

FreeDocumentsHub.com

Free Industrial Documents & Training — Available 24/7

SAUDI ARAMCO

WORK PERMIT RECEIVER (WPR) CERTIFICATION

EXAM PREPARATION GUIDE

CHAPTER 1

THE SAUDI ARAMCO WORK PERMIT SYSTEM

Permit Types · Roles & Responsibilities · Procedures · Real Incidents

Series	Saudi Aramco WPR Exam Preparation
Chapter	1 of 12
Topic	The Saudi Aramco Work Permit System
Reference Standard	GI-2.100 — Saudi Aramco Work Permit General Instruction
Level	Technician / Supervisor / Engineer
Published By	FreeDocumentsHub.com
Year	2026

www.freedocumentshub.com

HOW TO USE THIS CHAPTER

This chapter covers the Saudi Aramco Work Permit System — the foundation of everything a Work Permit Receiver must know. The WPR exam will test your knowledge of this system heavily. Every other chapter in this series builds on what you learn here.

Section	What You Will Learn
1.1	What is a Work Permit — and why it exists
1.2	The seven types of Work Permit used on Aramco projects
1.3	The role of the Work Permit Receiver — duties, authority, and limits
1.4	The Work Permit cycle — from application to closure

1.5	Permit validity, extensions, suspensions, and cancellations
1.6	Common WPR exam questions on the Work Permit System
1.7	Real incident — what happened, why, and what was lost
1.8	Chapter practice questions — 20 questions with answers

EXAM WEIGHT — CHAPTER 1

The Work Permit System appears in approximately 25–30% of all WPR exam questions.

Master this chapter first. Every other topic connects back to the permit system.

Key focus areas: permit types, WPR responsibilities, permit validity, and the GI-2.100 reference.

1.1 WHAT IS A WORK PERMIT?

A Work Permit is a formal, written, Aramco-authorized document that grants permission to carry out a specific task in a defined location for a defined period under stated safety conditions. It is the primary mechanism by which Saudi Aramco controls hazardous work activities across all its facilities, construction sites, and operating plants.

The Work Permit is not a formality. It is the documented result of a hazard assessment, a safety verification, and a formal authorization chain involving multiple trained personnel. Without a valid Work Permit in place, no hazardous work activity may begin.

Why the Work Permit System Exists

Every year, across the global oil and gas industry, workers are killed and seriously injured during routine maintenance and construction activities. The majority of these incidents share a common factor: the work began without adequate identification of the hazards, without adequate controls in place, or without clear communication between the parties involved.

The Work Permit System was designed specifically to prevent this. By requiring a structured, documented process before any hazardous work begins, the system forces a conversation between the people authorizing the work and the people doing it — a conversation that identifies hazards, specifies controls, assigns responsibilities, and creates a documented record that the required safety conditions were verified before work started.

GI-2.100 — THE GOVERNING DOCUMENT

The Saudi Aramco Work Permit System is governed by GI-2.100 — the General Instruction for the Work Permit System.

Every WPR must know GI-2.100. The exam will test specific requirements from this document.

GI-2.100 defines: permit types, roles and responsibilities, permit content, validity periods, and the complete permit cycle.

When in doubt in the exam — GI-2.100 is the answer for who has authority on the Work Permit System.

Core Principles of the Work Permit System

- No hazardous work shall begin without a valid Work Permit
- The Work Permit must be issued by an authorized Issuer and received by a qualified Receiver
- All hazards must be identified and all required controls must be in place BEFORE work begins
- The Work Permit must be displayed at the work site during the entire period of work
- Work must stop immediately if conditions change and the Permit must be suspended
- The Permit must be formally closed when work is complete or the permit period expires

1.2 THE SEVEN TYPES OF WORK PERMIT

Saudi Aramco uses seven distinct types of Work Permit. Each type is designed for a specific category of work activity. The WPR must know all seven types — their purpose, when each is required, and what distinguishes them from one another.

No.	Permit Type	When Required	Key Distinguishing Feature
1	Cold Work Permit	Any non-ignition work that does not involve open flame, spark, or heat generation — cleaning, inspection, mechanical work, painting	<i>No fire or ignition risk in work activity itself. Still requires gas testing if in hydrocarbon area.</i>
2	Hot Work Permit	Any work involving open flame, spark, or heat sufficient to ignite flammable material — welding, grinding, cutting, brazing	<i>Requires gas test immediately before and during work. Fire watch mandatory. 30-foot exclusion zone.</i>
3	Electrical Work Permit	Work on or near electrical equipment or circuits — panel work, cable work, equipment replacement	<i>Requires LOTO isolation. Authorised Electrical Person must verify isolation. Energised work not permitted without special authorisation.</i>
4	Excavation Permit	Any digging, trenching, or ground disturbance to a depth of 300mm or more	<i>Requires underground services survey before any digging. Shoring and edge protection specified.</i>
5	Confined Space Entry Permit	Entry into any space classified as a confined space — vessels, tanks, manholes, pits, ducts	<i>Most complex permit. Requires atmospheric test for O₂/LEL/H₂S. Continuous monitoring. Standby man outside at all times. Rescue plan in place.</i>
6	Radiography Permit	Use of radioactive sources or X-ray equipment for inspection work	<i>Controlled area must be established. Radiation survey before and after. Authorised radiographer only.</i>
7	Vehicle Entry Permit	Entry of vehicles or mobile equipment into restricted process areas	<i>Vehicle inspected before entry. Exhaust spark arrestor required in hydrocarbon areas. Speed limit enforced.</i>

CRITICAL EXAM POINT — HOT WORK vs COLD WORK

The most common mistake on the WPR exam is classifying work incorrectly as Cold Work when Hot Work rules apply.

If ANY part of the work involves a spark, flame, or heat source — the ENTIRE job requires a Hot Work Permit.

Example: A mechanical fitter changing a pump bearing (Cold Work) working alongside a welder (Hot Work). The entire area falls under Hot Work rules — not just the welder's immediate work.

Remember: one ignition source = Hot Work rules for the entire work area.

Multiple Permits for One Job

A single job may require more than one type of Work Permit. For example:

- A confined space vessel cleaning job requires BOTH a Cold Work Permit AND a Confined Space Entry Permit
- An electrical isolation job inside a classified area requires BOTH an Electrical Work Permit AND a Vehicle Entry Permit if a crane is needed
- A pipeline repair requiring cutting into a live line requires BOTH a Hot Work Permit AND a Cold Work Permit for the preparatory work

All required permits must be obtained and displayed before any part of the work begins. Permits are not interchangeable — each type authorises only its specific category of work activity.

1.3 ROLES AND RESPONSIBILITIES

The Work Permit System involves four key roles. Every WPR must know exactly what each role does — and critically, what each role is NOT authorised to do. The exam tests boundaries as much as responsibilities.

The Four Key Roles

ROLE 1 — PERMIT ISSUER (PI)

Responsibilities

Reviews the job request and assesses the hazards
 Verifies all required safety conditions are in place
 Completes and signs the Work Permit
 Conducts pre-job safety meeting with WPR
 Retains the Issuer copy of the permit
 Monitors work progress and permit compliance
 Closes the permit on completion

Authority & Limits

Must be a Saudi Aramco employee (cannot be a contractor)
 Must hold current PI qualification
 Cannot issue a permit for work in which they are personally involved
 Cannot issue permits beyond their authorised area of responsibility

ROLE 2 — WORK PERMIT RECEIVER (WPR) — YOUR ROLE

Responsibilities

Receives and reviews the Work Permit from the Issuer
 Conducts pre-job safety briefing with the work crew
 Ensures all crew understand the permit conditions
 Displays the permit at the work site
 Ensures work is carried out within permit conditions
 Suspends work immediately if conditions change
 Returns permit to Issuer on completion or suspension
 Never leaves the work site without handing over responsibility

Authority & Limits

The WPR is responsible for the crew's safety during work
 Cannot authorise work beyond the permit scope
 Cannot extend the permit — only the Issuer can extend
 Must STOP WORK if any permit condition is violated
 Cannot sign off a permit in the Issuer role
 One WPR per permit — cannot hold multiple active permits simultaneously without written authorisation

ROLE 3 — GAS TESTER (GT)

Performs gas testing before and during Hot Work or Confined Space Entry. Must hold current GT qualification. Cannot be the WPR or PI on the same permit. Records all readings on the permit.

ROLE 4 — AREA AUTHORITY (AA)

Saudi Aramco proponent responsible for the area where work is taking place. Must endorse the permit for work in their area. Has authority to cancel any permit in their area immediately if safety is at risk. Senior to the Permit Issuer in the permit hierarchy.

THE WPR'S MOST IMPORTANT DUTY — STOP WORK AUTHORITY

The WPR has the authority — and the OBLIGATION — to stop work immediately when:

- Any condition specified in the Work Permit is violated
- Conditions at the work site change in a way not covered by the permit

- Any crew member identifies a hazard not covered by the permit
- Gas readings exceed the permitted limits
- Any crew member refuses to continue because they believe it is unsafe

Stopping work is NEVER wrong. Continuing unsafe work is ALWAYS wrong.

The exam will test this: the correct answer is always STOP and NOTIFY the Issuer.

1.4 THE WORK PERMIT CYCLE

Every Work Permit follows a defined cycle from the moment work is planned to the moment the permit is formally closed. The WPR must understand every stage of this cycle — the exam tests both the sequence and the responsibilities at each stage.

Step	Stage	Who Does It	What Must Happen
1	Job Planning	Requesting Supervisor / WPR	Identify the work to be done. Identify all hazards. Identify all permits required. Submit work request to Issuer in advance — minimum 24 hours before work is needed.
2	Hazard Assessment	Permit Issuer + WPR	Complete Job Safety Analysis (JSA). Identify all hazards. Specify all required controls. Confirm isolation requirements, gas testing requirements, PPE requirements, and emergency arrangements.
3	Permit Preparation	Permit Issuer	Complete the Work Permit form. All sections must be filled. All required endorsements obtained (Area Authority, Gas Tester if required). Permit signed by Issuer.
4	Pre-Job Safety Meeting	Permit Issuer + WPR + Crew	Issuer briefs WPR on permit conditions. WPR briefs crew. All crew sign the permit. No work begins until all signatures are in place.
5	Work Commencement	WPR	Permit displayed at work site. WPR confirms all controls are in place. Gas test completed (if required). Work begins.
6	Work in Progress	WPR	WPR remains at or near work site. Monitors compliance with permit conditions. Stops work if conditions change. Gas tester performs repeat tests at required intervals.
7	Work Completion / Suspension	WPR → Issuer	Work complete or end of shift: WPR signs permit for completion/suspension. Returns permit to Issuer. Work area made safe. Equipment reinstated if work complete.
8	Permit Closure	Permit Issuer	Issuer inspects work area. Confirms work complete and area safe. Signs permit closed. Files permit per Aramco document control

requirements. Permit archived — minimum retention per GI-2.100.

1.5 PERMIT VALIDITY, EXTENSIONS, SUSPENSIONS & CANCELLATIONS

Permit Validity Periods

Permit Type	Standard Validity	Conditions
Cold Work Permit	Up to 8 hours (one shift)	Cannot extend beyond one working shift without reissue
Hot Work Permit	Up to 8 hours (one shift)	Gas test must be repeated if work is interrupted for more than 30 minutes
Electrical Work Permit	Up to 8 hours (one shift)	LOTO must remain in place throughout entire permit duration
Confined Space Entry Permit	Up to 8 hours (one shift)	Atmospheric test must be repeated every hour or as specified in permit
Excavation Permit	Up to 30 days	Must be re-endorsed every 7 days by Area Authority
Radiography Permit	Duration of radiography session	Area cleared and controlled for entire duration
Vehicle Entry Permit	Up to 8 hours (one shift)	Vehicle re-inspected if re-entering after more than 1 hour outside

Extensions

- Only the Permit Issuer can extend a Work Permit — the WPR has NO authority to extend
- Extension requires re-verification that all permit conditions are still met
- Extension must be documented on the permit form with time and Issuer signature
- Hot Work Permits — gas test must be repeated before extension is granted
- Permits cannot be extended indefinitely — maximum extensions per GI-2.100

Suspensions

- Work must be suspended immediately when: conditions change, gas alarm activates, incident occurs, shift ends, or WPR needs to leave
- Suspension is documented on the permit — WPR signs for suspension
- Equipment must be made safe before suspension — tools secured, area barricaded
- Permit is returned to Issuer — work cannot resume without Issuer re-activating the permit
- On resumption: Issuer re-verifies all conditions, gas test repeated if Hot Work or CSE

Cancellations

IMMEDIATE PERMIT CANCELLATION — THE ISSUER OR AREA AUTHORITY CAN CANCEL AT ANY TIME

A permit may be cancelled immediately — without notice — by the Issuer or Area Authority when:

- An emergency occurs in or near the work area

- Conditions make continuation of work unsafe
- Work is being carried out outside the scope of the permit
- Permit conditions are being violated

On cancellation: work stops immediately. Area is made safe. Personnel evacuated.

A new permit must be obtained before work can resume — the cancelled permit cannot be reactivated.

1.6 COMMON WPR EXAM QUESTIONS — WORK PERMIT SYSTEM

The following are the types of questions that regularly appear in the Aramco WPR examination on the Work Permit System. Study the question, the correct answer, and the reason — all three are equally important.

Q	Question	Correct Answer
1	Who is responsible for the safety of the crew during work under a Work Permit?	The Work Permit Receiver (WPR) — not the Issuer
2	Who can extend the validity of a Work Permit?	Only the Permit Issuer — the WPR has no authority to extend
3	A WPR notices gas readings rising during work. What is the correct action?	Stop work immediately. Evacuate the area. Notify the Permit Issuer.
4	Can a Saudi Aramco contractor employee be a Permit Issuer?	No — the Permit Issuer must be a Saudi Aramco employee only
5	A Hot Work Permit has been suspended for 45 minutes. What must happen before work resumes?	A new gas test must be performed — work cannot resume on an interrupted Hot Work Permit without a fresh gas test
6	Which GI governs the Saudi Aramco Work Permit System?	GI-2.100
7	A job requires entry into a vessel AND welding repairs inside. Which permits are required?	Both a Confined Space Entry Permit AND a Hot Work Permit
8	The WPR must display the Work Permit at the work site. Why?	So that all workers, supervisors, and inspectors can confirm work is authorised and the conditions under which it is authorised
9	Work is going well. The WPR's shift ends. What must the WPR do?	Suspend the permit. Brief the incoming WPR. Return the permit to the Issuer. The incoming WPR must obtain a new permit for the next shift.
10	Who has authority to cancel a Work Permit immediately?	The Permit Issuer OR the Area Authority

1.7 REAL INCIDENT — WHAT HAPPENED, WHY IT HAPPENED, WHAT WAS LOST

INCIDENT: REFINERY FATAL EXPLOSION — WORK PERFORMED WITHOUT A VALID PERMIT

Gulf Region — Petrochemical Plant

What Happened

A maintenance crew of four was assigned to replace a section of damaged insulation on a heat exchanger at a refinery process unit. The job had been classified as a Cold Work activity — insulation replacement was considered routine and non-hazardous.

The Permit Issuer prepared a Cold Work Permit. However, due to pressure from the operations supervisor to complete the job before a scheduled turnaround, the pre-job safety meeting was shortened. The gas test required for work in the hydrocarbon area was not completed before work began — it was assumed the area was safe because no gas alarms had activated in the past week.

Forty minutes into the job, while removing old insulation from the heat exchanger, one crew member cut into a corroded pipe fitting that had not been identified in the hazard assessment. The fitting contained residual process fluid — a light hydrocarbon vapour. The vapour released into the atmosphere and reached ignition point from an unidentified spark source approximately eight metres away.

The explosion that followed killed two workers instantly. One worker suffered severe burns covering 60% of his body and survived with permanent disability. The fourth worker was thrown 12 metres by the blast and suffered multiple fractures.

The Root Cause — What Went Wrong

1	The gas test was not completed before work began — a direct violation of GI-2.100 requirements for work in hydrocarbon areas. This is the primary cause.
2	The hazard assessment (JSA) did not identify the corroded fitting as a potential hazard. The area had not been inspected before the permit was issued.
3	The pre-job safety meeting was shortened under schedule pressure. The crew did not fully understand the permit conditions or the specific hazards in the work area.
4	No Hot Work controls were in place for the area — because the job was classified as Cold Work. When the hydrocarbon release occurred, there were no gas monitors running continuously and the ignition source eight metres away was not identified as a risk.
5	The WPR did not stop the job when the insulation removal revealed an unexpected pipe fitting in poor condition. A competent WPR with proper training would have recognised this as a changed condition requiring immediate permit suspension.

What Was Lost

Loss Category	Detail
Human Life	2 workers killed instantly. Ages 28 and 34. Both with young families.
Permanent Injury	1 worker — 60% burns, permanent disability, unable to return to any form of work

Serious Injury	1 worker — multiple fractures, 6 months hospitalisation, partial return to work 14 months later
Production Loss	Refinery unit shut down for 47 days. Estimated production loss: USD 28 million
Equipment Damage	Heat exchanger and surrounding pipe network — replacement cost USD 4.2 million
Legal Consequence	Company fined USD 8.5 million. Operations supervisor — criminal prosecution. Permit Issuer — dismissed and licence revoked.
Reputation	Company name in regional press for 6 months. Aramco contractor registration suspended for 18 months.

The Lesson — What Would Have Prevented This

- A complete gas test before work began would have detected the hydrocarbon atmosphere immediately — work would not have started.
- A thorough JSA would have identified the corroded fitting and required it to be inspected or removed before insulation work began nearby.
- A full pre-job safety meeting would have ensured the crew understood the specific hazards in this area and knew their individual stop-work authority.
- The WPR stopping work the moment an unexpected condition was identified — the corroded fitting — and returning the permit to the Issuer for re-assessment.
- Never allowing schedule pressure to reduce the quality of the safety process. The turnaround schedule cost 47 extra days. Two people paid with their lives.

THE ARAMCO RULE THAT WAS VIOLATED

GI-2.100 — Section 5.3: Gas testing is mandatory before commencement of any work in or adjacent to a hydrocarbon area, regardless of whether the work activity itself is classified as Hot Work or Cold Work.

GI-2.100 — Section 7.2: Work must be immediately suspended if any condition not covered by the permit is encountered during the course of work.

Both requirements were violated. Both violations were preventable. Both violations were fatal.

1.8 CHAPTER 1 PRACTICE QUESTIONS

Answer all 20 questions before checking the answer key. Write your answer for each question. Then check your answers at the end of this section. Any question you answered incorrectly — go back and re-read the relevant section.

HOW TO USE THESE QUESTIONS

Treat these as real exam conditions — answer without looking back at the chapter.

Time yourself — the real WPR exam allows approximately 1.5 minutes per question.

Score 18/20 or higher before moving to Chapter 2.

Any score below 16/20 — re-read the entire chapter before attempting again.

1. What is the primary governing document for the Saudi Aramco Work Permit System?

A) SAES-B-067 B) GI-2.100 C) SAES-A-004 D) GI-6.012

Your Answer: _____

2. Who has authority to issue a Work Permit on a Saudi Aramco facility?

A) Any senior engineer B) The contractor site manager C) A qualified Saudi Aramco employee Permit Issuer D) The Work Permit Receiver

Your Answer: _____

3. A WPR notices that the gas reading in the work area has reached 10% LEL. What is the correct immediate action?

A) Continue work but increase monitoring frequency B) Notify the Issuer by phone and await instructions C) Stop work immediately and evacuate the area D) Reduce the work crew to essential personnel only

Your Answer: _____

4. A Cold Work Permit is valid for which period?

A) 24 hours B) One working week C) Up to 8 hours (one shift) D) Until the work is complete regardless of time

Your Answer: _____

5. Which permit type is required for entry into a vessel for inspection?

A) Cold Work Permit only B) Confined Space Entry Permit only C) Both Cold Work Permit and Confined Space Entry Permit D) Hot Work Permit

Your Answer: _____

6. A grinding job (Hot Work) is interrupted for 50 minutes due to a material delivery. Before work resumes, what MUST happen?

A) The WPR must re-brief the crew B) A fresh gas test must be performed C) The Issuer must visit the site D) The permit must be fully reissued

Your Answer: _____

7. Who is responsible for briefing the work crew on permit conditions before work begins?

A) The Permit Issuer B) The Area Authority C) The Work Permit Receiver D) The Gas Tester

Your Answer: _____

8. A Work Permit has expired and work is not complete. What must happen?

A) The WPR can authorise a one-hour extension B) Work stops and a new permit must be obtained C) The crew can continue if the WPR signs the extension D) The supervisor can verbally authorise continuation

Your Answer: _____

9. The WPR's shift ends but the work is not complete. What is the CORRECT procedure?

A) Hand the permit to the next crew member and leave B) Suspend the permit, brief the incoming WPR, return permit to Issuer, new permit for next shift C) Ask the Issuer by phone to extend the permit for the next shift D) Leave the permit displayed and allow the incoming crew to continue

Your Answer: _____

10. Which person has the authority to cancel a Work Permit immediately?

A) The WPR only B) Any Saudi Aramco engineer C) The Permit Issuer or the Area Authority D) The contractor site manager

Your Answer: _____

11. A job involves both grinding (hot work) and mechanical fitting (cold work). Which permit applies?

A) Cold Work Permit — as most of the work is cold work B) Hot Work Permit — one ignition source means Hot Work rules apply to the entire area C) Two separate permits, one for each activity D) The supervisor decides based on the dominant work activity

Your Answer: _____

12. Gas testing before a confined space entry is the responsibility of:

A) The WPR B) The Permit Issuer C) A qualified Gas Tester D) Any member of the work crew

Your Answer: _____

13. The WPR discovers a condition at the work site that is not covered by the permit. What must the WPR do?

A) Use professional judgement and continue if the condition seems safe B) Stop work and notify the Permit Issuer immediately C) Ask the most senior crew member for advice D) Continue work but document the condition in the site log

Your Answer: _____

14. Can a contractor employee serve as a Permit Issuer on a Saudi Aramco project?

A) Yes — if they hold the required qualification B) Yes — if the Area Authority endorses them C) No — the Permit Issuer must be a Saudi Aramco employee D) Yes — but only for Cold Work Permits

Your Answer: _____

15. The Work Permit must be displayed at the work site. What is the primary purpose of this requirement?

A) So the crew can read the permit conditions during breaks B) So all personnel can confirm the work is authorised and understand the conditions C) To satisfy the Saudi Aramco document control requirement D) So that the Gas Tester can record readings

Your Answer: _____

16. An Excavation Permit has a standard validity of 30 days. What must happen every 7 days?

A) A new permit must be issued B) The WPR must sign the permit C) The Area Authority must re-endorse the permit D) The Gas Tester must inspect the area

Your Answer: _____

17. During a confined space entry, the atmospheric monitor alarms. The correct action is:

A) Check the monitor for a false alarm before taking action B) Reduce entry to essential personnel only C) Immediately evacuate all personnel from the confined space D) Increase ventilation and continue monitoring

Your Answer: _____

18. What is the minimum advance notice recommended for submitting a work permit request?

A) 1 hour B) 4 hours C) 24 hours D) 48 hours

Your Answer: _____

19. Who signs the Work Permit to confirm the crew has been briefed and understands the conditions?

A) The Permit Issuer only B) The WPR and all crew members C) The Area Authority D) The WPR only

Your Answer: _____

20. A permit has been cancelled by the Area Authority due to an emergency in the adjacent area. When can work resume?

A) When the emergency is resolved and a new permit is obtained B) When the WPR confirms the area is safe C) One hour after the emergency is resolved D) When the Permit Issuer reactivates the cancelled permit

Your Answer: _____

FreeDocumentsHub.com

Free Industrial Documents & Training — Available 24/7

SAUDI ARAMCO

WORK PERMIT RECEIVER (WPR) EXAM QUESTION BANK

200 Questions · 9 Topic Areas · Answers on Last Page

Total Questions	200
Answer Options	3 per question (A, B, C)
Topic Areas	9 sections covering all WPR exam topics
Answer Key	Last page only
Passing Score	Aim for 180+ (90%) before sitting the real exam
Reference Standard	GI-2.100, SAES-B-067, Saudi Aramco Safety Standards

Published By

FreeDocumentsHub.com — 2026

INSTRUCTIONS

1. Answer all 200 questions before checking the answer key.
2. Write your answer (A, B, or C) next to each question number.
3. Time yourself — the real WPR exam allows approximately 1.5 minutes per question.
4. The answer key is on the **LAST PAGE ONLY** — do not look until you have finished.
5. Score your answers and identify your weak areas. Re-study those chapter sections.

1.	What is the primary governing document for the Saudi Aramco Work Permit System?
A	GI-2.100
B	SAES-B-067
C	GI-6.012

2.	Who has the authority to issue a Work Permit on a Saudi Aramco project?
A	Any senior engineer
B	A qualified Saudi Aramco employee Permit Issuer
C	The contractor site manager

3.	What is the maximum standard validity period for a Hot Work Permit?
A	24 hours
B	Up to 8 hours (one shift)
C	One working week

4.	Which permit type is required for entry into a vessel for internal inspection?
A	Cold Work Permit only
B	Hot Work Permit
C	Both Cold Work Permit and Confined Space Entry Permit

5.	A Hot Work Permit is interrupted for 45 minutes. What must happen before work resumes?
A	The Issuer must re-sign the permit
B	A fresh gas test must be performed
C	The WPR must re-brief the crew

6.	The Work Permit must be displayed at the work site during work. Why?
A	To satisfy document control requirements
B	So all personnel can confirm work is authorised and understand the conditions

C For the Gas Tester to record readings

7. Who is responsible for briefing the work crew on permit conditions before work begins?

A The Permit Issuer

B The Area Authority

C The Work Permit Receiver

8. Who has the authority to cancel a Work Permit immediately?

A The WPR only

B Any Saudi Aramco engineer

C The Permit Issuer or the Area Authority

9. Can a contractor employee serve as a Permit Issuer on a Saudi Aramco project?

A Yes, if they hold the required qualification

B No — the Permit Issuer must be a Saudi Aramco employee

C Yes, if the Area Authority endorses them

10. How many types of Work Permit are used in the Saudi Aramco Work Permit System?

A Five

B Seven

C Ten

11. A job requires grinding (hot work) and mechanical fitting (cold work) in the same area. Which permit applies?

A Cold Work Permit — most of the work is cold work

B Hot Work Permit — one ignition source means Hot Work rules apply to the entire area

C Two separate permits, one for each activity

12. What is the standard validity of an Excavation Permit?

A Up to 8 hours

B Up to 7 days

C Up to 30 days

13. How often must an Excavation Permit be re-endorsed?

A Every 24 hours

B Every 7 days

C Every 14 days

14.	A WPR's shift ends but the work is not complete. What is the correct action?
A	Leave the permit at the site for the next crew
B	Suspend the permit, brief the incoming WPR, return permit to Issuer
C	Ask the Issuer to extend the permit by phone

15.	Who can extend the validity of a Work Permit?
A	The WPR
B	The Permit Issuer only
C	Any Saudi Aramco supervisor

16.	The WPR discovers a condition not covered by the permit. What must the WPR do?
A	Use professional judgement and continue
B	Stop work and notify the Permit Issuer immediately
C	Ask the most senior crew member for advice

17.	What is the minimum advance notice recommended for submitting a Work Permit request?
A	1 hour
B	4 hours
C	24 hours

18.	After a permit is cancelled, when can work resume?
A	When the emergency is resolved
B	Only after a completely new permit is obtained
C	When the WPR confirms the area is safe

19.	Who signs the Work Permit to confirm the crew has been briefed and understands the conditions?
A	The Permit Issuer only
B	The WPR and all crew members
C	The Area Authority

20.	A Cold Work Permit is valid for which period?
A	24 hours
B	One week
C	Up to 8 hours (one shift)

21.	What does GI stand for in GI-2.100?
------------	--

A	General Instruction
B	General Index
C	Government Instruction

22.	Which permit type requires a standby man outside the work area at all times?
A	Hot Work Permit
B	Excavation Permit
C	Confined Space Entry Permit

23.	Can the Permit Issuer issue a permit for work in which they are personally involved?
A	Yes, with Area Authority approval
B	No — this is not permitted under GI-2.100
C	Yes, for Cold Work only

24.	What must the WPR do immediately if gas readings rise to a dangerous level?
A	Reduce the number of workers
B	Stop work and evacuate the area immediately
C	Continue work but increase monitoring

25.	Which permit requires a controlled exclusion zone to be established?
A	Cold Work Permit
B	Hot Work Permit
C	Radiography Permit

26.	A Vehicle Entry Permit is required when a vehicle enters:
A	Any road on an Aramco project
B	A restricted process area
C	The main project gate

27.	The Area Authority role in the Work Permit System is held by:
A	The contractor project manager
B	The Saudi Aramco proponent responsible for the area
C	The Permit Issuer

28.	What is the purpose of the pre-job safety meeting?
A	To satisfy the Aramco audit requirement
B	To ensure all crew understand the hazards and permit conditions before work begins

C To give the WPR time to read the permit

29. Which document must the WPR keep displayed at the work site throughout the work?

A The Job Safety Analysis

B The Work Permit

C The Risk Assessment Matrix

30. After work is complete, who formally closes the Work Permit?

A The WPR

B The Permit Issuer

C The Area Authority

31. What does JSA stand for?

A Job Safety Analysis

B Joint Safety Assessment

C Job Site Audit

32. Who is responsible for completing the Job Safety Analysis (JSA) before work begins?

A The Permit Issuer alone

B The WPR and Permit Issuer together

C Any crew member

33. What is the first step in a JSA?

A Identify the controls

B Break the job into individual steps

C Start the work and observe hazards

34. Which of the following is a physical hazard?

A Exposure to benzene vapour

B Working at height — fall risk

C Stress from working long hours

35. What does the hierarchy of controls prioritise as the MOST effective control?

A Personal Protective Equipment

B Administrative controls

C Elimination of the hazard

36. Which is the LEAST effective control in the hierarchy of controls?

A	Substitution
B	Engineering controls
C	Personal Protective Equipment (PPE)

37.	A risk matrix is used to assess risk by combining which two factors?
A	Probability and frequency
B	Likelihood and severity
C	Frequency and consequence

38.	A risk rated HIGH on the risk matrix must be:
A	Accepted and documented
B	Reduced before work begins or work must not proceed
C	Reported to management only

39.	What is the purpose of a Toolbox Talk (TBT)?
A	To train workers on equipment operation
B	To brief the work crew on the specific hazards and controls before starting a task
C	To review the project schedule

40.	Which of the following is a chemical hazard?
A	Noise above 85 dB
B	Exposure to H ₂ S gas
C	Working in confined spaces

41.	What does LEL stand for?
A	Lower Explosion Limit
B	Lower Explosive Level
C	Least Explosive Limit

42.	At what % LEL is the atmosphere considered immediately dangerous?
A	5% LEL
B	10% LEL
C	25% LEL

43.	What is the safe oxygen level range for work in a confined space?
A	10% to 16%
B	19.5% to 23%

C	18% to 25%
---	------------

44.	Which gas is heavier than air and accumulates at low points?
A	Methane
B	Hydrogen
C	H ₂ S (Hydrogen Sulphide)

45.	What is the IDLH (Immediately Dangerous to Life and Health) value for H₂S?
A	10 ppm
B	50 ppm
C	100 ppm

46.	A crew member identifies a hazard not on the JSA. What should happen?
A	Continue work — the JSA covers all likely hazards
B	Stop and update the JSA before continuing
C	Report the hazard after the shift

47.	Which control involves changing the work method to reduce the hazard?
A	Engineering control
B	Substitution
C	Administrative control

48.	What is the purpose of an engineering control?
A	To document the hazard
B	To physically remove or reduce the hazard at source
C	To provide the worker with protection

49.	A noise level of 90 dB requires which control?
A	Engineering controls — reduce the noise at source or isolate worker
B	Hearing protection only
C	Posting of a warning sign only

50.	What is the colour of an H₂S warning sign on a Saudi Aramco project?
A	Blue and white
B	Red and white
C	Yellow and black

51.	Which hazard type includes ergonomic risks such as manual handling injuries?
A	Chemical
B	Physical
C	Biological

52.	What does the acronym HAZID stand for?
A	Hazardous Identification
B	Hazard Identification Study
C	Hazard and Incident Database

53.	A spill of flammable liquid in a work area is classified as which type of hazard?
A	Physical
B	Electrical
C	Chemical and fire

54.	What is the minimum recommended distance between a Hot Work activity and a flammable material?
A	10 metres
B	20 metres
C	30 feet (approximately 9 metres)

55.	Who has Stop Work Authority on a Saudi Aramco project?
A	Only supervisors and above
B	Only the WPR
C	Every worker on the site

56.	What must a worker do if they feel unsafe to continue their assigned task?
A	Continue and report at end of shift
B	Inform their immediate supervisor and stop the task
C	Ask a colleague to take over

57.	Which document records the hazards, controls, and responsible parties for a specific task?
A	Method Statement
B	Job Safety Analysis (JSA)
C	Inspection and Test Plan

58.	A high-noise environment above 85 dB requires workers to wear hearing protection after how many hours?
------------	---

A	After 8 hours only
B	Immediately upon entering the area
C	Only during peak noise periods

59.	What is the first priority when a hazard cannot be eliminated?
A	Accept the residual risk
B	Apply the next level of the hierarchy of controls
C	Issue PPE to all workers

60.	What does MSDS/SDS stand for?
A	Material Safety Data Sheet / Safety Data Sheet
B	Material Specification and Data Summary
C	Management of Safety and Data Standards

61.	What is the primary requirement before any Hot Work begins in a hydrocarbon area?
A	A Hot Work Permit must be obtained
B	Gas testing must confirm safe atmosphere AND a Hot Work Permit must be in place
C	A fire extinguisher must be present

62.	What is the fire watch's responsibility during Hot Work?
A	To perform gas testing
B	To watch for fire and be ready to respond throughout the work and for 30 minutes after completion
C	To hold the Hot Work Permit

63.	For how long must the fire watch remain after Hot Work is complete?
A	15 minutes
B	30 minutes
C	1 hour

64.	What is the minimum 30-foot rule in Hot Work?
A	No flammable material within 30 feet of the ignition source
B	No workers within 30 feet during welding
C	Fire watch must stand 30 feet from the welder

65.	Which activity requires a Hot Work Permit?
A	Changing a valve
B	Grinding on a steel structure

C	Painting with a brush
66.	During a welding job, a gas alarm activates. What is the immediate action?
A	Continue welding and inform the supervisor
B	Stop welding immediately, extinguish flame, evacuate area
C	Reduce the welding intensity
67.	What type of fire extinguisher is typically specified for Hot Work fire watch duty?
A	CO2 only
B	Dry powder or CO2, minimum 9kg capacity, as specified in the permit
C	Water-based extinguisher
68.	Hot Work in a classified hazardous area requires which additional precaution?
A	Increased fire watch numbers
B	Formal hot work authorisation from the Area Authority and verified area de-classification
C	Thicker welding gloves
69.	A welder finishes their shift. The weld area is still hot. What must happen?
A	Leave a warning sign and depart
B	The fire watch must remain until the 30-minute post-work observation period is complete
C	The next shift welder takes responsibility
70.	Which of the following is NOT a Hot Work activity?
A	Welding
B	Grinding
C	Tightening a bolt with a spanner
71.	What must be done with all combustible materials before Hot Work begins?
A	They must be moved or protected with fire-resistant covers
B	They must be documented only
C	They can remain if they are more than 5 metres away
72.	Gas testing for Hot Work must be performed by:
A	Any trained crew member
B	A qualified Gas Tester who holds current Aramco qualification
C	The WPR

73.	At what % LEL must Hot Work immediately stop?
A	5% LEL
B	10% LEL
C	25% LEL

74.	What is a fire blanket used for during Hot Work?
A	To protect the welder from heat
B	To protect nearby surfaces, equipment, or materials from sparks and spatter
C	To extinguish Class B fires

75.	Before Hot Work begins on or near a pipe, what must be confirmed?
A	The pipe is made of steel
B	The pipe has been properly isolated, drained, purged, and gas-tested
C	The pipe has been painted

76.	A spark from a grinding operation travels 12 metres. Is this covered by the 30-foot Hot Work rule?
A	No — the 30-foot rule only applies to open flame
B	Yes — sparks can travel further than expected and the 30-foot clearance is a minimum
C	Only if there is flammable material in the path

77.	What does a Hot Work Permit fire watch record in their log?
A	Equipment used
B	Start time, end time, any gas readings, and any incidents observed
C	Worker names only

78.	Can grinding be classified as Cold Work if it is done slowly to avoid sparks?
A	Yes — slow grinding does not produce sparks
B	No — any grinding is classified as Hot Work regardless of technique
C	Only on cold metal surfaces

79.	What must happen if rain starts during outdoor Hot Work?
A	Continue if the welder has appropriate PPE
B	Suspend work and return permit to Issuer — wet conditions may compromise safety
C	Reduce the arc current

80.	A Hot Work Permit requires which minimum PPE for the welder?
A	Safety glasses and gloves

B	Full welding PPE — welding mask, leather gloves, welding jacket, safety boots
C	Hard hat only

81.	Which of the following is classified as a confined space?
A	A room with one exit
B	A vessel, tank, or manhole that has limited entry/exit and is not designed for continuous occupancy
C	Any enclosed room

82.	What atmospheric test is mandatory before every confined space entry?
A	O ₂ only
B	O ₂ , LEL, and H ₂ S as a minimum
C	H ₂ S only

83.	What is the acceptable oxygen level for safe entry into a confined space?
A	15% to 21%
B	19.5% to 23%
C	18% to 25%

84.	Who must be present outside the confined space at all times during entry?
A	The Permit Issuer
B	A trained Standby Man
C	The Gas Tester

85.	The Standby Man's primary responsibility is:
A	To perform gas testing
B	To monitor the entrants and initiate rescue if needed — without entering themselves
C	To hold the Work Permit

86.	Can the Standby Man enter the confined space to assist a worker in distress?
A	Yes — immediately to help
B	No — the Standby Man must not enter. They must initiate the rescue plan and call for help
C	Only if they have their own atmosphere monitor

87.	How often must atmospheric testing be repeated during confined space work?
A	Every 4 hours
B	As specified in the permit — typically every hour or continuously
C	At the start and end of each shift only

88.	What must be done before a worker enters a confined space where H₂S may be present?
A	Wear a dust mask
B	Use supplied air breathing apparatus (SCBA or airline) — not a filter mask
C	Test the atmosphere once at entry

89.	At what H₂S concentration must work in a confined space stop immediately?
A	5 ppm
B	10 ppm
C	Any reading above the permit-specified safe limit

90.	What is the purpose of the rescue plan for confined space entry?
A	To document the entry procedure
B	To ensure a rapid, safe response if an entrant requires rescue
C	To satisfy the permit requirement only

91.	Can a confined space be entered without a Confined Space Entry Permit if the entry is brief?
A	Yes, if entry is under 5 minutes
B	No — any confined space entry regardless of duration requires a valid permit
C	Only for supervisors and above

92.	What does continuous ventilation in a confined space achieve?
A	It eliminates the need for gas testing
B	It removes or dilutes hazardous gases and maintains adequate oxygen levels
C	It prevents condensation

93.	If oxygen levels in a confined space fall below 19.5%, workers must:
A	Use supplemental oxygen from a small cylinder
B	Evacuate immediately — do not use supplemental oxygen into the space
C	Reduce physical activity and continue

94.	A worker inside a confined space stops responding to communication. What is the FIRST action?
A	Enter immediately to check on the worker
B	Activate the rescue plan — call for emergency response — do NOT enter without rescue equipment
C	Try communicating louder

95.	What type of lighting must be used inside a confined space in a hydrocarbon area?
A	Any available torch
B	Intrinsically safe (Ex-rated) lighting only
C	Standard 230VAC lighting

96.	Before a confined space is entered for the first time, a visual inspection from outside must confirm:
A	The space is large enough
B	All isolation points are complete, space is clean, and no visible hazards exist
C	The lighting is adequate

97.	Which gas settles at the bottom of a confined space due to being heavier than air?
A	Methane
B	Carbon monoxide
C	H ₂ S (Hydrogen Sulphide)

98.	What is a spectacle blind used for?
A	Visual identification of pipe contents
B	Physical isolation of a pipe — ensures no fluid can pass even if a valve fails
C	Pressure testing

99.	What must all entrants carry during confined space entry in a potentially hazardous atmosphere?
A	A torch
B	A personal gas monitor (4-gas detector)
C	A radio

100.	What does IDLH stand for?
A	Immediately Dangerous to Life and Health
B	Identified Danger Level Hazard
C	Imminent Danger Level High

101.	A confined space has been gas-tested and found safe. Entry begins. 30 minutes later the gas alarm activates. What happens?
A	Continue work as the initial test showed safe
B	Immediate evacuation of all entrants
C	Reduce workers inside to two only

102.	Who authorises the rescue plan for a confined space entry?
-------------	---

A	The WPR
B	The Permit Issuer — the rescue plan must be in place before the permit is issued
C	Any trained crew member

103.	What is the primary cause of confined space fatalities?
A	Falls from height inside the space
B	Attempting rescue without proper equipment or atmosphere monitoring
C	Equipment failure

104.	A manhole in a road is classified as a confined space if:
A	It is deeper than 1 metre
B	It meets the definition: limited entry/exit, not designed for continuous occupancy, and may contain hazardous atmosphere
C	It requires a ladder for entry

105.	What is the maximum number of workers allowed inside a confined space?
A	Two only
B	As specified in the Confined Space Entry Permit — no fixed rule
C	Four

106.	What does LOTO stand for?
A	Lock Out Tag Out
B	Level One Test Operation
C	Line Out and Test Off

107.	What is the purpose of LOTO?
A	To document maintenance work
B	To prevent accidental energisation of equipment during maintenance
C	To lock equipment rooms

108.	Who may apply a personal LOTO lock to an isolation point?
A	Any worker on the team
B	Only the worker who will perform the work — each worker applies their own lock
C	The Permit Issuer

109.	Can a supervisor remove a worker's personal LOTO lock because the worker has left site?
A	Yes, if the supervisor is senior enough

B	No — only the person who applied the lock may remove it, except through a formal emergency procedure
C	Yes, with the Area Authority's verbal approval

110.	What must be done after applying LOTO and before starting electrical work?
A	Start work immediately
B	Verify isolation by attempting to energise — confirm zero energy state
C	Check the work permit

111.	What is the colour of an Aramco LOTO danger tag?
A	Yellow
B	Blue
C	Red

112.	What is an isolation certificate?
A	A training certificate for electricians
B	A document confirming that all energy sources for a piece of equipment have been isolated and locked out
C	A type of work permit

113.	Electrical work on live equipment above 50 volts requires:
A	Standard safety gloves
B	Special authorisation and additional controls — live work is not permitted under normal conditions
C	A Hot Work Permit

114.	What is the minimum approach distance for unqualified workers near exposed live HV equipment?
A	0.5 metres
B	As specified by the Authorised Electrical Person — maintain exclusion zone
C	2 metres always

115.	A tag without a lock (Tag Out only) is considered:
A	Fully safe — the tag is a warning
B	A temporary measure — tags alone do not prevent energisation and must be upgraded to lock and tag
C	Standard Aramco practice

116.	Before working inside an electrical panel, what must be confirmed by the WPR?
-------------	--

A	That the panel is older than 5 years
B	That all circuits serving the panel are isolated, locked, tagged, and verified dead
C	That the panel is earthed

117.	What does arc flash mean?
A	A lightning strike near equipment
B	A sudden release of electrical energy through the air — capable of causing severe burns and fatality
C	A type of electrical grounding

118.	What PPE is required for work with arc flash risk?
A	Standard cotton overalls
B	Arc-rated PPE, face shield, and insulating gloves rated for the voltage
C	Leather gloves only

119.	What is the first step before any electrical isolation work begins?
A	Apply the LOTO locks
B	Obtain the Electrical Work Permit
C	Switch off the nearest isolator

120.	Which standard governs electrical safety on Saudi Aramco facilities?
A	SAES-B-067
B	GI-6.012
C	NFPA 70E

121.	A maintenance electrician is working on a motor. Another crew opens the motor's circuit breaker remotely. What should have prevented this?
A	The WPR being present
B	LOTO applied to the circuit breaker — the remote operation would have been physically prevented
C	A verbal warning

122.	What is an earthing strap used for in electrical work?
A	To ground portable tools
B	To provide an equipotential bond and prevent dangerous voltage differences during maintenance
C	To hold cables in position

123.	Can an Electrical Work Permit be used to authorise work on equipment not listed in the permit?
A	Yes, if the additional work is minor
B	No — the permit authorises ONLY the specific equipment and tasks listed
C	Yes, with the WPR's agreement
124.	At what voltage level does electrical shock become immediately life-threatening?
A	50 volts AC and above
B	100 volts AC only
C	240 volts only
125.	What must a WPR check before allowing the crew to open an electrical panel?
A	That the panel is painted
B	That the panel is de-energised, isolated, and the isolation is verified — not just assumed
C	That the panel is labelled
126.	What is the purpose of insulated tools for electrical work?
A	To provide a better grip
B	To prevent electrical current from passing through the tool to the worker
C	To reduce tool weight
127.	Who can verify that an electrical isolation is complete and the equipment is safe to work on?
A	Any crew member
B	An Authorised Electrical Person (AEP) only
C	The WPR
128.	A worker receives an electric shock. What is the FIRST action?
A	Touch the worker to check responsiveness
B	Do NOT touch the worker — isolate the power source first, then provide first aid
C	Call for help and wait
129.	CPR for an electric shock victim should begin when?
A	After the doctor arrives
B	As soon as the power is isolated and the area is safe — do not delay
C	After 5 minutes of observation
130.	What is the purpose of an equipotential bonding connection during maintenance on a pressurised pipeline?

A	To identify the pipe material
B	To prevent static electricity buildup and electrostatic discharge during fluid movement
C	To support the pipe weight

131.	What standard governs fire protection systems on Saudi Aramco facilities?
A	NFPA 101
B	SAES-B-067
C	GI-2.100

132.	What is the minimum acceptable fire alarm system type for a Saudi Aramco facility?
A	Conventional zone-based system
B	Addressable fire alarm system
C	Manual call points only

133.	An addressable fire alarm system identifies which of the following?
A	Only the zone of activation
B	The exact device address and location
C	Only that an alarm has occurred

134.	What is the purpose of a Manual Call Point (MCP) in a fire alarm system?
A	To reset the fire alarm panel
B	To allow a person discovering a fire to manually activate the alarm
C	To test the detector

135.	What gas detection level (% LEL) triggers an automatic gas shutdown on a kitchen safety system?
A	5% LEL
B	25% LEL
C	50% LEL

136.	What type of fire suppression is suitable for a Class B (flammable liquid) fire?
A	Water jet
B	CO2 or dry powder extinguisher
C	Water mist only

137.	What does FACP stand for?
A	Fire Alarm Control Panel
B	Fire and Alarm Control Procedure

C Facility Alarm and Control Point

138. A fire alarm activates in your work area. What is the WPR's FIRST action?

- A Continue work and investigate the alarm
- B Stop work, ensure crew evacuation, and follow the site emergency plan
- C Call the control room first

139. What is the purpose of a solenoid valve in a kitchen gas safety system?

- A To regulate gas pressure
- B To automatically cut off the gas supply on alarm activation
- C To monitor gas flow

140. What class of fire involves electrical equipment?

- A Class A
- B Class C
- C Class E (or Class C in some systems)

141. Which fire extinguisher must NEVER be used on an electrical fire?

- A CO2
- B Dry powder
- C Water

142. What is the fire triangle?

- A Heat, Fuel, and Oxygen — remove any one to extinguish fire
- B Fuel, Spark, and Air
- C Heat, Smoke, and Flame

143. What does a smoke detector detect?

- A Heat only
- B The optical or ionisation effect of smoke particles in the air
- C Gas concentration

144. A rate-of-rise heat detector activates when:

- A Temperature exceeds a fixed threshold
- B Temperature rises rapidly above a set rate of increase per minute
- C Smoke is detected

145.	What is the purpose of a fire damper in a duct system?
A	To improve airflow
B	To close automatically on fire alarm and prevent fire spreading through ductwork
C	To filter air

146.	What is the minimum spacing between smoke detectors in a standard ceiling installation per NFPA 72?
A	5 metres
B	9.1 metres maximum spacing
C	15 metres

147.	A gas detector reading of 20% LEL in a kitchen area requires:
A	Continued monitoring
B	Immediate activation of the gas cutoff and evacuation
C	Increased ventilation only

148.	What colour is a fire alarm Manual Call Point (MCP) on a Saudi Aramco project?
A	Green
B	Yellow
C	Red

149.	What is the purpose of a fire watch during Hot Work?
A	To hold the fire extinguisher at all times
B	To monitor for fire during and after Hot Work and extinguish any fire immediately
C	To test the atmosphere

150.	What is a fire suppression system pre-action?
A	A system that releases immediately on heat
B	A system that requires two triggers before releasing agent — reducing accidental discharge risk
C	A manual suppression system

151.	A solenoid valve in a gas safety system is normally-open. What happens when power is lost?
A	The valve stays open
B	The valve closes — gas supply is cut off (fail-safe design)
C	The valve partially opens

152.	What is NFPA 72?
-------------	-------------------------

A	The standard for fire suppression
B	The National Fire Alarm and Signaling Code — governs fire alarm system design
C	The standard for fire extinguisher ratings

153.	Which type of fire alarm detector is best suited for a kitchen with cooking activities?
A	Standard smoke detector
B	Rate-of-rise heat detector or multi-sensor detector
C	Beam smoke detector

154.	What is a cause and effect matrix in a fire alarm system?
A	A list of all detectors
B	A programmed document showing which input activates which output — e.g., which zones trigger which sounders
C	A wiring diagram

155.	When should a fire alarm system be functionally tested after installation?
A	Only at final commissioning
B	Before commissioning and annually thereafter
C	Every 5 years

156.	Who is qualified to perform gas testing on a Saudi Aramco project?
A	Any experienced worker
B	A qualified Gas Tester holding current Aramco certification
C	The WPR

157.	What does LEL stand for in gas testing?
A	Lower Explosive Limit
B	Least Exposure Level
C	Lower Energy Level

158.	At what % LEL must all work stop and the area be evacuated?
A	5%
B	10%
C	25%

159.	What is the normal oxygen level in air?
A	15%
B	21%

C 25%

160. What level of H₂S is considered immediately dangerous to life?

A 10 ppm

B 50 ppm

C 100 ppm

161. Gas testing for a confined space entry must be performed:

A Once before entry

B Before entry AND at regular intervals during the work as specified in the permit

C At the end of the shift

162. A gas monitor must be calibrated:

A Once a year

B Per the manufacturer's schedule — typically before each use or daily

C When a reading seems unusual

163. What does a 4-gas detector typically measure?

A O₂, LEL, CO, and H₂S

B O₂, CO₂, H₂S, and methane only

C LEL only

164. Which gas is colourless and has a rotten egg smell at low concentrations?

A Carbon monoxide

B Methane

C H₂S (Hydrogen Sulphide)

165. Carbon monoxide (CO) is dangerous because:

A It has a strong smell that warns workers

B It is colourless and odourless — it gives no warning before causing unconsciousness

C It is heavier than air

166. A gas reading of 5% LEL in a work area means:

A The atmosphere is safe — below the danger threshold

B The atmosphere contains 5% of the concentration needed to ignite — monitoring must continue

C The area must be evacuated immediately

167.	Methane is lighter than air. Where does it accumulate?
A	At low points and floor level
B	At high points — roof level and tops of tanks
C	It distributes evenly

168.	What personal protective equipment is required when working in an area with confirmed H₂S above the IDLH?
A	Dust mask and safety glasses
B	Self-Contained Breathing Apparatus (SCBA) or supplied air
C	A gas monitor only

169.	A gas tester records a reading of 0% LEL and 20.9% O₂ before Hot Work begins. This means:
A	The area has some gas present
B	The atmosphere is clear — no combustible gas detected and normal oxygen level
C	More testing is needed

170.	What must a gas tester do if their instrument fails during work?
A	Continue with visual observation
B	Stop gas-dependent work immediately and notify the WPR and Issuer
C	Use a backup mobile phone app

171.	What does PPE stand for?
A	Personal Protective Equipment
B	Plant Protection Equipment
C	Process Protection Element

172.	PPE is considered which level of the hierarchy of controls?
A	The most effective control
B	The last resort — least effective control
C	The first control to apply

173.	What is the minimum mandatory PPE for all workers on a Saudi Aramco construction site?
A	Safety glasses only
B	Hard hat, safety glasses, safety boots, and high-visibility vest
C	Hard hat only

174.	A hard hat must be replaced when:
-------------	--

A	After 5 years of use
B	If it has been struck, cracked, or deformed — even if damage is not visible
C	Only when it is visibly broken

175.	What type of glove provides protection against H2S exposure?
A	Leather welding gloves
B	Chemical-resistant gloves appropriate for the specific chemical
C	Cotton gloves

176.	A worker is working at height above 1.8 metres. What fall protection is required?
A	Safety boots with good grip
B	Full body harness and lanyard connected to an anchor point
C	A safety net below

177.	Safety footwear on an Aramco project must provide protection against:
A	Rain only
B	Impact (toe protection), penetration (mid-sole), and electrical hazards
C	Cold temperatures only

178.	When must respiratory protection be used?
A	Only in confined spaces
B	Whenever the atmosphere contains contaminants at or above safe exposure limits
C	Only when the supervisor orders it

179.	What is the purpose of a face shield in welding work?
A	To block wind
B	To protect the face and eyes from arc radiation, sparks, and spatter
C	For general sun protection

180.	High-visibility vests are required on Saudi Aramco projects:
A	Only at night
B	In any area where vehicle movement or equipment operation poses a risk
C	Only in road construction areas

181.	PPE inspection must be carried out:
A	Annually
B	Before each use — inspect for damage, expiry, and correct fit

C Monthly

182. What is the hazard from not wearing hearing protection in a high-noise environment?

A Headaches only

B Permanent hearing damage — hearing loss is irreversible

C Temporary ear ringing only

183. Which PPE is required when working with chemicals that can splash?

A Safety glasses only

B Chemical splash goggles and face shield

C A dust mask

184. A safety harness must be connected to:

A Any fixed structure nearby

B A certified anchor point rated for the load — minimum 2,270 kg (5,000 lbs)

C A co-worker for support

185. Damaged or expired PPE must be:

A Repaired with tape if possible

B Removed from service and replaced immediately

C Used for low-risk tasks only

186. What is the first action when a fire is discovered on a Saudi Aramco facility?

A Attempt to extinguish it immediately

B Activate the fire alarm, call the emergency number, and evacuate

C Continue working and report it later

187. What is the Aramco emergency telephone number used on most Saudi Aramco sites?

A 911

B 1222 (varies by site — always confirm the site-specific number)

C 999

188. What is a muster point?

A A storage area for emergency equipment

B A designated assembly area where workers gather after evacuation to be accounted for

C The site first aid station

189. An injured worker is conscious and alert after a fall. What is the FIRST priority?

A	Move the worker to a comfortable position
B	Do not move the worker — stabilise and call for emergency medical assistance
C	Give the worker water

190.	A worker is found unconscious. What is the FIRST step after confirming the area is safe?
A	Start CPR immediately
B	Check responsiveness, call for help, check breathing, and begin CPR if not breathing
C	Give oxygen from a cylinder

191.	What does STOP stand for in emergency response?
A	Stop, Think, Observe, Plan
B	Stand, Talk, Observe, Proceed
C	Stand, Think, Order, Prevent

192.	During an emergency evacuation, a worker is missing from the muster point. Who must be notified immediately?
A	Other crew members
B	The muster point supervisor and emergency response team
C	The project manager only

193.	A chemical spill occurs in the work area. The first action is:
A	Attempt to clean it up immediately
B	Evacuate the immediate area, identify the chemical using the SDS, and notify the emergency team
C	Continue working at a safe distance

194.	What colour is a first aid box on a Saudi Aramco project?
A	Red
B	Green with white cross
C	Yellow

195.	An injured worker requires ambulance transport. Before the ambulance arrives, the WPR must:
A	Leave the worker with a colleague
B	Ensure the worker is stabilised, the area is safe, and someone is ready to guide the ambulance
C	Complete the incident report

196.	What is the purpose of an emergency eyewash station?
-------------	---

A	General hand washing
B	Immediate flushing of eyes following chemical splash — must be reached within 10 seconds
C	Equipment cleaning

197.	How long must an eyewash station be used after a chemical splash to the eyes?
A	1 minute
B	15 minutes minimum
C	5 minutes

198.	What is the correct action when you hear the site emergency siren?
A	Wait for instructions
B	Proceed immediately to the nearest muster point following the site evacuation plan
C	Call the control room first

199.	A minor injury (small cut) occurs on site. What must the WPR do?
A	Apply a plaster and continue work
B	Ensure first aid is provided, complete a near-miss or first aid report, and notify the supervisor
C	Ignore it if the worker wants to continue

200.	What is the WPR's responsibility regarding emergency preparedness before work begins?
A	It is the Issuer's responsibility
B	Ensure the crew knows the emergency muster point, emergency numbers, and the location of first aid and firefighting equipment for their work area
C	Only the safety officer needs this information

ANSWER KEY

200 Questions — Saudi Aramco WPR Exam Preparation

Q1 - 10	Ans	Q11 - 20	Ans	Q21 - 30	Ans	Q31 - 40	Ans	Q41 - 50	Ans	Q51 - 60	Ans	Q61 - 70	Ans	Q71 - 80	Ans	Q81 - 90	Ans	Q91 - 100	Ans
1	A	11	B	21	A	31	A	41	A	51	B	61	B	71	A	81	B	91	B
2	B	12	C	22	C	32	B	42	C	52	B	62	B	72	B	82	B	92	B
3	B	13	B	23	B	33	B	43	B	53	C	63	B	73	B	83	B	93	B
4	C	14	B	24	B	34	B	44	C	54	C	64	A	74	B	84	B	94	B
5	B	15	B	25	C	35	C	45	C	55	C	65	B	75	B	85	B	95	B

6	B	16	B	26	B	36	C	46	B	56	B	66	B	76	B	86	B	96	B
7	C	17	C	27	B	37	B	47	C	57	B	67	B	77	B	87	B	97	C
8	C	18	B	28	B	38	B	48	B	58	B	68	B	78	B	88	B	98	B
9	B	19	B	29	B	39	B	49	A	59	B	69	B	79	B	89	C	99	B
10	B	20	C	30	B	40	B	50	C	60	A	70	C	80	B	90	B	100	A

ANSWERS — QUESTIONS 101 to 200

Q10 1- 110	An s	Q11 1- 120	An s	Q12 1- 130	An s	Q13 1- 140	An s	Q14 1- 150	An s	Q15 1- 160	An s	Q16 1- 170	An s	Q17 1- 180	An s	Q18 1- 190	An s	Q19 1- 200	An s
101	B	111	C	121	B	131	B	141	C	151	B	161	B	171	A	181	B	191	A
102	B	112	B	122	B	132	B	142	A	152	B	162	B	172	B	182	B	192	B
103	B	113	B	123	B	133	B	143	B	153	B	163	A	173	B	183	B	193	B
104	B	114	B	124	A	134	B	144	B	154	B	164	C	174	B	184	B	194	B
105	B	115	B	125	B	135	B	145	B	155	B	165	B	175	B	185	B	195	B
106	A	116	B	126	B	136	B	146	B	156	B	166	B	176	B	186	B	196	B
107	B	117	B	127	B	137	A	147	B	157	A	167	B	177	B	187	B	197	B
108	B	118	B	128	A	138	B	148	C	158	B	168	B	178	B	188	B	198	B
109	B	119	B	129	B	139	B	149	B	159	B	169	B	179	B	189	B	199	B
110	B	120	B	130	B	140	C	150	B	160	C	170	B	180	B	190	B	200	B

Your Score	Result	Action
180–200 / 200	Excellent	Ready for Aramco WPR exam — review any incorrect answers
160–179 / 200	Good	Review weak sections and re-attempt those question banks
140–159 / 200	Needs Work	Re-study chapters for sections scored below 70%
Below 140 / 200	Not Ready	Complete full re-study of all chapters before re-attempting

ANSWER KEY — CHAPTER 1 PRACTICE QUESTIONS

Q	Answer	Explanation
1	B	GI-2.100 is the Saudi Aramco General Instruction that governs the entire Work Permit System.

2	C	Only a qualified Saudi Aramco employee who holds the Permit Issuer qualification can issue a Work Permit. Contractors cannot be Permit Issuers.
3	C	10% LEL is approaching dangerous levels. Stop work immediately and evacuate. Do not wait for further instructions before evacuating.
4	C	All standard Work Permits (except Excavation) are valid for up to one working shift — maximum 8 hours.
5	C	Confined space entry requires BOTH a Confined Space Entry Permit AND a Cold Work Permit (assuming no hot work inside).
6	B	Any Hot Work interruption of more than 30 minutes requires a fresh gas test before work resumes. 50 minutes exceeds this threshold.
7	C	The WPR is responsible for briefing the crew before work begins and ensuring all crew understand the permit conditions.
8	B	An expired permit cannot be extended retrospectively. Work stops. A new permit must be obtained before work can resume.
9	B	The correct shift handover procedure: suspend permit, brief incoming WPR, return permit to Issuer, incoming WPR obtains new permit.
10	C	Both the Permit Issuer and the Area Authority have authority to cancel a permit immediately.
11	B	One ignition source in the area means Hot Work rules apply to the entire work area — not just to the grinding task.
12	C	Only a qualified Gas Tester can perform atmospheric testing. The WPR and crew cannot perform their own gas tests.
13	B	Stop work and notify the Issuer. Never continue when a condition arises that is not covered by the permit.
14	C	The Permit Issuer role is restricted to Saudi Aramco employees. Contractors cannot hold PI authority.
15	B	The permit is displayed so all personnel — workers, supervisors, inspectors — can confirm the work is authorised and the conditions under which it is authorised.
16	C	Excavation Permits must be re-endorsed by the Area Authority every 7 days, even though the permit may run for up to 30 days.
17	C	On any atmospheric alarm during confined space entry — immediate evacuation. No exceptions.
18	C	GI-2.100 recommends a minimum of 24 hours advance notice for work permit requests.
19	B	The WPR AND all crew members sign the permit to confirm they have been briefed and understand the conditions.
20	A	A cancelled permit cannot be reactivated. When the emergency is resolved and the area is safe, a completely new permit must be obtained.

Your Score	Result	Action
18–20 / 20	Excellent	Ready for Chapter 2
16–17 / 20	Good	Review incorrect questions then move to Chapter 2

Below 16 / 20

Not Ready

Re-read entire Chapter 1 before attempting practice questions again

NEXT — CHAPTER 2: HAZARD IDENTIFICATION & RISK ASSESSMENT

Chapter 2 covers: JSA preparation, hazard types and categories, the risk matrix, the hierarchy of controls, and how to complete a proper pre-job hazard assessment.

Chapter 2 builds directly on Chapter 1 — the Work Permit JSA is the hazard assessment framework you will learn in Chapter 2.

Download Chapter 2 at FreeDocumentsHub.com — available free.

