



**higher education
& training**

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

**NON-NATIONAL CERTIFICATE
OCCUPATIONAL HEALTH AND SAFETY ACT**

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This question paper consists of 11 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA
NON-NATIONAL CERTIFICATE
OCCUPATION HEALTH AND SAFETY ACT
TIME: 3 HOURS
MARKS: 100

INSTRUCTIONS AND INFORMATION

1. Answer all the questions.
 2. Read all the questions carefully.
 3. Number the answers according to the numbering system used in this question paper.
 4. Write neatly and legibly.
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QUESTION 1

- 1.1 Define the following terms as used in the Occupational Health and Safety Act:
- 1.1.1 Approved inspection authority (1)
 - 1.1.2 Inspection authority (2)
 - 1.1.3 Explosives (1)
 - 1.1.3 Occupational health (1)
- 1.2 Any person who manufactures, imports, sells or supplies any substance for use at work shall ensure, as far as is reasonably practicable, that the substance is safe and without risks to health when properly used.
- 1.2.1 Name TWO steps that suppliers of substances must take to ensure that the substance will be safe and without risks to health when properly used. (2)
 - 1.2.2 What must the supplier of the substance do in case of an accident involving that substance? (1)
- 1.3 Every employer whose employees are liable to be exposed to hazards emanating from listed work shall identify the hazards and evaluate the risks associated with such work constituting a hazard to the health of such employees, and when required, carry out an occupational hygiene programme and biological monitoring and subject those employees to medical surveillance. The employer shall also keep the health and safety representatives informed of the actions taken and of the results of such actions.
- What must the employer do about individual results of biological monitoring and medical surveillance relating to the work of an employee? (1)
- 1.4 Under what conditions may an employer make any deduction from any employee's remuneration or require or permit any employee to make any payment to him for anything which the employer has to provide in terms of this Act in the interest of the health or safety of an employee? (1)
- [10]**

QUESTION 2

2.1 You have a large site in an industrial area where 415 persons are employed in the different business activities carried out on the site with the following staff (the head office is also on the site):

1. Head office – 102 persons which includes 17 management staff members of the assembly plant, the 32 members of the sales department and seven office-bound members of the installation division

2. Procurement/Stores – 11 persons

3. Machine shop – 32 persons

4. Assembly plant – 128 persons of which 17 are office management staff with offices in head office

5. Quality control division – 28 persons

6. Sales department – 20 persons employed on site with offices in the head office and 12 sales representatives working off site

7. Installation division – 45 employees of which 38 work off site to install products on clients' premises

8. Foundry, which is a separate company – 60 persons of which seven are office management staff

9. Scrap yard which is a separate company – 21 employees of which three are office management

10. Retail shop which is a separate company – 12 persons

2.1.1 Indicate the number of health and safety representatives to be designate to each of the 10 activities. (Substantiate your answer.) (5)

2.1.2 Indicate the total number of health and safety representatives to be appointed if all the activities are regarded as one business. (Substantiate your answer.) (1)

2.2 If a medical practitioner suspects that the disease of a person being examined by him is related to the person's employment, he should report it to the person's employer and to the chief inspector and inform that person accordingly.

2.2.1 Why must a medical practitioner report the case? (1)

2.2.2 When must a medical practitioner report the case? (1)

2.3 An inspector may hold a formal inquiry which shall be held in public.

When may the presiding inspector exclude a person from the place where the inquiry is held?

(1)

2.4 Any person who has an interest in the issue of the formal inquiry may personally or by representative, advocate or attorney, put such questions to a witness at the inquiry to such extent as the presiding inspector may allow.

Name a person who has an interest in the enquiry other than the employer, the owner of the premises where the incident occurred or any other person who, at the discretion of the presiding inspector, can prove such interest.

(1)
[10]

QUESTION 3

3.1 Define the following terms as used in the Ergonomics Regulations, 2019:

3.1.1 Competent person, other than a person who is familiar with the Act and the applicable regulations

(1)

3.1.2 Design

(1)

3.1.2 Supplier

(1)

3.2 What must a designer of machinery and work systems ensure?

(1)

3.3 Name TWO aspects that a supplier of machinery and work systems must ensure.

(2)

3.4 Name TWO aspects that a designer, manufacturer, importer or supplier of machinery, plant or work systems for use at work must provide to potential users.

(2)

3.5 An employer must, before the commencement of any work that may expose employees to ergonomic risks, have an ergonomic risk assessment performed by a competent person.

When must the ergonomic risk assessment be reviewed other than when such assessment is no longer valid or the control measures are no longer effective?

(2)
[10]

QUESTION 4

4.1 Define the following terms as used in the Construction Regulations, 2014:

4.1.1 Construction supervisor

(1)

4.1.2 Fall arrest equipment

(1)

- 4.1.3 Fall risk (1)
- 4.2 A client who intends to have construction work carried out on a new site has applied and obtained an assigned construction work permit from the provincial director who will assign a site-specific number for each construction site. Before starting with the construction work, the client sells the site.
May the client transfer the assigned construction work permit to the new owner? (1)
- 4.3 A client must prepare a suitable, sufficiently documented and coherent site specific health and safety specification for the intended construction work.
On what must this specification be based? (1)
- 4.4 What must the client ensure that the designer takes into consideration during the design? (1)
- 4.5 What must be included in the client's tender documents? (1)
- 4.6 What must be included in the tender documents of the principal contractor to be appointed? (1)
- 4.7 A contractor must ensure that a fall protection plan is implemented.
When must fall arrest equipment be used? (1)
- 4.8 When must employees not be permitted to carry out roof work? (1)
- [10]**

QUESTION 5

- 5.1 Define the following terms for water as used in the Facilities Regulations, 2004:
- 5.1.1 Drinking water (1)
- 5.1.2 Hot water (1)
- 5.2 Every employer shall provide sanitary facilities at the workplace in accordance with the provisions of Parts F, P and Q of the National Building Regulations.
- 5.2.1 What must the employer supply to every employee for his sole use at the washbasins in lieu of a towel? (1)
- 5.2.2 What must the employer make available free of charge to employees? (1)
- 5.3 Define the following terms as used in the General Machinery Regulations, 1988:
- 5.3.1 Certificated engineer (1)

- 5.3.2 Graduate engineer (1)
- 5.4 You have machinery on the premises generating 4 000 kW plus two steam generating units, one with an evaporative capacity of 15 750 kg of water per hour at 100 °C and one with a heating surface of 937,5 m², all running simultaneously.
- 5.4.1 Determine the sum of power generated by the machinery plus the generation of steam (1)
- 5.4.2 Define the term *competent person* (only the minimum requirements) for the premises (1)
- 5.5 In the case in 5.4 above, may the chief inspector permit the employer to designate a person who does not have the qualifications described in your answer? (1)
- 5.6 When may one permit or require a person to do any work on or near moving or electrically live machinery if such work may endanger him? (1)
- [10]**

QUESTION 6

- 6.1 Define the term *fire-resistance* as used in the General Safety Regulations, 1986 as amended. (1)
- 6.2 Every employer and user of machinery shall make an evaluation of the risk attached to any condition or situation which may arise from his activities which may endanger persons and he shall take such steps as may under the circumstances be necessary to make such condition or situation safe.
- What must the employer or user do where it is not practicable to safeguard the condition or situation in order to ensure that any person exposed to any such condition or situation at a workplace or in the course of his employment or on premises where machinery is used, is rendered safe? (1)
- 6.3 No person at a workplace shall be under the influence of or have in his or her possession or partake of intoxicating liquor or drugs.
- What must the employer do in the case where a person is taking medication? (1)
- 6.4 A flammable liquid shall only be used or applied in a room, cabinet or other enclosure specially constructed for this purpose. All ducts, trunks and enclosures of the ventilation system to be of fire resistant material with a smooth interior finish and to be constructed in such a manner as to facilitate the cleaning thereof and to be kept in operation during all working hours.
- 6.4.1 What is the purpose of fitting it with an efficient intake and exhaust ventilation system? (1)

- 6.4.2 What must the employer provide for every employee doing spraying? (1)
- 6.4.3 For what period of time must the ventilation system operate after spraying has ended? (1)
- 6.4.4 In which way must the work be organised? (1)
- 6.5 No person shall use a ladder unless it is constructed of sound material and suitable for the purpose for which it is to be used.
- 6.5.1 What is the maximum length of a ladder which is required to be leaned against an object for support? (1)
- 6.5.2 May one extend a ladder and if so, under what conditions? (2)
- [10]**

QUESTION 7

- 7.1 Define the following terms as used in the Electrical Machinery Regulations, 2011:
- 7.1.1 Dead (1)
- 7.1.2 Live (1)
- 7.2 Who may enter premises housing switchgear or transformers where all live conductors are not insulated or screened off against inadvertent contact? (1)
- 7.3 Why must all electrical machinery be provided with controlling apparatus and protective devices? (1)
- 7.4 What must one do to enable persons to work safely on electrical machinery or other machinery operated by electricity and controlled by switchgear or control gear? (1)
- 7.5 One is using diverse items of electrical machinery such as motors, cables and control apparatus, of which each individual item has been approved and certified by an inspection authority to be used in a location where there is danger of fire or explosion owing to the presence of explosive and flammable articles.
- What must one ensure where these individual items are used together in a system? (1)

- 7.6 One has to visually inspect and test all electrical machinery in a hazardous location at intervals not exceeding two years, or any other intervals approved by the chief inspector.

How will one test or determine the functionality and safety of installed intrinsically safe equipment?

(1)

- 7.7 Name TWO sources of electrical energy which may be used for a portable electric tool with an operating voltage that exceeds 50 V to earth.

(2)

- 7.8 During alterations at a factory the contractor informed you that he intends to use explosives to remove large rocks in the excavation for the foundations.

In terms of the Explosives Regulations, 2002, what is required before explosive material may be used for the blasting on one's premises?

(1)

[10]

QUESTION 8

- 8.1 Define the following terms as used in the Pressure Equipment Regulations, 2009:

8.1.1 Authorised person

(1)

8.1.2 Reticulation

(1)

- 8.2 Any person who manufactures, imports, sells, offers or supplies any pressure equipment described in these regulations for use in the Republic shall ensure that such equipment complies with these regulations.

8.2.1 What must the person who erects or installs any pressure equipment for use in the Republic ensure?

(1)

8.2.2 Name TWO aspects to which all pressure equipment for use in the Republic must comply with in addition to the requirements of the relevant health and safety standard incorporated into these regulations under section 44 of the Act.

(2)

- 8.3 Every user of pressure equipment shall keep a record, which shall be open for inspection by an inspector.

8.3.1 What must be recorded in the records?

(2)

8.3.2 For what period must the manufacturer keep the original manufacturing records of the pressure equipment?

(1)

- 8.4 When pressure equipment is sold, the manufacturer shall ensure that it is accompanied, where relevant, with instructions for the user, containing all the necessary safety information relating to specific aspects.

Name TWO specific instructions relating to the necessary safety information.

(2)
[10]

QUESTION 9

- 9.1 Define the term *WCL 22* as used in the General Administrative Regulations, 2003.

(1)

- 9.2 Every employer shall have a copy of the Act and the relevant regulations readily available at the work place.

Under what conditions is it not necessary to have a copy of the Act and the relevant regulations readily available at the work place?

(1)

- 9.3 Where a health and safety committee has been established in terms of section 19 of the Act, an employer shall make available a suitable meeting place and ensure that the records, as contemplated in section 20(2) of the Act, are kept for a period of at least three years.

What records must be kept?

(1)

- 9.4 An employer shall within seven days of any incident referred to in section 24(1)(a) of the Act, give notice thereof to the provincial director in the prescribed form.

Who must complete the *WCL 22* form and for what reason?

(1)

- 9.5 An employer shall keep at a workplace a record in the form of Annexure 1 for a period of at least three years, which record shall be open for inspection by an inspector, of all incidents which he or she is required to report in terms of section 24 and every other incident which must be recorded and investigated.

9.5.1 When must such incidents be investigated and when must it be finalised?

(1)

9.5.2 Who must examine the Annexure 1 records of every incident?

(1)

- 9.6 Define the term *asbestos work* as used in the Asbestos Abatement Regulations, 2020.

(1)

- 9.7 What must the employer do if he is uncertain whether suspected material contains asbestos?

(1)

- 9.8 What must the employer do about all materials identified as, or assumed to be, asbestos-containing material at the workplace?

(1)

- 9.9 What must the employer do if asbestos is identified?

(1)
[10]

QUESTION 10

- 10.1 Define the term *registered lift inspector* as given in the Lift, Escalator and Passenger Conveyor Regulations, 2010. (1)
- 10.2 The user of a lift, escalator or passenger conveyor shall keep in a safe place in the machine compartment, a record of every such lift, escalator and passenger conveyor in which he shall enter specific information.
- 10.2.1 Name TWO items which shall be entered in the records other than the following: (2)
- his name, address and telephone number;
 - the name, address and telephone number of the competent lift service provider designated by him to carry out the maintenance, examinations and tests in terms of regulation 6(1);
 - copy of the suspension ropes certificate;
 - the register or file and the technical dossier required in terms of the relevant SANS specifications;
 - a copy of each comprehensive report made in respect of incidents in terms of section 24(1)(c)(iii) and (iv) of the Act.
- 10.2.2 For what period must the above records be kept? (1)
- 10.3 Define the following terms as used in the Regulations for Hazardous Chemical Agents, 2020:
- 10.3.1 GHS hazard classification (1)
- 10.3.2 Chemical agent (1)
- 10.4 As contemplated in section 37(2) of the Act, what must the employer and mandatarly do to ensure compliance by the mandatarly with information, instruction and training requirements? (1)
- 10.5 An employer or self-employed person must, after consultation with the relevant health and safety representative or relevant health and safety committee, cause an assessment to be made immediately, and thereafter at intervals not exceeding two years, to determine if any employee may be exposed by any route of intake.
- What must the employer do if the assessment indicates that an employee may be exposed? (1)
- 10.6 One has to ensure that the exposure of one's employees to noise is either prevented or, where this is not reasonably practicable, one has to reduce the exposure to noise by implementing noise control measures.
- 10.6.1 What engineering control measures can one apply? (1)
- 10.6.2 What administrative control measures can one apply? (1)
- [10]**
TOTAL: 100