A worker is manually loading boxes of components onto metal shelves.

Identify FOUR types of injury that the worker could suffer while carrying out this task. (4)

The four types of injuries include:

• spinal disc compression or a prolapsed disc;
• strains to tendons, muscles or ligaments;
• hernia;
• dislocation or fracture of bones;
• cuts and abrasions;
• crushing or impact injuries
• work related upper limb disorders (WRULDs).

Identify factors (issues) in relation to the task that will increase the risk of injury. (4)

• the manipulation of the load at a distance from the trunk;
• the work rate and periods allowed for rest and recovery;
• excessive carrying distances;
• excessive lifting or lowering distances;
• and the need to adopt unsatisfactory body positions because of space restrictions.
(a) List FOUR specific types of injury that could be caused by the incorrect manual handling of loads. (4)

• spinal disc compression or prolapsed disc,
• torn ligaments or sprained tendons,
• hernia, dislocation and fractures,
• muscular strain,
• cuts and abrasions
• crushing and impact injuries.

(b) Identify factors (issues) in relation to the load that will affect the risk of injury. (4)

• They should have identified factors (issues) such as the size and weight of the load,
• the possibility that the contents might move and the load become unbalanced,
• the centre of gravity not in the centre of the load,
• difficulty in securing a firm grasp of the load
• the presence of sharp edges.
Identify the factors (issues) that could contribute towards the development of work-related upper limb disorders (WRULDs) amongst workers at a supermarket checkout. (8)

The identify factors (issues) such as:
• space constraints resulting in employees being forced to adopt fixed and static positions;
• non-adjustable equipment such as chairs and the design of the scanning equipment;
• over-reaching often during the handling of bulky and heavy articles;
• a high pace of work and high levels of repetition;
• environmental conditions such as temperature and humidity;
• a lack of job rotation and a failure to provide adequate breaks;
• the age of the workers with some having pre-existing conditions and
• a lack of appropriate training and supervision.
Outline the specific hazards associated with the use of battery-powered forklift trucks and state the precautions necessary in EACH case. (8)

The hazards and control measures include:

- The generation of hydrogen gas causing explosion or fire,
  - precaution include provision of a dedicated charging station with adequate ventilation.

- Burns by battery acid,
  - precaution includes wearing personal protective equipment such as gloves and eye protection.

- Possibility of electric shock and burns through the shorting of battery leads and
  - precaution include adequate insulation, a correct connection procedure and the wearing of gloves.

- Collisions with pedestrians with silent operation of the forklift,
  - the precaution include proper design off traffic routes, the wearing of high visibility clothing by pedestrians and with warning devices.
©Outline EIGHT rules to follow when a fork-lift truck is left unattended during a driver's work break. (8)

Answer
The rules to follow include:

• returning the fork-lift truck to a designated area;
• parking on firm, level ground;
• leaving the truck with the mast tilted slightly forward and the forks resting on the floor,
• isolating the power with the ignition key removed and retained by a responsible person;
• and parking the truck away from other vehicles and in a position that does not cause obstruction to traffic routes, fire points or emergency exits.