) Involve staff in hazard spotting
  
8. The most common way for a harmful substance to enter the body is:
  - a) Ingestion
  - b) Injection
  - c) Absorption
  - d) Inhalation
  
9. A hazard analysis can be used to evaluate a potential hazard; what other information should be considered?
  - a) Injury reports
  - b) Statistical data
  - c) Risk assessment
  - d) Fatality investigations
  
10. Which is the most effective method of reducing contamination to workers?
  - a) Personal Protective Equipment
  - b) Administration controls
  - c) Treating sick employees
  - d) Engineering controls

11. What percentage of fatal accidents to people happens on the job?
- a) 15%
  - b) 25%
  - c) 50%
  - d) 75%
12. Siderosis is a pneumoconiosis caused by inhalation of:
- a) Beryllium
  - b) Iron oxide
  - c) Lead oxide
  - d) Free silica
13. Which of the following is the most common on-the-job injury among hospital workers?
- a) Back injury
  - b) Eye injury
  - c) Head injury
  - d) Burn injury
14. An occupational health and safety committee would be necessary at an enterprise employing.....people
- a) 5
  - b) 15
  - c) 30
  - d) 19
15. The following are goals of occupational health and safety laws except
- a) To protect Workers from hazards on the job.
  - b) To set standards for health and safety in the workplace.
  - c) To set out the duties of Employers, Supervisors and Workers in the workplace.
  - d) To provide a checklist for safe and unsafe work conditions
16. The proportion of global workforce without access to occupational health services is estimated at
- a) 25%
  - b) 80%
  - c) 90%
  - d) 30%
17. The statements below are true except
- a) Dust is generated by work and other processes.
  - b) Dust deposition in the respiratory tract may occur by sedimentation
  - c) In occupational health dust means solid particles larger than 10 microns
  - d) Respirable dust does not settle easily

18. Concerning workers compensation in Kenya, which statement is false
- Compensation may be denied if employee gives false information
  - Compensation may be denied if the injury was due to failure by the employee to follow medical instructions
  - Compensation may be denied if the employee subscribes to an insurance policy
  - Compensation may be granted if the injury causes disablement
19. Indicate whether true or false (2 marks)
- A radiological exposure of 5-10 rem per year is safe
  - The x ray is an example of non ionizing radiation
  - To effectively control hazards personal protective equipment should be considered last
  - Engineering controls in hazard management are most effective

**SECTION B: SHORT ANSWER QUESTIONS (40 MARKS).**

- Define the following terms (6 marks)
  - Time-weighted average concentration
  - Ceiling concentration
  - Short-term exposure limit
  - Occupational exposure limit.
  - Occupational disease.
  - Occupational hazard
- Agricultural work is risky to health. Give 5 reasons why this is true (5 marks)
- Explain the three particle size fractions of dust (6 marks)
- State five functions of employees under the OSHA act of 2007 (5 marks)
- State five principles of basic occupational health services (5 marks)
- Explain 4 types of health assessments done to establish whether an employee is capable of carrying out a particular task (8 marks)
- Explain the importance of directorate of occupational safety and health services (5 marks)

**SECTION C: LONG ANSWER QUESTIONS (40 MARKS).**

- Assessment of workers health risks is an important function of occupational health
  - Differentiate between a risk and a hazard (2marks)
  - Give a detailed description of how such an assessment is conducted (18 marks)
- Occupational exposure to noise is a problem of public health importance.
  - Explain four engineering measures for controlling this exposure (4 marks)
  - Describe 8 health effects of such exposure (16 marks)