

## Important Questions (CH-161)

### First Aid Awareness

- Q1) List two procedures involved in cardiopulmonary resuscitation (CPR).  
Q2) Under what circumstances is CPR required?  
Q3) Comment on the Recovery Position.  
Q4) Highlight three important observations to be made when treating a casualty.  
Q5) Write down the steps constituting the Heimlich Manoeuvre.  
Q6) Differentiate between various degrees of burns and shed light on the remedial solution.  
Q7) Comment on the foot drag and wrist drag procedure with reference to obstacles.  
Q8) What treatment must be administered to the victim in the event of the following:
- Heat Exhaustion
  - Fractures
  - Snake Bites and Scorpion Stings

### Accident Investigation

- Q9) Differentiate between 'accident' and 'incident'.  
Q10) Define the following terminologies:
- ✓ Undesired Circumstance
  - ✓ Near Miss
  - ✓ First Aid Case
  - ✓ Medical Treatment Case
  - ✓ Lost Time Accident or Incident
- Q11) Jot down three reasons for accident/incident investigation.  
Q12) Illustrate an indirect as well as a direct cause of accident.  
Q13) What are the benefits of conducting an accident investigation?  
Q14) Why is it a good practice to investigate immediately in the aftermath of the accident?  
Q15) List the main features of an investigation process.  
Q16) Which parameters need to be factored into consideration in the event of the following:
- Planning the Investigation
  - Collecting Information
  - Organising Information
  - Analysing Information
- Q17) Mention 6 questions that require exposition in regard to the analysis of a particular event.  
Q18) Comment on a suitable means of recommending solutions in the event of an accident investigation.

### Construction Hazards

- Q19) Define construction hazard.  
Q20) Give examples of common construction hazards.  
Q21) Define dust.  
Q22) Name three types of construction dust.  
Q23) How do dust and fibres affect the body?  
Q24) Give examples of dust and fibres found in construction.  
Q25) What are chronic obstructive pulmonary diseases?  
Q26) Mention activities that lead to generation of crystalline silica dust.  
Q27) Define the following conditions:
- ❖ Silicosis
  - ❖ Asbestosis
  - ❖ Mesothelioma
- Q28) Write a short note on asbestos, naming a few of its sources.  
Q29) How to prevent asbestos-related harm?  
Q30) List the exposure hazards and also suggest some good safety solutions for the following:

- ✚ Lead-based Paint Dust
- ✚ Fiberglass Insulation
- ✚ Fumes
- ✚ Welding Fumes
- ✚ Asphalt Fumes
- ✚ Naphtha
- ✚ Hexavalent Chromium
- ✚ Mist

Q31) Define the following:

- Fiberglass insulation
- Welding fumes
- Asphalt fumes
- Naphtha (Coal tar)

Q32) give examples of mists found the construction sector.

Q33) Suggest best practices for the following:

- Assessing the Risks
- Controlling the Risks
- Reviewing the Controls

Q34) Define respiratory protective equipment with examples and mention the criteria to be factored into account in the event of their selection.

### **Climate Change: Impact on Occupational Health and Safety (OH&S)**

Q35) Define the following:

- Climate
- Climate change
- Weather

Q36) Distinguish between weather and climate.

Q37) List key impacts of climate change on worker safety and health.

Q38) Explain heat stress and list the parameters it tends to influence.

Q39) Highlight the symptoms of both heat exhaustion and heat stroke.

Q40) Name the most common pollutants present in the air.

Q41) Mention the harmful effects of air pollution.

Q42) By means of a schematic, comment on ozone depletion.

Q43) Discuss harmful consequences of ozone depletion when it comes to worker health and safety.

Q44) What are the three main gases emitted during the production of pesticides?

Q45) List contributing factors that directly impact pesticide use.

Q46) Comment on the dangers of HHPs.

Q47) What are the drawbacks of soil erosion?

Q48) State the health implications of the use of nitrogen-based fertilizers and white phosphorus.

Q49) Suggest some climatic conditions which can impact vector-borne disease transmission.

Q50) Outline the consequences of major industrial accidents.

Q51) With examples, explain the impact of toxic and hazardous chemicals on worker safety and health.

Q52) Classify the impacts of climate change.

Q53) Suggest some strategies to prevent or mitigate the harmful effects of climate change.

### **Ethics in Engineering**

Q54) Explain the role of engineers in modern society.

Q55) Define ethics and give two examples of each of the following:

- Legal and ethical activities
- Legal and unethical activities
- Illegal and ethical activities
- Illegal and Unethical activities

- Q56) Give two reasons accounting for ethics being a sub domain of engineering.
- Q57) List the seven principles of engineering ethics.
- Q58) What obligations are mandated upon engineers by the engineering code of ethics.
- Q59) Which three aspects must be combined when conforming to ethical standards at the workplace?
- Q60) Who is a whistle blower?
- Q61) Under what circumstances is it morally permissible for engineers to engage in external whistle blowing?

### **Tools to Improve Health and Safety**

Q62) Define the following:

- Hazard
- Harm
- Risk
- Risk assessment
- Exposure
- Severity
- Likelihood

Q63) List the five steps involved in conducting a risk assessment.

Q64) State types as well as sources of hazards.

Q65) Explain the term 'consequence' and categorize the consequences of an event.

Q66) Define Safe System of Work.

Q67) Mention factors to be encompassed while developing a safe system of work.

Q68) Explain Permit to work.

Q69) Differentiate between a permit issuer and a permit receiver.

Q70) By means of an illustration, shed light on the general hierarchy of risk assessment.