

**Job Role: Gas Detector**

Code :MIN/Q0412

Sr. No	NOS Code	PC Code	Question	Option A	Option B	Option C	Option D	Answer	Level-E/M/H
1	MIN/N0437	PC1	Flame safety lamp is used for detecting.	methane	CO <sup>2</sup>	SO <sup>2</sup>	NO <sup>2</sup>	A	E
2			Deficiency of oxygen is tested by	flame safety lamp	Methanometer	toximeter	hygrometer	A	E
3		PC1	Presence of co2 is determined by	flame safety lamp	multi gas detector	CO <sup>2</sup> detector	all three	D	M
4			Co is detected by	toximeter	multi gas detector	CO <sup>2</sup> decting tube	all three	D	M
5			Flame safety lamp can be used for detecting	CH <sup>4</sup>	CO <sup>2</sup>	O <sup>2</sup> deficiency	all three	D	M
6			Hygrometer is used for detecting	temperature	humidity in air	velocity of air	none	B	M
7		PC1	Multi gas detector can be used for detecting	ch4	co	co2	all three	D	E
8			Permissible limit of nitrous fumes	5 PPM	10 PPM	50 PPM	30 PPM	C	M
9			Permissible limit of co is.....in UG coal mine	21%	15%	19%	14%	C	M
10		PC2	Permissible limit of co2 is .....	0.50%	0.05%	5%	0.15%	A	M
11			Permissible limit of nitrous fumes	50 PPM	10PPM	5PPM	25PPM	C	M
12			Hydrogen sulphide permissible limit	50 PPM	5PPM	7PPM	10PPM	C	M
13			Permissible limit of sulphur dioxide.....	50PPM	7PPM	5PPM	15PPM	B	M
14		PC2	Gas chromatograph is used	detecting temperature	analysing gas sample in laboratory	detecting co2	detecting H <sup>2</sup>	B	H
15			Methane is a .....gas	inflammable	poisons'	extinguishes the flame	none of these	A	E
16			Co2 is a .....gas	poisoners	extinguishes the flame	inflammable	all three	B	E
17			Co is a .....gas	extinguishes flame	inflammable	poisoners	none	C	E
18		PC2	Ch4is tested for presence by keeping flame safety lamp near.....	THE FLOOR	THE ROOF	EVERY WHERE	NONE OF THESE	B	M

19	MIN/N0438	PC1	Co2 is formed in UG coal mines due to	SPONTANEOUS HEATING OF COAL	PRESENCE OF HYDRO CARBON	USE OF MACHINE	ALL THREE	A	M
20			Co2 is .....than air	LIGHTER	HEAVIER	EQUAL	NONE	N	M
21			Co2 is produced due to	BURNING OF COAL	SPONTANEOUS HEATING	BURNING OF CARBON MATERIAL	ALL THREE	D	M
22		PC1	The blasting of explosive produces (containing nitro-glycerine)	NITROUS FUMES	CO2	CH4	N2	A	M
23			So2 is formed due to	BLASTING	BURNING OF COAL	BOTH A AND B	NONE	C	H
24		PC1	Ch4is explosive mixture with air containing .....methane	5% TO 4%	ANY PERCENTAGE	MORE THAN 18%	LESS THAN 2%	A	M
25			Methane is.....air	HEAVIER	EQUAL	LIGHTER	NONE	C	E
26		PC2	Electric power supply should be cut off when methane percentage is detected to be .....	0.75%	2.00%	1.25%	3%	C	M
27			LMD is used to detect methane	IN RETURN RODWAY OF MINE	IN RETURN RODEWAY OF DISTRICT	BOTH A NND B	NONE	C	H
28		PC2	General body of air of return of ventilation district inflammable gas percentage shall not exceed .....in any place in mine	1.25%	0.75%	2.00%	4%	B	M
29			Inflammable gas percentage shall not exceed ....in any place in mine	2.00%	4.00%	1.75%	1%	C	M
30		PC2	In any fiery seam or gassy seam of second or third degree all unused working which have not been sealed off shall be inspected by competent person presence of inflammable or noxious gas once in	EVERY 14 DAYS	EVERY SEVEN DAYS	EVERY 30 DAYS	DAILY	B	H
31			The light of flame safety lamp reduces with reduction in .....content	N2	CO2	O2	CH4	M	M
32			Reduction of light is 25% for every.....percentage.....	1% OF O2	2% OF O2	2% OF CO2	2% CH4	A	M

33			Degree of gassiness of first degree when inflammable gas	PERCENTAGE IS LESS THAN 0.1%	PERCENTAGE LESS THAN 1%	PERCENTAGE LESS THAN 0.5%	NONE	A	M
34		PC1	Degree 2 glassines	MORE THAN 0.1%EMISSION PER TONN COAL PRODUCED 1 TO 10m3	LESS THAN 0.1%	EMISSION OF GAS PER TONNE MORE THAN 10m 3	NONE	A	H
35			Gas survey in every gas mine is done.....	EVERY 7 DAYS	EVERY 15 DAYS	EVERY 3 MONTH	EVERY MONTH	D	H
36		PC1	In every return airway of every depillaring district air is tested to detect spontaneous heating	ONCE IN 15 DAYS	ONCE IN 7 DAYS	ONCE IN 30DAYS	ONCE IN 60 DYS	B	H
37			In every return airway of every depillaring distict air analysed for co/o2	ONCE IN 7 DAYS	ONCE IN 15 DAYS	ONCE IN 30DAYS	ONCE IN 10DAYS	C	H
38		PC3	Every depillaring district small be inspected on idle day by	MINING SIRDAR	OVERMAN	ANY OF A AND B	NONE	B	H
39			Every unused working shall be inspected by competent person	ONCE IN 15 DAYS	ONCE IN 7 DAYS	ONCE IN 30DAYS	ONCE IN 60 DAYS	B	H
40		PC3	Every isolation stoppings built around goayed area shall be inspected by competent person	ONCE IN 7 DAYS	ONCE IN 30 DAYS	ONCE IN 15 DAYS	ONCE IN 10 DAYS	A	H
41		PC4	Unused working shall be inspected by .....once in 7 days	MINING SIRDAR	OVERMAN	ANY ONE OF A AND B	NONE OF THESE	B A	H H
42			Every issolation stoppings built around goaved out area shall be inspected once in 7 days by....	OVERMAN	MINING SIRDAR	ANY ONE OF A AND B	NONE	A	H
43		PC4	During dealing of fire it should be done under supervision of	MINING SIRDAR	OVERMAN	BOTH	ANY ONE	C	H
44			All stopping erected for isolation of spontaneous heating shall be inspected by competent person	ONCE IN 15 DAYS	ONCE IN 30DAYS	ONCE IN 7 DAYS	ANY ONE	H	H
45			Isolation stopping erected for isolation of spontaneous heating shall be inspected by	MANAGER	MINING SIRDAR	OVERMAN	ANY ONE	C	H

46		PC4	No un use working shall be dewatered except under content super	MINING SIRDAR	OVERMAN	MANAGER	ANY ONE	A	H
47			During dewatering operation at least one.....kept burning	FIRE	SAFETY LAMP	ANY LAMP	NONE	B	E
48			Every working which has been dewatered shall be inspected at least by	MINING SIRDAR	MANAGER	ASSITANT MANAGER	OVERMAN	D	H
49		PC4	Every working which has been discontinued for a period more than 7 days shall be inspected by at least	OVERMAN	MINING SIRDAR	MANAGER	ANYONE	A	H
50		PC5	The first inspection of any part after dewatering shall be made with	FLAME SAFETY LAMP FOR DETERMINING PRESENCE OF INFLAMABLE GAS	OTHER APPROVED APPATUS FOR DETERMINE INFLAMABLE GAS NOXIOUS GAS	NONE DEFICIENCY OF OXYGEN	ALL OF THESE	C D	H H
51			During the inspection for first time for a period more than seven days done	MINING SIROAR	OVERMAN	MANAGER	ANY PERSON	B	H
52			Record of inspection after dewatering shall be signed by person making is	ASSITANT MANAGR	MANAGER	BOTH A AND B	NONE	B	H
53		PC6	Inspection record of inspection report done after denatering shall be counter signed by	ASSITANT MANAGR	MANAGER	BOTH A AND B	NONE	B	H
54			Methano meter used UG coalmines should type	APPROVED BY DGMS	NO APPROVAL REQUIRED	IS MARKED	TESTED BY SCIENTIFIC LABORTORY.	A	E
55			Period at which calibration of methano meter, multimeter, multigas detector etc is	IS MARKED	IS MARKED	ANY PART	NONE	A	E
56			Repair of flame safety lamp is done by parts of type	PROVIDED BY ORIGINAL MANUFACTURER	ANY TYPE	REPAIRED PARTS	LOCAL MADE	A	E

57		PC7	Calibration of methano meter multi gas detector is done by	MANUFACTURER	SCIENTIFIC AGENCY	ANY OF A AND B	AT LOCAL AGENCY	C	M
58			Period at which calibration of methanometer ,multigas detector etc. is	NOTIFIED BY DGMS FOR EACH TYPE	MANUFACTURER MANUAL	AS PER COD	NONE	A	M
59			Details record of calibration of testing equipments maintained by	MANAGER	OVERMAB	NONE	NONE	A	M
60		PC7	Any manufacturing defect in gas detecting equipment's notice by manager shall be	IN FORMED TO MANUFACTURER	DGMS	BOTH A NAD B	NONE	C	H
61			What is environmental tele monitoring	DETECT METHANE	DETECT CO <sup>2</sup>	DETECT SO <sup>2</sup>	MONITORS CONTINUOUSLY ALL ENVIRONMENTAL CONDITION.	D	H
62		PC7	Environmental tele monitoring monitors	ALL TYPE OF GAS	TEMPERATURE	HUMADITY	ALL THREE	D	H
63		PC8	LMD detects	CO <sup>2</sup>	CO	CN <sup>4</sup>	NONE	C	M
64			LMD is installed	IN RETURN AIRWAY OF VENTILATION DISTRICT	IN RETURN AIRWAY OF MINE	ON CUTTING MACHINE	ALL THREE	D	M
65		PC9	LMD gives warning on pre-set percentage of ch4 by means of	AUDIO	VISUAL	BOTH AUDIO VISUAL	NONE	C	M
66			LMD in when air in return airway reaches pre-set limit	SWITCHES POWER OFF FROM MAIN SWITCH	SWITCH OFF POWER OF LODING MACHINE	DOSE NOT SWITCH OFF POWER	GIVES AUDIO VISUAL SIGNAL	A	M
67			Details of reading of tele monitoring can be seen	ON SURPRISE MONITOR ONLY	ONLY DISPLAY IN UNDERGROUND	SURFACE AND UNDERGROUND	ANYWHERE THROUGH NETWORK	D	H
68		PC9	Environmental tele monitoring system should be	DGMS APPROVED	CERTIFIED BY SCIENTIFIC AGENCY	ANY OF A AND B	NONE	A	M
69			Spontaneous heating is detected by analysing air sample of return airway by study of	PRESENCE OF CO2	COFORMED/O2ABS ORBED RATIO	CO2/O2RATIO	NONE	B	H

70		PC9	LMDis	HANDHELD APPARATUS	FIXED TYPE APPARTUS	BOTH A AND B	NONE	B	H
71	MIN/N0901	PC1	What is IME	INITIAL MEDICAL EXAMINATION	INITIAL 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		PC1	As per mine rule period of PME is .....	AT EVERY 5 YEARS INTERVAL	AT EVERY 3 YEARS INTERVAL	EVERY YEAR	NINE	A	H
74			As per 11th national conference recommendation PME is done for person more than 45 years age PME is to be done	AT EVERY 2 YEARS	EVERY YEAR	AT EVERY 5 YEAR INTERVAL	EVERY 3 YEAR	D	H
75		PC1	What is notified disease	OCCUPATIONAL DISEASE	INDUSTRIAL DISEASE	DISEASE NOTIFIED BY CENTRAL GOVERNMENT IN OFFICAL 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	PNEOMOCONIOSIS	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 OLACE	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 than .....mg/m3 in air borne resirable dust where free silica present is less than 5%	3	5	2	1.5	C	H
81		PC1	What is PPE	PERSONAL POSITIVE EXPRESION	PUBLIC PRIVATE ENTERPRISE	PERSONAL PROTECTIVE EQUIPMENT	NONE	C	E

82			Which of these is not PPE	HELMET	SHOE	GLOVES	REVIVING APPARATUS	D	H
83			What is sop	SAFETY OF PERSONS	SAFE OPERATING PROCEDURE	SAFETY OF PEOPLE	NONE	B	E
84		PC1	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	INFLAMABLE LIQUIDS	CUMBUSTIBLE 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	ANY ONE 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 EXPODE ENTIRE CHARGE	ALL THREE	C	M
93			Misfire is due to	FAULTY OPERATION	FAULTY EXLODER	BAD QUALITY DETONATOR	ANY OF THESE	D	M
94		PC9	Nitrous fumes are produced in blasting of	NG EXP	AMONIUM NITRATE EXP	ANY EXP.	NONE	A	H
95		PC9	Nitrus fumes are tested by	METHANOMETER	TOXIMETER	HYGROMETER	MULTIGAS 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

<b>97</b>		<b>PC10</b>	No worker should be allows an area where the level exceeds	90dB(A)	115dB(A)	140dB(A)	NONE	C	H
<b>98</b>		<b>PC10</b>	Helmet are to be .....for use in mines	DGMS APPROVED	ANY TYPE	IS MARKED	NONE	A	M
<b>99</b>		<b>PC11</b>	Mining shoes should be provided at interval not more than.....months(as per cmr.2017)	1 YEAR	3MONTHS	6MONTHS	NONE OF THESE	C	E
<b>100</b>		<b>PC11</b>	Manufacturers safety instructions should be included while preparation of	SOP	COP	MAINTANANCE SCHEDULE			