Industrial Security - 100 Practice MCQs

Industrial Safety, Security Measures & Pollution Control

Q1. The term 'pilferage' in industrial security means:

(a) Petty theft of materials or goods
(b) Damage caused by flood
(c) Unauthorised copying of software
(d) Deliberate setting of fire

Q2. Deliberate damage to machines or utilities to disrupt production is called:

(a) Sabotage
(b) Ergonomics
(c) Trespass
(d) Pilferage

Q3. The principle 'need to know, need to enter' is associated with:

(a) Waste disposal
(b) Access control
(c) Fire fighting
(d) First aid

Q4. The record of issue and return of keys is kept in a:

(a) Patrol log
(b) Visitor register
(c) Accident register
(d) Key register

Q5. A written permission to take goods out of the factory is a:

(a) Visitor pass
(b) Hot work permit
(c) Material gate pass
(d) Work permit

Q6. The CISF was raised in the year:

(a) 2005
(b) 1947
(c) 1969
(d) 1984

Q7. The CISF functions under the:

(a) Ministry of Commerce
(b) Ministry of Defence
(c) Ministry of Home Affairs
(d) Ministry of Labour

Q8. Private security agencies in India are regulated by an Act passed in:

(a) 2005
(b) 1969
(c) 2013
(d) 1948

Q9. A system that raises an alarm when a door, window or fence is disturbed is a(n):

(a) Limit switch
(b) Pressure gauge
(c) Intrusion alarm
(d) Ammeter

Q10. Fires involving flammable gases such as LPG are classified as:

(a) Class C
(b) Class A
(c) Class B
(d) Class D

Q11. Fires of wood, paper and cloth are classified as:

(a) Class B
(b) Class C
(c) Class A
(d) Class D

Q12. The fire tetrahedron adds which fourth element to the fire triangle?

(a) Smoke
(b) Carbon dioxide
(c) Chemical chain reaction
(d) Water vapour

Q13. Stopping a fire by removing the fuel is called:

(a) Flooding
(b) Starving
(c) Cooling
(d) Smothering

Q14. Stopping a fire by cutting off the oxygen supply is called:

(a) Ventilating
(b) Cooling
(c) Smothering
(d) Starving

Q15. In the RACE fire-response method, 'C' stands for:

(a) Contain
(b) Cut
(c) Cool
(d) Call

Q16. Which agent can be used on both flammable-liquid fires and electrical fires?

(a) Water-based foam
(b) Carbon dioxide (CO_2)
(c) Soda-acid
(d) Water jet

Q17. Section 38 of the Factories Act, 1948 dealt with:

(a) Precautions in case of fire
(b) First-aid appliances
(c) Safety officers
(d) Fencing of machinery

Q18. Safety officers were covered under which section of the Factories Act, 1948?

(a) Section 40B
(b) Section 7A
(c) Section 34
(d) Section 21

Q19. Section 34 of the Factories Act, 1948 dealt with:

(a) Excessive weights
(b) Pressure plant
(c) Hoists and lifts
(d) Protection of eyes

Q20. Protection of eyes was covered by which section of the Factories Act, 1948?

(a) Section 31
(b) Section 29
(c) Section 36
(d) Section 35

Q21. Hoists and lifts were covered by which section of the Factories Act, 1948?

(a) Section 35
(b) Section 29
(c) Section 21
(d) Section 45

Q22. First-aid appliances were covered by which section of the Factories Act, 1948?

(a) Section 45
(b) Section 38
(c) Section 46
(d) Section 49

Q23. Under the Factories Act, 1948, a unit not using power became a factory at:

(a) 10 workers
(b) 50 workers
(c) 20 workers
(d) 40 workers

Q24. Under the OSH Code, 2020, a factory not using power needs at least:

(a) 10 workers
(b) 50 workers
(c) 40 workers
(d) 20 workers

Q25. Under the OSH Code, 2020, a canteen is required from:

(a) 250 workers
(b) 100 workers
(c) 500 workers
(d) 150 workers

Q26. Under the OSH Code, 2020, a welfare officer is required from:

(a) 100 workers
(b) 1000 workers
(c) 500 workers
(d) 250 workers

Q27. Under the OSH Code, 2020, a crèche is required for more than:

(a) 30 workers
(b) 50 workers
(c) 10 women workers
(d) 100 workers

Q28. The Factories Act, 1948 was repealed on:

(a) 21 November 2025
(b) 15 August 2025
(c) 28 September 2020
(d) 1 January 2026

Q29. The 'occupier' of a factory is the person who:

(a) Inspects the factory for the government
(b) Is the chief safety officer
(c) Is the oldest worker
(d) Has ultimate control over the affairs of the factory

Q30. A guard fixed permanently with screws or welding is a:

(a) Interlocked guard
(b) Adjustable guard
(c) Fixed guard
(d) Distance guard

Q31. A guard that moves automatically as material is fed is a:

(a) Distance guard
(b) Interlocked guard
(c) Self-adjusting guard
(d) Fixed guard

Q32. An invisible beam that stops a machine when broken is a:

(a) Rheostat
(b) Relay coil
(c) Fuse
(d) Light curtain

Q33. A two-hand control on a press ensures that:

(a) Production is faster
(b) Both hands are away from the danger zone during operation
(c) Power consumption is lower
(d) The machine stays cool

Q34. An emergency stop (E-stop) button is normally:

(a) A green rocker switch
(b) A blue push button
(c) A red mushroom-head button
(d) A yellow toggle

Q35. The hazard of a body part being pulled between two rotating parts is called:

(a) Shearing
(b) Ejection
(c) Drawing-in / nip point
(d) Friction

Q36. A cutting action between two moving edges is called:

(a) Ejection
(b) Impact
(c) Shearing
(d) Entanglement

Q37. Hair or clothing wound around a rotating shaft is an example of:

(a) Shearing
(b) Crushing
(c) Abrasion
(d) Entanglement

Q38. The most effective control in the hierarchy of controls is:

(a) Administrative control
(b) Substitution
(c) PPE
(d) Elimination

Q39. Replacing a solvent-based paint with a water-based paint is an example of:

(a) PPE
(b) Elimination
(c) Engineering control
(d) Substitution

Q40. The least effective level in the hierarchy of controls is:

(a) Substitution
(b) Elimination
(c) Engineering control
(d) PPE

Q41. A Lockout/Tagout tag usually carries the message:

(a) Danger - Do Not Operate
(b) Wet Floor
(c) Safe to Use
(d) Fire Exit

Q42. In Lockout/Tagout, a personal lock may be removed only by:

(a) Any supervisor
(b) The person who fitted it
(c) The security guard
(d) The next shift worker

Q43. Under the present IEC colour code, the neutral wire is:

(a) Green
(b) Blue
(c) Black
(d) Red

Q44. Under the present colour code, the earth wire is:

(a) Brown
(b) Green-yellow
(c) Grey
(d) Blue

Q45. The purpose of earthing is to:

(a) Provide a safe path for fault current to the ground
(b) Store electrical energy
(c) Increase voltage
(d) Reduce frequency

Q46. An MCB protects a circuit against:

(a) Earth leakage only
(b) Low voltage only
(c) Noise
(d) Overload and short circuit

Q47. The Indian Boilers Act was passed in the year:

(a) 1986
(b) 1952
(c) 1948
(d) 1923

Q48. The boiler fitting that melts when the water level becomes dangerously low is the:

(a) Stop valve
(b) Pressure gauge
(c) Safety valve
(d) Fusible plug

Q49. The boiler fitting that shows steam pressure is the:

(a) Fusible plug
(b) Water level gauge
(c) Blow-down valve
(d) Pressure gauge

Q50. The fitting that relieves excess steam pressure is the:

(a) Stop valve
(b) Safety valve
(c) Fusible plug
(d) Feed-check valve

Q51. A major cause of boiler explosions is:

(a) Use of a safety valve
(b) Excess clean water
(c) Regular inspection
(d) Low water level

Q52. The safety colour for caution or warning is:

(a) Green
(b) Red
(c) Blue
(d) Yellow

Q53. A prohibition sign has the shape of a:

(a) Circle with a diagonal slash
(b) Yellow triangle
(c) Green rectangle
(d) Blue square

Q54. SWL stands for:

(a) Standard Work Level
(b) Standard Weld Length
(c) Safe Weight Limit
(d) Safe Working Load

Q55. Planned servicing at fixed intervals to prevent failure is:

(a) Corrective maintenance
(b) Breakdown maintenance
(c) Predictive maintenance
(d) Preventive maintenance

Q56. Maintenance based on vibration or temperature monitoring is:

(a) Emergency repair
(b) Breakdown maintenance
(c) Predictive maintenance
(d) Preventive maintenance

Q57. UN hazard Class 2 covers:

(a) Corrosives
(b) Explosives
(c) Flammable liquids
(d) Gases

Q58. UN hazard Class 4 covers:

(a) Oxidisers
(b) Flammable liquids
(c) Flammable solids
(d) Radioactive material

Q59. UN hazard Class 5 covers:

(a) Oxidising substances and organic peroxides
(b) Toxic substances
(c) Corrosives
(d) Gases

Q60. UN hazard Class 6 covers:

(a) Radioactive material
(b) Explosives
(c) Toxic and infectious substances
(d) Gases

Q61. UN hazard Class 7 covers:

(a) Toxic substances
(b) Corrosives
(c) Radioactive material
(d) Explosives

Q62. UN hazard Class 9 covers:

(a) Flammable solids
(b) Miscellaneous dangerous goods
(c) Corrosives
(d) Gases

Q63. The flash point of a liquid is:

(a) The temperature at which it boils
(b) The temperature at which it explodes in a closed tank
(c) The lowest temperature at which it gives off enough vapour to form an ignitable mixture
(d) The temperature at which it freezes

Q64. Under the Petroleum Rules, Class B petroleum has a flash point of:

(a) 65 °C to 93 °C
(b) Above 93 °C
(c) 23 °C to 65 °C
(d) Below 23 °C

Q65. Under the Petroleum Rules, Class C petroleum has a flash point of:

(a) 65 °C to 93 °C
(b) 23 °C to 65 °C
(c) Below 23 °C
(d) Above 93 °C

Q66. LEL in fire science stands for:

(a) Lowest Energy Level
(b) Liquid Ejection Limit
(c) Lower Electric Load
(d) Lower Explosive (Flammable) Limit

Q67. A Safety Data Sheet was earlier known as:

(a) PTW
(b) MSDS
(c) NFPA
(d) LOTO

Q68. In the NFPA 704 diamond, the yellow quadrant shows:

(a) Flammability
(b) Reactivity (instability)
(c) Special hazard
(d) Health hazard

Q69. In NFPA 704, a rating of 4 indicates:

(a) Slight hazard
(b) Moderate hazard
(c) No hazard
(d) Severe / extreme hazard

Q70. In the white quadrant of NFPA 704, 'W' with a bar means:

(a) Waste
(b) Weak acid
(c) Reacts with water
(d) Water-based

Q71. FEFO in store management means:

(a) First Expiry, First Out
(b) Fast Exit, Fast Out
(c) Final Entry, Final Out
(d) First Entry, First Order

Q72. A 'bund' around a tank is used to:

(a) Ground static charge
(b) Cool the tank
(c) Increase pressure
(d) Hold and contain spilled liquid

Q73. Storing acids together with cyanides is dangerous because it can release:

(a) Hydrogen peroxide
(b) Steam only
(c) Highly toxic gas
(d) Harmless nitrogen

Q74. The Hazardous and Other Wastes Rules were notified in:

(a) 2005
(b) 1986
(c) 2016
(d) 1996

Q75. Gas cylinders should be stored:

(a) Without caps
(b) Near heaters
(c) Upright and secured with a chain
(d) Lying flat

Q76. A gas leak from a cylinder should be checked with:

(a) A spark
(b) Soap solution
(c) A candle
(d) A lighted match

Q77. The correct posture for manual lifting is:

(a) Twist the body while lifting
(b) Bend the back with straight legs
(c) Jerk the load upward
(d) Bend the knees and keep the back straight

Q78. When a forklift is travelling with a load, the forks should be:

(a) Removed
(b) Raised high
(c) Tilted forward
(d) Kept low

Q79. According to Heinrich, the share of accidents caused by unsafe acts is about:

(a) 88%
(b) 10%
(c) 50%
(d) 2%

Q80. A 'near miss' is:

(a) A planned shutdown
(b) An event that could have caused harm but did not
(c) A minor first-aid case
(d) An accident causing death

Q81. In 5S, 'Seiton' means:

(a) Sort
(b) Standardise
(c) Set in order
(d) Shine

Q82. In 5S, 'Shitsuke' means:

(a) Standardise
(b) Shine
(c) Sustain
(d) Sort

Q83. Silicosis is caused by:

(a) Cotton dust
(b) Silica dust
(c) Lead fumes
(d) Asbestos fibres

Q84. Byssinosis is caused by:

(a) Coal dust
(b) Silica dust
(c) Lead fumes
(d) Cotton dust

Q85. Frequency rate is calculated as:

(a) Injuries / man-days lost
(b) (Man-days lost x 10^6) / man-hours worked
(c) (Lost-time injuries x 10^6) / man-hours worked
(d) (Injuries x 1000) / average workers

Q86. Severity rate measures:

(a) Near misses per year
(b) Injuries per million man-hours
(c) Injuries per thousand workers
(d) Man-days lost per million man-hours worked

Q87. The safe oxygen level for entering a confined space is:

(a) 10% to 15%
(b) 19.5% to 23.5%
(c) 25% to 30%
(d) 5% to 10%

Q88. A hot work permit is required for:

(a) Office typing
(b) Stock counting
(c) Welding or cutting in or near flammable areas
(d) Routine sweeping

Q89. The POSH Act was passed in the year:

(a) 1993
(b) 2013
(c) 2020
(d) 2005

Q90. The NDRF is a specialised force for:

(a) Search, rescue and disaster response
(b) Tax collection
(c) Industrial security
(d) Border patrol

Q91. The National Executive Committee (NEC) is headed by the:

(a) President
(b) Prime Minister
(c) Chief Justice
(d) Union Home Secretary

Q92. The Sendai Framework for Disaster Risk Reduction covers the period:

(a) 2015-2030
(b) 2005-2015
(c) 2020-2040
(d) 2000-2015

Q93. The Bhopal gas tragedy took place in:

(a) 2005
(b) 1984
(c) 1986
(d) 1975

Q94. The Chernobyl nuclear disaster took place in:

(a) 1984
(b) 1988
(c) 1986
(d) 2011

Q95. The 2020 Vizag gas leak was caused by:

(a) Chlorine
(b) Styrene vapour
(c) Ammonia
(d) Methyl isocyanate

Q96. The single emergency helpline number in India is:

(a) 108
(b) 112
(c) 100
(d) 1098

Q97. The correct action during an earthquake indoors is:

(a) Stand near a window
(b) Stand in a doorway on a high floor
(c) Run to the lift
(d) Drop, Cover and Hold On

Q98. An on-site emergency plan is prepared by the:

(a) NDMA
(b) Occupier / factory management
(c) District Magistrate
(d) State Police

Q99. The Public Liability Insurance Act was passed in:

(a) 1986
(b) 1991
(c) 2005
(d) 1984

Q100. Early warning, training and mock drills belong to which disaster phase?

(a) Preparedness
(b) Response
(c) Recovery
(d) Mitigation

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	a	**21**	b	**41**	a	**61**	c	**81**	c
2	a	**22**	a	**42**	b	**62**	b	**82**	c
3	b	**23**	c	**43**	b	**63**	c	**83**	b
4	d	**24**	c	**44**	b	**64**	c	**84**	d
5	c	**25**	b	**45**	a	**65**	a	**85**	c
6	c	**26**	d	**46**	d	**66**	d	**86**	d
7	c	**27**	b	**47**	d	**67**	b	**87**	b
8	a	**28**	a	**48**	d	**68**	b	**88**	c
9	c	**29**	d	**49**	d	**69**	d	**89**	b
10	a	**30**	c	**50**	b	**70**	c	**90**	a
11	c	**31**	c	**51**	d	**71**	a	**91**	d
12	c	**32**	d	**52**	d	**72**	d	**92**	a
13	b	**33**	b	**53**	a	**73**	c	**93**	b
14	c	**34**	c	**54**	d	**74**	c	**94**	c
15	a	**35**	c	**55**	d	**75**	c	**95**	b
16	b	**36**	c	**56**	c	**76**	b	**96**	b
17	a	**37**	d	**57**	d	**77**	d	**97**	d
18	a	**38**	d	**58**	c	**78**	d	**98**	b
19	a	**39**	d	**59**	a	**79**	a	**99**	b
20	d	**40**	d	**60**	c	**80**	b	**100**	a

Answers with Short Explanations

Q	Answer	Explanation
1	(a) Petty theft of materials or goods	Pilferage = small-scale theft.
2	(a) Sabotage	Sabotage is intentional damage.
3	(b) Access control	Access is given only where required.
4	(d) Key register	Key control is part of access control.
5	(c) Material gate pass	Checked at the material gate.
6	(c) 1969	CISF Act was passed in 1968; force raised 1969.
7	(c) Ministry of Home Affairs	It is a central armed police force.
8	(a) 2005	Private Security Agencies (Regulation) Act, 2005.
9	(c) Intrusion alarm	Sensors detect unauthorised entry.
10	(a) Class C	A solids, B liquids, C gases, D metals.
11	(c) Class A	Ordinary combustibles = Class A.
12	(c) Chemical chain reaction	Heat, fuel, oxygen + chain reaction.
13	(b) Starving	Starving removes fuel.
14	(c) Smothering	Smothering removes oxygen.
15	(a) Contain	Rescue, Alarm, Contain, Extinguish.
16	(b) Carbon dioxide (CO_2)	CO_2 is non-conducting and leaves no residue.
17	(a) Precautions in case of fire	Means of escape, alarms, drills.
18	(a) Section 40B	Section 40B.
19	(a) Excessive weights	Prevents lifting loads likely to cause injury.
20	(d) Section 35	Section 35.
21	(b) Section 29	Section 29.
22	(a) Section 45	Section 45; canteens in 46.
23	(c) 20 workers	Old Act: 10 with power, 20 without.
24	(c) 40 workers	OSH Code: 20 with power, 40 without.
25	(b) 100 workers	Reduced from 250 under the old Act.
26	(d) 250 workers	Reduced from 500 under the old Act.
27	(b) 50 workers	Old Act: more than 30 women workers.
28	(a) 21 November 2025	OSH Code came into force that day.
29	(d) Has ultimate control over the affairs of the factory	Section 2(n) of the old Act.
30	(c) Fixed guard	It cannot be removed without tools.
31	(c) Self-adjusting guard	Example: circular saw blade guard.
32	(d) Light curtain	A presence-sensing device.
33	(b) Both hands are away from the danger zone during operation	Operator hands stay on the buttons.
34	(c) A red mushroom-head button	Red, large, easy to hit.
35	(c) Drawing-in / nip point	Belts, pulleys, gears, rollers.
36	(c) Shearing	Example: guillotine.

Q	Answer	Explanation
37	(d) Entanglement	Rotating shafts, drills, lathes.
38	(d) Elimination	Remove the hazard completely.
39	(d) Substitution	Replacing with a less hazardous material.
40	(d) PPE	PPE is the last line of defence.
41	(a) Danger - Do Not Operate	It warns that the machine is under maintenance.
42	(b) The person who fitted it	Ensures the worker is in control.
43	(b) Blue	Earlier Indian code used black.
44	(b) Green-yellow	Green-yellow for protective earth.
45	(a) Provide a safe path for fault current to the ground	Prevents dangerous touch voltage.
46	(d) Overload and short circuit	ELCB/RCCB protects against earth leakage.
47	(d) 1923	Indian Boilers Act, 1923.
48	(d) Fusible plug	It warns by releasing steam.
49	(d) Pressure gauge	Shows steam pressure.
50	(b) Safety valve	Usually two are fitted.
51	(d) Low water level	Overheating of the shell when dry.
52	(d) Yellow	Yellow = caution.
53	(a) Circle with a diagonal slash	Red circle with slash.
54	(d) Safe Working Load	Maximum load for normal use.
55	(d) Preventive maintenance	Done before any failure.
56	(c) Predictive maintenance	Condition-based maintenance.
57	(d) Gases	Class 2 = gases.
58	(c) Flammable solids	Includes substances dangerous when wet.
59	(a) Oxidising substances and organic peroxides	Oxidisers feed fires.
60	(c) Toxic and infectious substances	Class 6.
61	(c) Radioactive material	Class 7.
62	(b) Miscellaneous dangerous goods	e.g. lithium batteries, dry ice.
63	(c) The lowest temperature at which it gives off enough vapour to form an ignitable mixture	Lower flash point = higher fire hazard.
64	(c) 23 °C to 65 °C	Class A below 23; C 65-93.
65	(a) 65 °C to 93 °C	Above 93 is 'excluded petroleum'.
66	(d) Lower Explosive (Flammable) Limit	Minimum vapour concentration that can ignite.
67	(b) MSDS	Material Safety Data Sheet.
68	(b) Reactivity (instability)	Blue health, red flammability.
69	(d) Severe / extreme hazard	Scale 0 to 4.
70	(c) Reacts with water	Special hazard symbol.
71	(a) First Expiry, First Out	Used for items with an expiry date.
72	(d) Hold and contain spilled liquid	Spill containment wall.
73	(c) Highly toxic gas	Hydrogen cyanide.
74	(c) 2016	Under the Environment (Protection) Act, 1986.

Q	Answer	Explanation
75	(c) Upright and secured with a chain	Prevents falling and valve damage.
76	(b) Soap solution	Never use a flame.
77	(d) Bend the knees and keep the back straight	Use leg muscles.
78	(d) Kept low	Improves stability.
79	(a) 88%	Unsafe conditions about 10%.
80	(b) An event that could have caused harm but did not	Base of Heinrich's triangle.
81	(c) Set in order	A place for everything.
82	(c) Sustain	Maintain discipline.
83	(b) Silica dust	Mining, quarrying, stone cutting.
84	(d) Cotton dust	Textile mill workers.
85	(c) (Lost-time injuries x 10^6) / man-hours worked	Injuries per million man-hours.
86	(d) Man-days lost per million man-hours worked	SR = days lost x 10^6 / man-hours.
87	(b) 19.5% to 23.5%	Normal air is about 20.9%.
88	(c) Welding or cutting in or near flammable areas	Sparks can ignite flammables.
89	(b) 2013	Sexual Harassment of Women at Workplace Act, 2013.
90	(a) Search, rescue and disaster response	Works under the NDMA framework.
91	(d) Union Home Secretary	NDMA is chaired by the Prime Minister.
92	(a) 2015-2030	Successor to the Hyogo Framework.
93	(b) 1984	Night of 2-3 December 1984.
94	(c) 1986	Ukraine.
95	(b) Styrene vapour	LG Polymers plant, Visakhapatnam.
96	(b) 112	Police 100, fire 101, ambulance 102/108.
97	(d) Drop, Cover and Hold On	Take cover under strong furniture.
98	(b) Occupier / factory management	Off-site plan: district authority.
99	(b) 1991	Provides immediate relief on no-fault basis.
100	(a) Preparedness	Done before a disaster.