

Job Role: Ventilation adequacy checker/fan operator

Code : MIN/Q0421

Sr. No	NOS Code	PC Code	Question	Option A	Option B	Option C	Option D	Answer	Level-E/M/H
1.	MIN/N0459	PC1	What is main mechanical ventilator	Ventilation fan installed at surface	Ventilation fan ventilation the face	Both	None	A	E
2.			Main mechanical ventilator should be capable	To produce adequate ventilation in a mine	To ventilate the face only	Any of A and B	None	A	M
3.		PC1	Main mechanical ventilator shall be installed at a distance not less than.....meters from the opening of the shaft or incline	5	15	10	20	C	E
4.		PC2	The electric power to main fan should becircuit from the main substation of mine	Same circuit on which mine situated	Separate	Any circuit	None of these	B	M
5.		PC2	Main fan should have power supply fromdifferent sources	3	4	2	Any	C	M
6.		PC3	Pressure developed by main fan should be recorded	When needed	Not required	Continuously	None	C	M
7.		PC3	Every main fan so designed , installed and maintained that current of air can	Not be reversed	Be reversed when necessary	Unidirectional	Not required	B	M
8.			Every shaft and incline where main fan so designed installed should	Have air lock	Not have air lock	Decided by manager	May have	A	M
9.	MIN/N0460	PC1	In every mine quantity of air shall be measured once in a.....	Week	Every fourteen days	Every twenty days	Every fifteen days	B	M
10.			In non-fiery seam or a gassy seam of first degree, quantity of air shall be measured once in	Every fifteen days	Every twenty days	Every thirty days	Every sixty days	C	M
11.		PC1	Air measurement should be done in every	Main intake (near the entrance)	Main return(near the entrance)	Split(near the commences)	All three	D	M

12.			Standing order specifying the actions that shall be taken in the event of stoppage of main fan shall be	Approved by the regional inspector	Approved by the manager	Approved by either a or b	None	A	H
13.		PC1	In every underground coal mine auxiliary fan or booster fan shall normally be installed in	Return airway	Intake airway	Both a and b	Cannot be installed	B	H
14.			Installation and maintenance is done by	Fan operator	Mining sardar	Engineer	None of these	C	H
15.		PC5	Mechanical ventilator and booster fan shall be inspected once in.....day by the competent person	15	30	5	7	D	M
16.		PC5	Person should start, stop, restart, remove, repair or interfere with ventilator or booster fan is stopped the timing of stoppage	Manager	Officer authorised by manager	Any of a and b	All three	D	H
17.		PC5	Details of stoppage and repair should be recorded by	Competent person authorised by manager	Mining sardar	Fan operator	Any of these	A	H
18.			Whenever main fan or booster fan is stopped the timing of stoppage	Manager	Ventilation officer	Any of a and b	None	C	H
19.		PC6	In case of stoppage of main fan disconnection of electric supply to the mine should be done by direction of	Engineer	Fan operator	Manager	None	C	H
20.		PC1	Every ventilation district of the mine should have.....	Same air current	Independent ventilation fan	Separate air current	None of these	C	H
21.			Every ventilation district shall be provided	Two independent intake airways	One intake airway	Two independent return airway	None of these	A	M
22.		PC1	Every connection between main return shall be provided with at least	One door	No door	Three doors	Two doors	D	M
23.			Every airway ,air crossing, ventilation stoppings and doors shall be examined by competent person once in	Every seven days	Every thirty days	Every fourteen days	Every ten days	C	M
24.		PC1	The inspection of air crossing , ventilation stoppings, airways and doors shall be done by at least	Mining sardar	Overman	Assistant manager	Forman	B	E

25.		PC1	Velocity of air immediate out bye ventilation connection from the face shall not be less than	15mts/min	30mts/min	25mts/min	45mts/min	B	E
26.			In first or second degree of gassiness velocity of air on intake side of brattice at 4.5mts from face shall not be	Less than 30mts/min	Less than 45mts/min	Less than 15mts/min	Less than 60mts/min	A	E
27.		PC1	In third degree of gassiness seam velocity of air at 7.5 mts out bye of the discharge end of an air pipe shall not be	Less than 15mts/min	Less than 30mts/min	Less than 25 mts/min	Less than 75mts/min	C	M
28.		PC1	In first or second degree of gassiness the velocity of air at maximum span of long wall face shall not be less than	30mts/min	75mts/min	45mts/min	60mts/min	D	M
29.		PC1	In third degree of gassiness seam the velocity of air on intake side of brattice at 4.5 mts from any face shall not be less than	15mts/min	30mts/min	60mts/min	45mts/min	D	M
30.		PC1	In first or second degree of gassiness seam the velocity of air at 7.5 mts out bye of discharge end of an air pipe shall not be less than	30mts/min	15mts/min	25mts/min	60mts/min	B	M
31.		PC2	What is anemometer	It measures temperature	it measures of quantity of air	it measures velocity of air	none	C	M
32.		PC2	What is velometer	it measures velocity of air	it measures of quantity of air	it measures quantity of air	none	A	H
33.		PC2	What is hydrometer	it measures temperature of air	it measures velocity of air	it measures relative humidity of air	it measures pressure	C	M
34.		PC2	What is barometer	it measures velocity of air	it measures temperature	it measures pressure of atmosphere	it measures humidity of air	C	H
35.		PC2	The minimum range of measurement of velocity of air can change	done by anemometer	done by velometer	none of A and B	both A and B	B	H
36.		PC2	What is auxialary fan	it is used for boosting air of district	it is used for ventilating one or more faces of a ventilating district	both A and B	none of these	B	H

37.		PC2	If more than one auxiliary fan is used in a ventilating district permission is required from.....	manager of mine	engineer of mine	ventilation officer of the mine	DGMS	D	H
38.		PC1	The air duct of auxiliary fan shall be extended so as to reach adequate supply of air withinmeters of the face	4.5	7	3	5	C	H
39.		PC1	The SOL machine and auxiliary fan should be....	operated independent power	intercoupled	both A and B	none	B	M
40.		PC1	Auxiliary fan shall be located in such a place that	sufficient air reaches it all the time	any place	at the junction of gallyary	at out bye of heading	C	E
41.		PC2	In any interruption of ventilation by stoppage of auxiliary fan the mining sardar of the distict shall	inform overman	inform manager	withdraw the persons from the face	none of these	C	E
42.		PC2	If two or more auxiliary fans are used in same ventilation distict , auxiliary fan should not take more thanpercent air passing in the roadway	25%	75%	50%	30%	C	H
43.		PC2	A forcing fan shall be installed on the.....of the heading	return	intake	any	both	B	M
44.		PC3	The exhaust auxiliary fan shall be installed in theside of the heading	intake	return	any side	both	B	E
45.		PC3	Distance of the auxiliary fan from the nearest piller should not be	more than 4.5 meters	less than 3 meters	less than 4.5 meters	any distance	C	M
46.		PC3	The auxiliary fan installed in ventilation distinct is if more than one, they should be interlocked and in sequence control such that intake side fan	start last	start first	both start together	none of these	B	H
47.		PC3	Air courcing is done in the ventilation district to ventilate the face through	barricades of fire assistances of barricade	barricades of CGI sheeyts	auxiliary fan with ducting	ANY OF THESE	D	H
48.		PC3	Auxiliary fans use as	EXHUST FAN	overlapping of forcing and exhaust	any of these	any of these system	D	H

49.		PC3	In overlapping system of ventilation overlap should be minimum.....mts	10	4.5	3	0	D	H
50.		PC3	Before installing auxiliary fan it is required	to measure air quantity at mouth of heading	air quantity at face	air quantity at last heading	measurement not required	A	M
51.		PC3	Temperature at any working face not to exceed.....	30 degree C	35degree C	33.5degree C	33degree C	C	E
52.		PC3	Velocity of air shall not bem/sec if temperature exceeds 30.5 degree C	more than1m/sec	less than 5m/sec	less than 1m/sec	none of these	C	M
53.		PC3	Respirable air borne dust at any working place shall not exceed	3mg/m3	5mg/m3	2mg/m3	4.5mg/m3	C	H
54.		PC3	Owner , agent and manager shall ensure that air contain not less than.....oxygen at every place where workers required to work or pass in a mine	21%	18%	19%	23%	C	M
55.		PC3	The percentage of inflammable gas does not exceedsin air in return air of any ventilating district	0.01	2%	0.75%	0.50%	C	H
56.		PC3	The percentage of inflammable gas does not exceedsin any place in the mine	0.75%	1.25%	2%	2.50%	B	M
57.		PC4	For ensuring compliance of oxygen percentage in mine , inflammable gas limit and temperature in working in working place, air samples and temperature measurement shall be taken at least once in every.....	14days	30days	15days	7days	B	H
58.		PC4	Water gauge in the return airway indicates(at the main mine fan of the mine)	the attendance clerk	pressure developed by the fan	both A and B	none	B	M
59.		PC4	Reading of water gauge indicates resistance developed	by the mine	by stopping	by machine	none	A	M
60.		PC4	If water gauge reading reduces abruptly it indicates	blockage in air current	breakdown of mechanical ventilator	short circuit of air current	none	C	H

61.		PC4	If water gauge reading increases abruptly more than	short circuit of air current	under loading of motar	blockage in air circuit	none	C	H
62.		PC4	Water gauge reading is recorded once in.....hours	4	6	every hour	2	C	M
63.		PC5	What are checked by fan operator in fan house	not bolts of motor coupling guard	tightness of fan belt	water gauge and ammeter reading	all these	D	E
64.		PC5	Fan operator should stop the fan , out of the power at the end of shift.....	TRUE	false, cannot leave unless relived by next shift operator	can depute some person	none of these	B	M
65.		PC5	Main air lock hasdoorsof it open reverse direction and is effective during reversal of fan	three , one	two, one	three, two	none of these	A	H
66.		PC5	In case of any fault in mechanical ventilator at surface fan operator should inform immediately	the attendance clerk	any person at surface	DGMS	all three	A	E
67.		PC5	Fan operator should record in bound page book kept for the purpose ever hour	water gauge reading	ammeter reading	speed indicator	all three	D	E
68.		PC5	Fan evacuee is provided in fan to	increase the fan efficiency	reduce the sound	direct the fault mine air to atmosphere	all three	D	M
69.		PC5	There shall always available /spareas replacement in case of emergency	mechanical ventilator	spare motor of same rating as of existing motor	switch	all three	B	M
70.		PC5	Fan operator should be aware of	SOP	COP	standing order	all three	D	M
71.	MIN/N901		What is IME	Initial medical examination	Internal mining examination	Internal medical examination	None	A	M
72.			What is PME	Personal medical examination	Periodical medical examination	Periodical mining examination	None	B	M
73.			As per mine rule period of PME is.....	At every 5 year interval	At every 3yrs interval	Every year	None	A	M
74.			AS PER 11th NATIONAL CONFERENCE RECOMONDATION PME IS DONE	At every 2 years	Every year	At every 5 years	At every 3 years	D	H

75.			What is notified disease	Occupational disease	Industrial disease	Disease notified by central government in official gazette	None	C	H
76.		PC1	Pneumoconiosis is a.....	Notified disease	Industrial disease	A kind of fever	None	A	E
77.			Which of these are not notified disease	Pneumoconiosis	Noise induced hearing loss	Silicosis	Skin disease	D	M
78.		PC1	Person detected containing pneumoconiosis should be	Placed to work in non-dusty atmosphere	Continued to work at same place	Provided with dust mask	None	A	M
79.		PC1	Pneumoconiosis occurs due to	Coal dust	Water	Humidity	High temperature	A	E
80.			Coal dust should not be more thanmg/m ³ in air borne respirable dust where free silica present is less than 5%	3	5	2	1.5	C	H
81.		PC1	What is PPE	Personal protective equipment	Public private enterprise	Personal protective equipment	None	C	E
82.			Which of these is not PPE	Helmet	Shoe	Gloves	Reviving apparatus	D	H
83.		PC1	What is sop	Safety of persons	Safe operating procedure	Safety of people	None	B	E
84.			What is cop	Code of practice	Code of persons	Code of presentation	None	A	E
85.		PC4	Accidents occur due to	Unsafe act	Unsafe condition	Unsafe procedure	All three	D	M
86.			Fire requires these elements	Oxygen	Fuel	Heat	All three	D	H
87.		PC4	Class a fire involves	Carbonaceous solids	Inflammable liquids	Combustible gases	All three	A	H
88.			Solid carbonaceous material fire is dealt with	Water	Sand	Soda acid extinguisher	All three	D	H
89.			Liquid combustible material fire is dealt with	Soda acid type	Water	Form type	None	C	H
90.		PC5	All type firefighting systems must be approved by	DGMS	Manager of mine	Safety officer of mines	Anyone these	A	M

91.			All firefighting system , equipment's materials shall be examined by competent person once in every	3month	6month	2month	One month	D	H
92.		PC8	What is misfire	Blasting operation	Exploder failure	Failure to explode entire charge	All three	C	M
93.			Misfire is due to	Faulty operation	Faulty exploder	Bad quality detonator	Any of these	D	M
94.		PC9	Nitrous fumes are produced in blasting of	NG EXP	Ammonium nitrate exp	Any exp.	None	A	H
95.		PC9	Nitrus fumes are tested by	Methanometer	Toximeter	Hygrometer	Multi gas detector	D	H
96.		PC10	Worker should not be allowed without appropriate ear protection in area of noise level	85dB(A) OR MORE	90dB(A) OR MORE	115dB(A) OR MORE	140dB(A) OR MORE	C	H
97.		PC10	No worker should be allows an area where the level exceeds	90dB(A)	115dB(A)	140dB(A)	None	C	H
98.		PC10	Helmet are to befor use in mines	DGMS APPROVED	Any type	Is marked	None	A	M
99.		PC11	Mining shoes should be provided at interval not more than.....months(as per cmr.2017)	1 YEAR	3MONTHS	6MONTHS	None of these	C	E
100.		PC11	Manufacturers safety instructions should be included while preparation of	SOP	COP	MAINTANANCE SCHEDULE	Any of these	D	E