









## SAFETY OPERATOR - MIN/Q0537


Sr. No.	NOS Code	PC Code	Question	Option A	Option B	Option C	Option D	Answer (A/B/C/D)	Difficulty Level (Easy/Medium/Hard)
1	N0503	PC1	What is the full form of CMR	Coal Mining Rules	Coal Mines Regulation	Collieries Managers Rules	Coal mines rules	B	M
2	N0503	PC1	Which year the CMR were implemented ?	1961	1958	1957	1963	C	M
3	N0503	PC1	Which Year Indian Electricity Rules were formed and implemented ?	1973	1976	1956	1923	C	M
4	N0503	PC1	Under which chapter of CMR duties of Safety Officers are defined ?	Chapter 5	Chapter 6	Chapter 3	Chapter 7	A	M
5	N0503	PC1	Under which chapter of Indian Electricity rule 1956 the rules for mines and oil field is defined ?	Chapter 3	Chapter 10	Chapter 7	Chapter 5	B	M
6	N0503	PC1	What is the unit of Sound ?	hertz	decibels	Mega cycles	Light year	B	M
7	0503	PC1	The maximum noise level in a work place is allowed up to which decibels?	60 db	80db	90db	120db	C	M





8	N0503	PC2	The Maximum voltage that can be transmitted in to a gassy mine is	33000volts	3300 volts	650 Vots	11000 Volts	D	M
9	N0503	PC3	The Earthing of equipment is done to protect	Human beings from shock	Save machines from damage	To isolate power from unhealthy source	All the above	D	E
10	N0503	PC3	The term Medium Voltage refers to voltage ranges	0 to 250 Voltage	651 to 33000Volts	251 to 650 Voltage	0 to 120 Volts	C	E
11	N0503	PC4	Identify this PPE 	Gloves	Goggles	Dust mask	Helmet	A	E
12	N0503	PC4	Identify this PPE 	To protect Foot	To protect Head	To protect Eyes	To Protect from heat	A	E
13	N0503	PC4	The PEE protects from which part of the body? 	Head	Eyes	Foot	Fingers	A	E
14	N0503	PC3	What is an Incident ?	A fatal accident in a mine	An injury to worker	A near miss	A worker slipped and broke his neck	C	M
15	N0503	PC3	What is the Danger sign board is for ?	An injury or Death may occur if care is not taken	An injury or Death will occur if care is not taken	If Care is not taken the Equipment will fail	None of these	B	M
16	N0503	PC3	What is the Warning symbol board for	An injury or Death will occur if care is not taken	If Care is not taken the Equipment will fail	An injury or Death may occur if care is not taken	None of these	C	M


17	N0503	Pc3	What are NOTICE board displayed on equipments refer to	Clean the equipment periodically	If Care is not taken the Equipment will fail	An injury or Death will occur if care is not taken	An injury or Death will occur if care is not taken	B	E
18	N0503	PC3	What is the full form of DGMS	Director General Mines Safety	Director Mines General safety	Director General mines sources	Director General Mine Survey	A	E
19	N0503	PC4	What is the function of Safety Lamp in a mine ?	To detect Oxygen deficiency	To illuminate the area	To detect Methane Gas	All the above	D	E
20	N0503	PC4	At what percentage of Methane gas in general body of the mine the safety lamp will automatically burn out ?	9.5 %	4.5%	6.5%	7%	B	H
21	N0503	PC4	The Carbon dioxide gas is found in the vicinity of which part of the mine ?	Near the roof	Near the floor	In the Inclines at the bottom section	In the incline at the Bottom Section	D	H
22	N0503	PC4	Which gas is termed as KHOONI gas	Oxygen	Carbon Monoxide	Nitrogen	Helium	B	H
23	N0503	PC4	Which gas is termed as GARAM gas	Oxygen	Carbon dioxide	Methane	Nitrogen	C	H
24	N0503	PC4	Which gas in the mine is termed as Poocha gas as it gives a smell of rotten egg.	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Nitrogen	C	H
25	N0503	PC4	Identify This Safety Item used in a Mine 	Gas Detector	Methanometer	Flame safety lamp	lantern	C	E
26	N0503	PC4	 This is for the protection from what ?	Fire	Inundations	Dust and fumes	Ear	C	E
27	N0503	PC4	What is used to protect our breathing from dusty and Smokey atmosphere	Ear Plug	Helmet	Dust Mask	Gloves	C	E

28	N0503	PC 4	Identify this PPE 	Goggles	Reflector jacket	Ear Plug	Helmet	B	E
29	N0503	PC4	What is this instrument used for in underground mine ? 	Gas detector	Safety Lamp	Barometer	Anemometer	A	M
30	N0503	PC5	In any emergency situation in a underground Mine the FIRST step is to	Inform higher authorities and DGMS	Withdraw persons to safety from danger site	Check for Gas accumulation	Check roof and side wall	B	M
31	N0503	PC5	The Electrical power to a Gassy Mine section is to be cut off at what percentage of Methane exceeds in general body of the section ?	1.25 %	2%	1.75%	4.5%	A	E
32	N0503	PC5	The Methane gas will not ignite when its percentage in general body of the mine exceeds?	9.5%	10%	2.4%	7%	A	E
33	N0503	PC5	Methane when exceeds 9.5% in general body of the mine will ignite due to what reason ?	The atmosphere gets cool	The percentage of Oxygen to ignite diminishes so no ignition	The Methane gas acts as a coolant	None of the above	B	H
34	N0503	PC5	The term OVER HANG in mining refers to what ?	Bad Roof	Bad side wall	Poor Ventilation	Undulated surface	A	H
35	No503	PC5	What accident may happen due to a Belt conveyor Running out of centre ?	The belt may come out of its structure and hurt any one near by	Spillage will occur along the conveyor route and passage will be choked	The Belt Conveyor motor may get burnt due to over load and fire accident may take place near drive head	All the above	D	
36	N0503	PC5	What is the clearance to be given along the Belt conveyor both side of the conveyor as per CMR in an under ground mine ?	2 Meter	1.2 Meter	1 Meter	4Meter	B	H
37	N0503	PC5	How accidents can be eliminated in a belt conveyor network ?	By Guards and fences to rotating components	By providing enough space to move around the conveyor during operation /maintenance	By providing adequate illumination and ventilation	All the above	D	E

38	N0503	PC 5	The Pilot core protection of equipments refer to which machinery of a underground mine ?	Mine Winder	Mine Ventilation	Mine Face Machinery	Mine Support	C	H
39	N0503	PC5	Mention the type of Electrical equipments to be used in a third degree gassy mine	Water proof	Air proof	Flame Proof	None of the se	C	E
40	N0503	PC5	A Gear Box is running without proper lubrication and getting heated . What accident this can cause ?	Nothing	The Gear box will seize and stop	Over heating of the Gear box may ignite Fire damp and explosion will occur	Gear box will get damaged beyond repair	C	M
41	N0503	PC6	What is the job of a Pump Operator during an inundation of a mine ?	Nothing	To support roof after clearing the debris due to roof fall	To install and start a PUMP to dewater the flooded area	None of these	C	M
42	N0503	PC6	What is the job of a Timber man in an accident site	Nothing	To support roof after clearing the debris due to roof fall	To install and start a PUMP to dewater the flooded area	None of these	B	M
43	N0503	PC6	A roof fall had occurred near a junction and water is rushing in to the section . Who all has to assigned job to overcome this situation	Machinist	Electrician	Timber man and Pump operator	Mining Mate	C	M
44	N0503	PC7	<b>The best</b> way to train and prepare the work force to face emergency situation is through .	Lecture in class room	Mock drills at site	Display Boards	Counseling	B	E
45	N0503	PC8	What this display board at work site states ? 	No Cell phone at work area	Water logged section	Use stair case	None of these	A	E
46	N0503	PC8	<b>An AIR BLAST</b> occurs in a	Developing section of a mine	Depillaring section of a mine	This happens in GOAF	In a sinking shaft	C	H
47	N0503	PC8	What is a Siren and what is its use in mine	A device to trip Electrical circuit during a fault in the circuit	A device to alert persons from danger by making sound	A device to control flood in a mine	A device to improve ventilation in a mine	B	E
48	N0503	PC8	Which of these is the most essential device in a mine where the Air blast to take is expected	Gas detector	Flame safety Lamp	Siren	Display board	C	
49	N0503	PC8	As per Mines Rescue rules 1985 how many Mine Rescue trained are to be there in a underground mine for every 100 employees of the mine ?	1	2	3	5	D	H
50	N0503	PC8	The Mines Rescue Rules were formed in which year	1987	1986	1985	2014	C	H

51	N0504	PC1	What are the functions of Safety Operator in a mine ?	To look after safety aspects of the mine	Create awareness on Safety Regulations and & Compliances in new workers	To inspect and take corrective actions to improve safety	All the above	D	E
52	N0504	PC1	What steps are to be taken To improve awareness among new workers on safety ?	Train them on safety	Bring in a work culture to respect safety	Award the safe worker	All the above	D	E
53	N0504	PC2	What steps are to be taken to improve the awareness on safety among old workers ?	Arrange Refresher training on Safety	Award the safe worker	Arrange quiz programs on safety to bring awareness	All the above	D	E
54	N0504	PC2	What steps are to be taken to improve safety when new technology is brought in at mine ?	Arrange for Training in new technology	Discuss case studies of other mines on safety	Improve skill of the workers in new technology	All the above	D	E
55	N0504	PC5	What frequency the Safety committee meetings are to be held in a mine ?	Weekly	Monthly	Half Yearly	Quarterly	B	M
56	N0504	PC5	Who is the Chairman of the Safety Committee in a Mine ?	Mine Manager	Safety Officer	Ventilation Officer	None of the above	A	M
57	N0504	PC5	Who is the Secretary of the Safety Committee in a Mine	Mine Manager	Safety Officer	Work man Inspector	Ventilation officer	B	M
58	N0504	PC5	Find the ODD one out in a Safety Committee team	Mine Manager	Safety Officer	Workman Inspector	Pump Operator	D	E
59	N0504	PC6	What is the best way to train the work force on safety in a mine ?	To support VTC in charge in training aspects	To assist training activities at the mine on skill and safety improvement	Counseling accident prone workers	All the above	D	E
60	N0504	PC6	In a mine new technology is to be introduced . What will be the role of Safety Operator in this?	To co ordinate with the Vendor of the technology to know the new technology	To prepare Safe Operating Procedures and circulate it among all the persons in the mine and educate them	Arrange Training on safety and New technology to all concerned people	All the above	D	E
61	N0901	PC5	Identify this Fire Extinguisher 	CO <sub>2</sub>	DCP	SAND BUCKET	None of these	A	

SINo	NOS	PC CODE	QUESTION	OPTION A	OPTION B	OPTION C	OPTION D	ANSWER A/B/C/D	H/M/E
62	N0901	PC5	Identify this Fire Extinguisher 	CO <sub>2</sub>	DRY CHEMICAL POWDER	SAND BUCKET	None of these	B	M
63	N0901	PC5	Identify this fire fighting item 	DCP	CO <sub>2</sub>	Sand Bucket	Foam type extinguisher	C	E
64	N0901	PC7	How can the Fire accident can be prevented in a welding work shop of a mine ?	Keep the inflammable items away from welding zone ?	Keep Fire fighting system at hand for any emergency	Follow SOP	All the above	D	E
65	N0901	PC7	Which material of these is not to be stored in a underground mine ?	Petrol	Nuts & Bolts	Spares item for Gear Box	Spares for Electrical switch	A	E
66	N0901	PC7	Which of these material is not to be stored in a underground gassy mine	Cables	Wire rope	Diesel and Carbon tetra chloride oil	Spare sprocket for Apron feeder	C	E
67	N0901	PC6	Identify this danger symbol used on Mining Equipments for safety of operators. 	High pressure Hose	Hot surface	Electric shock	Crushing hazarrd	B	M
68	N0901	PC6	Identify this danger symbol used on Mining Equipments for safety of operators. 	Hot Surface	High Pressure Hose	Rotating Blade	Electric Shock	C	E

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69	N0901	PC6	Identify this danger symbol used on Mining Equipments for safety of operators. 	Hot Surface		High Pressure hose	Electric shock	High Voltage	C	M
70	N0901	PC10	Find the ODD one out	Helmet		Ear Plug	Reflector jacket	Self Rescuer	D	M
71	N0901	PC10	Find the ODD one out	Reverse Alarm		Parking Brake	Reflector Jacket	Emergency switch	C	M
72	N0503	PC5	The Methane at what percentage becomes the dangerous explosive mixture in an underground gassy mine of third degree ?	1.25%		9.5%	4.5%	14.5%	B	M
73	N0503	PC5	How the Signal system circuit in underground mine is designed so the open spark intensity is reduced which is insufficient to ignite fire damp	The Signal system is working on 110Volts		The circuit Intrinsically safe by providing a parallel path to the excited voltage	The Signal system is safe as it is in an enclosure	The signal bell is made off Brass	B	M
74	N0503	PC5	A worker crossed a running belt in a gallery and fell on the running belt conveyor and got injured. Explain your role as a Safety Operator.	Stop the conveyor . Rescue and recover the worker		Apply First Aid after ascertaining the extend of the injury	Send him to Hospital in a stretcher with an escort further treatment	All the above	D	M
75	N05503	PC5	Find the ODD one out	Rock bolt		Bearing Plate	Nut for Rock bolt	Drill Rod	D	M
76	N0503	PC3	A worker had fracture in his little finger while lifting a load. What type of injury is it as per mines act.	Reportable injury		Serious injury	Fatal injury	None of these	B	M
77	N0503	PC3	A worker gets injured and is out of his regular job more than three days . What type of injury is as per mines act	Serious Injury		Reportable Injury	Fatal Injury	None of these	B	M
78	N0503	PC3	Under which CMR a safety Officer is appointed in a Mine	Rule 41		Rule 24	Rule 30	Rule 49	A	M
79	N0503	PC6	What is the role of Pump operator in mine during an emergency situation ?	To observe others working and to supervise		Check pumps under his charge and keep them ready to use in case of a flooding	To set roof support	None of these	B	E
80	N0503	PC8	Which one of these is not emergency situation ?	Flooding		Explosion	Break down of a LHD at face	Roof Fall of a big chunk of stone on a running Conveyor	C	E



81	N0901	PC2	What is the quantity of ventilation required in an underground mine in a section ?	6M <sup>3</sup> /Person	8M <sup>3</sup> /Person	7M <sup>3</sup> /Person	10M <sup>3</sup> Person	A	H
82	N0901	PC2	The Air velocity is measured by which Instrument ?	Voltmeter	Hydrometer	Anemometer	Lactometer	C	M
83	N0901	PC2	What governs the underground support systems in a underground mine ?	DGMS Rules	CMR 1957	Systematic Support Rule approved by DGMS for the section	All of these	C	M
84	N09001	PC2	Name the part of workings below ground wherefrom a pillar or part thereof, or in the case of "longwall" workings, coal has been extracted but which is not a working place	Drift	Incline	Goaf	Depillaring	C	M
85	N0901	PC2	When the rate of emission of inflammable gas is above ten cubic meters per tonne of coal extracted in an underground mine as per CMR 1957 it is a	First Degree Gassy Mine	Second Degree Gassy Mine	Third Degree Gassy Mine	None of these	C	M
86	N0503	PC5	How the capacity of a Mine winder is determined ?	By the depth of the Mine shaft	By the Safe working load	By the size of its wire rope	By the size of the cage the winder is attached	B	M
87	N0503	PC5	Which Coal Mines Regulation governs the appointment of a Safety Officer for a Mine ?	CMR 38	CMR 41	CMR 31	CMR 24	C	M
88	N0503	PC5	What is the maximum voltage that can be used in a signaling system in underground gassy mine ?	24 Volts	30 Volts	110Volts	220 Volts	B	M
89	N0503	PC5	What shall be the interval of distance between the man holes where the gradient is less than 1in 6 as per CMR 1957 ?	15 Meter	20 Meter	25 Meter	30 Meter	B	M
90	N0503	PC5	What shall be the size of a manhole to provide safety to men working in a mine from any injury?	1.2 Meter Height 1.8 Meter Width 1Meter Depth	1.8 Meter Height 1.2 Meter Depth ! Meter width	1.8Meter Height 1.2 Meter Depth 1.5 Meter Width	None of these	B	M
91	N0504	PC3	The Term PULL CORD is connected to which equipments safety protection ?	Load Haul Dumper	Rope Haulages	Belt Conveyor	Air compressor	C	M
92	N0504	PC3	The term OVER SPEED protection is related which Mining Equipment ?	Load Haul Dumper	Rope Haulages	Mine Winder	Belt Conveyor	C	M
93	N0504	PC3	The BELL PLATE is a part of which safety device	Belt Conveyor	Cage suspension gear for mine winder	LHD	Air Compressor	B	M
94	N0504	PC3	What is the length of a trailing cable that can be used with a transportable machine in underground as per IER ?	150 Meter	200 Meter	90Meter	120 Meter	C	E
95	N0901	PC4	During a emergency where people take shelter in a mine for safety ?	Miners station	Man hole	Refuge Chamber	Pit Bottom of the mine	C	E
96	N0901	PC10	Find the ODD one out	Self Rescuer	Dust Mask	Helmet	Reflector jacket	A	M

97	N0901	PC4	When the Main mechanical ventilator stops suddenly what safety precaution is to be taken in underground?	Stop the Auxiliary fan at the mine face	With draw persons from the mine face	Take shelter in Refuge Chamber	All the above	D	E
98	N0901	PC4	The Term Intrinsically safety circuit refers to which equipment in a underground gassy mine ?	Power Transformer	Electric Motor	Signal Bell of 24 Volts	Belt conveyer starter	C	E
99	N0901	PC4	Where the Electrical equipments used in under ground gassy mines are tested and certified for their fitness ?	DGMS	CMFRI	SCCL	CIL	B	H
100	N0901	PC4	What is done to analyze and eliminate accidents to improve safety standards in mine by a Safety officer ?	Put display board at all the premises	<b>Risk Assessment</b>	Train worker	None of these	B	M