

**Job Role:** Winding Engine operator

**Code:** MIN/Q0420

Sr. No.	PC Code	NOS Code	Question	Option A	Option B	Option C	Option D	Ans. (A/B/C/D)	Difficulty Level, Easy /Med./ High.
1	PC1	N 0456	Check the oil levels before taking the charge of the winder	Hydraulic oil	Lubricating oil in oil bath	Diesel	Both A & B	D	Easy
2			Check the Lubrication of the Gear Boxes before taking the charge of the winder	By checking the level of Gear oil	By checking the level of Engine oil	By checking the level of Hydraulic oil	None of these	A	Easy
3			Hydraulic oil is used for	Accelerating the winder	For lubrication of the Gear Boxes	In brake cylinders for Brake mechanism	All of these	C	Easy
4			At the Beginning of the shift, Winding engine operator shall examine	Winding Engine	Brakes	All Appliances	All of these	D	Easy
5	PC2		Before operating the winder please check that	Winding room is cleaned	No inflammable material is kept in the room	Both A & B	None of these	C	Easy
6			Before operating the winder please ensure for	Signalling system is functioning properly	Signalling is not essential	Depth level indicators are correctly set	Both A & C	D	med
7			Before operating the winder please ensure for	Single phase power is available	Double phase power is available	All Three phases are available and the indicators are showing in the panel	All of these	C	Easy
8			Before operating the winder please check for	Motor Bearing Greasing	Motor & Gearbox coupling Nut Bolts	Both A & B	None of these	C	Easy

9	PC3		Before operating the winder please ensure for	Slow banking is in order	Overspeed device is functioning	Overwinding protection is functioning	All of these	D	med
10			For Double Drum multilevel winder, Before operating the winder please ensure for	Clutch brake interlock for clutching De-clutching	Clutch is not required	Clutch brake is not required	None of these	A	Med
11			Before operating the winder please ensure for	Rope and Rope caple arrangement is in order	Cage hanging Dog catches in secured places	Bell plate is in its proper place	All of these	D	Easy
12	PC4		Before operating the winder please check for	Proper application of service Brakes	Proper application of Emergency brakes	Proper application of Parking Brakes	All of these	D	Easy
13			Service Brakes of the winder is meant for	Emergency Braking	Normal operation Braking	Parking the winder in one position for considerable period	None of these	B	Easy
14			Emergency Brakes of the winder is meant for	Braking the winder in Emergency	Normal operation Braking	Parking the winder in one position for considerable period	None of these	A	Easy

15			Parking Brakes of the winder is meant for	Emergency Braking	Normal operation Braking	Parking the winder in one position for considerable period	None of these	C	Easy
16	PC5		If the winder is to be stopped abruptly then apply	Emergency stop switch	Normal Caliper type Brakes	Apply Parking Brakes	All of these	A	Easy
17			Emergency stop swich	Disconnects the Air supply	Disconnects the Electrical Power supply	Disconnects the Hydraulic oil supply	None of these	B	med
18			Emergency stop swich	Operates Hydraulically	Disconnects the Electrical Power supply	Operates the Electrical Thruster Brakes	Both B & C	D	med
19	PC6		Wjnding engine speed is increased by	Pushing the Accelaration lever very fast	Pushing the Accelaration lever very slow	Pushing the Accelaration lever very gently and steadily	None of these	C	Easy
20			Wjnding engine rotation in reverse direction is facilitated by	Pushing the Accelaration lever towards reverse mode	Pushing the Brake levers	Pushing the Directional lever in to reverse mode	None of these	C	Easy
21			Hydraulic service Brakes are applied	Suddenly	very gently and steadily so that no jerks are caused to Rope Drums	may be applied as per wish	None of these	B	Easy

22			Emergency Brakes are applied	Suddenly by pressing the Button on the Dashboard	very gently and steadily so that no jerks are caused to Rope Drums	may be applied as per wish	None of these	A	med
23	PC7		For extending the life of the Big size winder Drum	Special slots are made on the Drum	Rope is softer than the Drum material hence no effect of rope on the Drum	coiling of the rope is done on the Wooden liners provided on the Drum.	All of these	C	med
24			Coiling of the ropes direction on the Drum	is same for both the ropes	is reverse. If one is clockwise, the other is anticlockwise	Both A & B	None of these	B	med
25			While coiling the new rope on the Drum	The rope coiled is as per the Depth of the level	No spare rope is provided	At least 3 to 5 spare coils are required when the cage is at the Bottom of the shaft	None of these	c	med
26	PC8		For increasing or Decreasing the speed of the winder	Brake levers are provided	Acceleration lever is provided	Directional levers are provided	None of these	B	Easy
27			For changing the direction of the winder Drum	Brake levers are provided	Acceleration lever is provided	Forward/ reverse lever is provided	None of these	C	Easy

28			For applying the brakes to reduce the speed of the winder	Brake levers are provided	Acceleration lever is provided	Directional levers are provided	None of these	A	Easy
29			To park the winder for the considerable time	Acceleration lever is provided	Directional levers are provided	Foot Brake cum locking arrangement is provided	None of these	C	med
30	PC9		After joining the Duty, Winding engine operator	should see the Log book for previous shift operations	should also verbally discuss with the previous operator	Both A & B not required	Both A & B	D	Easy
31			Log Book of the Winding engine operator shall make a note of	Hydraulic oil Level	Gear oil Level	Greasing of Bearings	All of these	D	Easy
32			Log Book of the Winding engine operator shall also make a note of maintenance activities, like	New rope fittment	Report of Recapping	Winding rope Lubrication	All of these	D	med
33	PC10		For any problem with the winder operation	The winder should be checked for the same at the end of the shift	Inform the supervisor and operate till he comes	Stop the winder and get it attended immediately	None of these	C	Easy
34			After attending any breakdown on the winder, the work may be resume	after the breakdown is attended	after taking trials of the winder and satisfactory performance	After getting the orders from the superiors	Any of these	B	med

35			If Winding engine operator has noticed any defect in the engine, brake, indicator, drum, rope or other appliances under his charge.	He will report to Manager	He will report to Mine Foreman	He will report to Competant person kept for the purpose	Any of these	C	med
36	PC1	N 0457	For stopping the winder at a place the Banksman shall give the signal	One Rap	Two Raps	Three Raps	Four Raps	A	Easy
37			For lowering the Cage at a perticular place the Banksman shall give the signal	One Rap	Two Raps	Three Raps	Four Raps	B	Easy
38			For hoisting the Cage at a perticular place the Banksman shall give the signal	One Rap	Two Raps	Three Raps	Four Raps	C	Easy
39			For carrying out manwinding in a Cage the Banksman shall give the first signal	One Rap	Two Raps	Three Raps	Four Raps to allow the persons in the cage	D	Easy
40			For carrying out manwinding in a Cage the Banksman shall give the second signal	One long Rap	Two Raps	Three Raps	Four Raps as a conformatory for men have already entered the cage	D	med
41			In an Emergency situation, Banks man shall give the signal	One long Rap	Two Raps	Three Raps	Four Raps	A	Easy
42			If the Winding engine operator is not clear of the signal then	He will start the engine slowly	He will start the lowering and stop for a while	He will stare the hoisting and stop for a while	He will not start the engine and wait for further signal from the Banks man	D	med

43	PC2		Slow Banking zone is	Where material is being hoisted	Where men are hoisted	Both A & B	The zone below the top landing of the cage and length of the travel is normally not less than twice the circumference of the Rope Drum.	D	med
44			As soon as the Cage approaches the slow Banking zone the Driver	Stops the cage	No necessity of stoping the cage	There is a alarm blows that cage has entered the slow banking zone	None of these	C	med
45			If the Winding Engine operator does not follow the speed limit in Slow Banking zone and crosses the speed of the winder	The operator will get repeatative alarm	After getting repeatative alarm,The operator will stop the winder.	The winder will automatically trip	None of these	C	med
46	PC3		What are the Automatic contrivances	When required Winding Engine operator make use of	These are the safety measures which takes care the safety of winder operation	Both A & B	None of these	B	Easy
47			Which are the Automatic contrivances provided on the winder	Over speed	Over winding	Slow Banking	All of these	D	Easy

48			Over speed contrivance is effective	only at Bottom landing of the cage	only at Top landing of the cage	Throughout the travel of the Cage	None of these	C	Easy
49			Automatic Contrivances are normally checked	During Shift hours	Beginning of the shift, Just after taking the charge of the winder	Any of the A & B	None of these	B	Easy
50	PC4		While stoping the winder, the Jerks on the winder are avoided	by slowly applying the Service Brakes.	by slowly applying the Parking Brakes.	by slowly applying the Emergency Brakes.	None of these	A	Easy
51			During running of the winder, the Jerks on the winder are avoided	By steady acceleration of the winder	By steady Deceleration of the winder	Both A & B	None of these	C	Easy
52	PC5		Man winding is carried out	at a speed, which is comfortable to the operator	The manwinding speed is fixed and the man winding need to be done within that speed.	If no. of men are more , then at lower speed	If no. of men are less , then at higher speed	B	Easy
53			Manwinding speed for a winder	is always more than the material winding	manwinding and material winding is done at the same speed	is approved by the Inspectorate of Mines safety and Manager may fix the speed within that limit.	None of these	C	med



54			During manwinding	One of the cages may be loaded with material	Both the cages shall be used for men winding	One of the cages may be partly used for material and remaining portion for men	None of these	B	Med
55	PC6		When loading material in the cage at Landing position	The Keps for the Cage may be open	Keps for the Cage shall be closed and cage be rested on those Keps.	Any of the A & B	None of these	B	Easy
56			If Banksman gives the signal for Emergency	Winding Engine operator shall stop at nearest landing position	Winding Engine operator shall stop the winder immediately	Winding Engine operator shall bring the cage at the surface and stop the winder.	None of these	B	med
57	PC7		In case of casualties, Winding Engine operator	He has to inform his superiors.	may come out of his cabin.	However ,he has to lock his cabin while leaviing the Cabin	All of these	D	med

58			In normal circumstances,	Winding engine operator is allowed to go earlier if the work is completed.	Winding engine operator is allowed to go after the shift	Winding engine operator is allowed to go only after his successor has arrived and taken the charge of the winder.	None of these	C	Easy
59	PC8		Detailed log book is maintained for every shift mentioning regarding	Brake Testing	Automatic Contrivances trial / Testing	Condition of all engine components	All of these	D	Easy
60			Log book is also maintained	To get ready information regarding condition of the winder during the shift	It is mandatory as per Directorate of ine safety.	Both A & B	None of these	C	Easy
61	PC9		At the start of the shift, the winding engine operator	Inspect the rope near Rope cappel	Inspect the Tail end Rope fastning arrangement on the Drums	Check Overall Lubrication of the Rope on the Drums	All of these	D	Easy
62			Diameter and Pitch of the Winding engine rope is measured regularly	to know the condition of the rope	to know the lubrication of the rope	To get idea regarding wear of the rope and elongation of the rope	None of these	C	Easy

63			In case of any defects observed during the shift are	Verbally told to next operator	written on a piece of paper and kept in a cabin	Immediately inform to Supervisor/Engr/Manager	All of these	C	Easy
64	PC10		Winder requires various oils, Grease etc.	Hence the winder room should be kept clean so as to facilitate the walking on the floor easily	Oil and Grease etc. should be stored in the separate room	Both A & B	None of these	C	Easy
65	PC11		Winding engine room comprises of various electrical panels and several components having oil , Grease etc for its operation /Maintenance hence winding engine room shall be provided with	CO2 type Fire Extinguishers	Dry chemical powder type Fire Extinguishers	Foam type Fire Extinguishers	All of these	D	Easy
66	PC12		If the Winder is under repairs / maintenance then to avoid any untoward incidences	Inform everybody that winder is stopped.	Every body knows that the winder repairs are going on	Put proper Tags at prominent location mentioning "The winder is out of order"	All of these	C	Easy
67	PC1	N 0458	Statutory Maintenance of the winder is	Daily	Weekly	Monthly	All of these	D	Easy
68			Statutory maintenance of the winder also covers	Six monthly Maintenance	Annual Maintenance	Two yearly Maintenance	Both A & B	D	Med
69	PC2		Winding Engine Ropes are Recaped	Every month	Every three months	Every six months	All of these	C	Easy

70			Major works on the winder are carried out	Under the trained supervisors	As per the procedures mentioned in the Maintenance Manual	Both A & B	None of these	C	Easy
71	PC3		After carrying out major repairs, the winder should be operated	At least one trip with no load in the cages	Can be operated in normal way	Can be operated with Material winding	None of these	A	Easy
72			After carrying out the Rope Recapping , the winder should be made to operate for	At least one trip with no load in the cages	At least one trip with load in the cages	Five trip with full load in the cages	None of these	C	Easy
73			Maximum period of Winding engine rope replacement is	Six months	One Year	One & Half Year	Three and Half year	D	Easy
74	PC4		Maintenance Activities are carried out while the cages are	In any position	In top landing position	On any landing platform and rested on Keps	None of these	C	med
75			While replacing the Rpes of the winder, the cages shall be	Kept at any landing platform	Kept on top with Keps on and with additional heavy support at the Bottom of the cages	Kept at Bottom with Keps on and with additional heavy support at the Bottom of the cages	None of these	B	Difficult
76	PC5		Hydraulics circuits are operated at high pressures, hence components are hot while in operation, Thus while going in for repairs	Repairs can be carried out immediately	Release the Hydraulic oil pressure for the circuit.	Wait till the components are cooled and can be handled with hand gloves.	Both B & C	D	med

77			While carrying out the repairs on the Gear boxes	First drain the oil	Wait for the Gears / pinions to cool down	Then open the components	All of these	D	Med
78	PC6		While carrying out repairs on the winder	Winding Engine Operator may come out of Cabin	Winder engine operator may rest in cabin	Winder engine operator has to sit in cabin be alert for any instructions.	All of these	C	Med
79			While carrying out Breakdown repairs on the winder	Shut off the power supply	display Breakdown Tag in Electrical room	Lock the operators cabin and keep the keys with the chief person of the Maintenance crew	All of these	D	Med
80	PC7		If the problem noticed is beyond the capacity of the Winding Engine operator	Inform to competent person kept for the purpose	Inform to Mine manager	Both A & B	None of these	C	Easy
81	PC8		Any Defect is noticed and rectified in the shift	Shall be verbally told to next operator	Written on a piece of paper and kept in cabin	Record the same in Log Book/ Defect rectify sheet	None of these	C	Easy
82			If the winder is repetatively giving problem, then	Call for a Mechanic	Call for a Engineer	Call for Expert from Manufacturer's side	None of these	C	Easy

83	PC1	N 0901	Winding Engine operator should wear Handgloves while dealing with hot zone	To keep his hands clean	To avoid hands from electric shocks	To protect hands in case of handling hot machine parts	None of these	C	Easy
84			Winding EngineOperator should wear	Safety shoes	Safety Helmet	Hand Gloves	All of these	D	Easy
85	PC2		Lighter winding engine material is handeled by	In a Dumper	Manually	In a rubber wheel trolley	Both B & C	D	Easy
86			Heavier Winding Engine material is handeled by	In a Dumper	Manually	mechanical means	None of these	C	Easy
87			Oil, Diesel,Grease, Hydraulic oil is transported through	In a Dumper	Manually	In a tractor trailor	Through oil Drum carrier or through mechanical means	D	Easy
88	PC3		Who is to be informed first for any accident	Foreman	Engineer	Manager	All of these	A	Easy
89			In case of minor accident	Inform Foreman	provide first aid	Both A & B	None of these	C	Easy
90			In case of major accident	Inform Foreman	provide First aid	Call for Anbulance	All of these	D	Easy
91			Who is to be informed for winding engine major breakdown	Mechanical Foreman	Mine Foreman	Mechanical fitter	All of these	D	Easy
92	PC4		In case of small fires	Leave the work place	use the fire Extinguisher and start extinguishing the fire	Inform to Engineer	Inform to Manager	B	Easy

93			In case of Big fires	Keep away personnel from the work place	use the fire Extinguisher and start extinguishing the fire	Call for fire tender kept for the purpose	All of these	D	med
94			Winding Engine operator should be trained in Fire extinguisher operation	yes	not required	Not to attain fire hazards	None of these	A	Easy
95	PC5		Which type of Fire Extinguisher is used in Electrical fires	CO2 type	Foam type	Dry chemical powder	Both A & C	D	med
96			Which type of Fire Extinguisher is used in general fires like wood , paper	CO2 type	Foam type	Dry chemical powder	Both B & C	D	med
97			Which type of Fire Extinguisher is used in Flammable oils / Liquids	CO2 type	Foam type	Dry chemical powder	All of these	D	med
98			Fire extinguishers are inspected by competent person	Once in three months	Every week	Every month	Every shift	A	Difficult
99	PC6		Winding Engine operator should allow to enter his work area	Foreman	Electrician	Mechanical fitter	All of these	D	Easy
100			Winding engine operator should allow the Personnel Who had put on	Safety shoes	Safety helmet	Handgloves	All of these	D	Easy
101	PC7		Winding Engine spares/material may be stored with Grease & oil	Keep seperately	Yes	may be kept as per the situation	None of these	A	Easy
102			Hazardous Material should be handled with	Due care	handle as normal material	Both A & B	None of these	A	Med
103	PC8		Who handles the misfire	Blaster	Engineer	Drill rig operator	Mine manager	A	Easy
104			Misfire takes place	Due to Drilling	Due to face conditions	Due to loose rock	None of these	D	Med

105			Misfire is mainly due to	Drilling problem	Mucking problem	Mistakes in Explosive loading	None of these	C	Easy
106			Misfire is noticed	Immediately after blasting	some time after Blasting	Only after fume clearance & inspection	None of these	C	Med
107	PC9		Fumes in face accumalets after Blasting	Always	Some times	Never	None of these	A	Easy
108			Fumes will clear in face due to	Improper Ventilation	Proper ventilation	No ventilation	None of these	B	Easy
109			What improves the fume clearance in face	water jet	Air jet	Auxiliary ventilation fan	None of these	C	Med
110			Workmen are allowed to enter the face	Immediately after blasting	Only after fume clearance	After dealing misfire if any	Both B & C	D	med
111	PC10		Winding Engine Operator should wear Safety Goggle	For Dust protection	For sound proction	For eye protection	None of these	C	Easy
112			Winding Engine Operator should wear Nose mask	For Dust protection	For sound proction	For eye protection	None of these	A	Easy
113			Winding Engine Operator should wear Ear Plugs	For Dust protection	For sound proction	For eye protection	None of these	B	Easy
114			Winding Engine Operator should wear Safety Helmet	For Head protection	For sound proction	For eye protection	None of these	A	Easy
115	PC11		Maintain the Winding Engine logsheet	As per Directorate of Mines safety Regulation	on a plain Register	inform verbally to next Winding Engine operator	Log sheet not maintained	A	Med