

Operator – Coal Handling Plant

Question Bank

(Answers Underlined)

Section I MCQ

1. Per-capita annual power consumption in India in 2017 is
 - a. 734 unit.
 - b. 1075 units
 - c. 1750 units
 - d. 2009 units
2. All India thermal Installed Capacity as on 31.03.2017 is
 - a. 86 % of total installed capacity
 - b. 46 % of total installed capacity
 - c. 68 % of total installed capacity
 - d. 80 % of total installed capacity
3. Primary Transmission of Power is
 - a. 66/132 kV
 - b. 11/22 kV
 - c. 132/220/400/765 kV
 - d. 11/0.415 V
4. In a gas based combined cycle power plant, waste heat recovery boilers
 - a. Produce natural gas to run gas turbine
 - b. Produce steam from exhaust gases from gas turbine
 - c. Produce steam from natural gas
 - d. Produce hot gases to run gas turbine
5. India's installed utility-scale hydro electric capacity as on 31st march, 2017 was
 - a. 38 % of the total installed capacity
 - b. 28 % of the total installed capacity
 - c. 18 % of the total installed capacity
 - d. 08 % of the total installed capacity
6. In a solar power plant sunlight can be converted to electricity
 - a. Directly by using Photovoltaics (PV) cells
 - b. Indirectly by using concentrated solar power (CSP)
 - c. By any of the above two systems
7. Capacity of a conveyor is designed based on the coal consumption of the boilers and per day working of conveyor upto
 - a. 16 hours at rated capacity
 - b. 12 hours at rated capacity
 - c. 24 hours at rated capacity

- d. 10 hours at rated capacity
- 8. The recommended inclination of coal conveyor belt for uncrushed coal is limited to
 - a. 15 degrees
 - b. 10 degrees
 - c. 12 degrees
 - d. 20 degrees
- 9. Time taken to unload a BOBR wagon
 - a. 40 seconds
 - b. 10 seconds
 - c. 20 seconds
 - d. 30 seconds
- 10. In the case of BOBR rakes
 - a. Loading is done with the rake moving at slow speed and unloading is done with rake moving at high speed
 - b. Loading is done with the rake moving at high speed and unloading is done with rake moving at slow speed
 - c. Loading and unloading is done with the rake moving at high speed
 - d. Loading and unloading is done with the rake moving at slow speed
- 11. Coal handling Plants at the power station are designed to receive coal
 - a. Upto 400 mm size (with occasional size upto 600 mm)
 - b. Upto 100 mm size (with occasional size upto 400 mm)
 - c. Upto 250 mm size (with occasional size upto 400 mm)
 - d. Upto 250 mm size (with occasional size upto 500 mm)
- 12. Time taken to unload a Box-N wagon after it is positioned over the wagon tippler table is
 - a. 40-50 seconds
 - b. 150-180 seconds
 - c. 250-280 seconds
 - d. 300-380 seconds
- 13. Which of the following statement is incorrect
 - a. Once rake is placed by loco near the wagon tippler within the reach of Side Arm Charger, it is coupled to the first wagon
 - b. Side Arm Charger (SAC) places one loaded wagon over the wagon tippler platform (cradle)
 - c. Wagon tippler cradle rises, tilts by 150 degree, unloads coal and brings back empty wagon to normal position
 - d. SAC is coupled to the empty wagon and pushed towards outhaul rail
- 14. Coal feeding rate of an Apron Feeder is controlled
 - a. By changing speed of the receiving conveyor through VFD motor/hydraulic motor

- b. By changing the speed of dribble conveyor through VFD motor/hydraulic motor
 - c. By changing the speed of apron feeder through VFD motor/hydraulic motor
 - d. By changing the speed of tilting mechanism of wagon tippler table
15. A “1200 NN 800/4 5+2 FR” shall mean
- a. width as 800 mm, Nylon-Nylon Fabric of 4 plies, tensile strength of 1200 N/mm, top cover thickness of 5 mm, bottom cover thickness of 2 mm and grade being Fire Retardant.
 - b. width as 800 mm, Nylon-Nylon Fabric of 4 plies, tensile strength of 1200 N/mm, top cover thickness of 2 mm, bottom cover thickness of 5 mm and grade being Fire Retardant.
 - c. width as 1200 mm, Nylon-Nylon Fabric of 4 plies, top cover thickness of 5 mm, bottom cover thickness of 2 mm tensile strength of 800 N/mm, and grade being Fire Retardant.
 - d. width as 1200 mm, Nylon-Nylon Fabric of 4 plies, tensile strength of 800 N/mm, top cover thickness of 2 mm, bottom cover thickness of 5 mm and grade being Fire Retardant
16. Normal Carrying Idlers/Troughing Idlers are installed
- a. at a gap of 0.6 m
 - b. at a gap of 1.2 m
 - c. at a gap of 0.8 m
 - d. at a gap of 1.6 m
17. Impact Idlers are provided
- a. At discharge Point of the conveyor
 - b. At tail end of the conveyor
 - c. At loading point of the conveyor
 - d. At the centre of the conveyor belt
18. Shells of conveyor pulleys are lagged
- a. To reduce sound level
 - b. To reduce friction between belt and pulley
 - c. To increase friction between belt and pulley
 - d. To protect the pulley from rusting
19. Sticky coal from conveyor belt is removed by
- a. Internal Primary Belt Scraper
 - b. External Primary Belt Scraper
 - c. External Secondary Belt Scraper
 - d. Internal Secondary Belt Scraper
20. In emergency best option for a local operator to stop a belt conveyor is
- a. To inform the control room
 - b. To run upto the local start/stop push bottom and push bottoms

- c. To pull the cord of a pull cord switch
 - d. To run upto one pull cord switch and operate it
21. Belt sway switches are used
- a. To adjust the conveyor belt once it sways
 - b. To send alarm to control room once it sways
 - c. To trip conveyor belt once it sways
 - d. To reduce speed of conveyor belt once it sways
22. Under speed switch operates
- a. When the belt speed falls by 85% of rated speed
 - b. When the belt speed falls by 15% of rated speed
 - c. When the belt speed increases by 15% of rated speed
 - d. When the belt speed increases by 85% of rated speed
 - e.
23. A Flap gate installed in an inverted “Y” transfer chute
- a. Can close both the outgoing paths
 - b. Can open both the outgoing paths
 - c. Can open one of the two outgoing paths
 - d. Can close incoming path
24. Two Rack and Pinion Gates installed in an inverted “Y” transfer chute
- a. Cannot close both the outgoing paths
 - b. Cannot open both the outgoing paths
 - c. Cannot open one path with the other being close
 - d. Can open & close both paths, and can also open one path with the other closed
25. Separation of magnetic metal pieces from coal at the conveyor belt discharge pulley is done by
- a. Suspended Magnet
 - b. CBMS
 - c. ILMS
 - d. Metal Detector
26. A Metal Detector
- a. Can pick up magnetic metal pieces in running belt
 - b. Can pick up non-magnetic/non-ferrous metal pieces in a running belt
 - c. Can detect non-magnetic/non-ferrous metal pieces in a running belt
 - d. Can detect stone pieces in a running belt
27. Coal Sampling equipment consists of
- a. primary sampler, secondary sampler, VGF, small conveyors, screw conveyors
 - b. primary sampler, secondary sampler, mini crusher, small conveyors, screw conveyors
 - c. primary sampler, mini crusher, small conveyors, screw conveyors
 - d. primary sampler, secondary sampler, small conveyors, screw conveyors

28. A Vibrating Grizzly Feeder are used
- To feed entire incoming coal into crusher
 - To feed coal particles less than 20 mm into crusher
 - To feed coal particles larger than 20 mm into crusher
 - To feed coal particles larger than 200 mm into crusher
29. ROM coal stands for
- Rate Of Mine Coal
 - Running Of Mine Coal
 - Run Of Mine Coal
 - Return Of Mine Coal
30. In a Rotary Breakers
- Coal pieces are broken by high speed rotary motion of the inclined perforated slotted cylinder
 - Coal pieces are broken by slow speed rotary motion of the inclined perforated slotted cylinder
 - Coal pieces are broken by the gravity impact of falling coal from the shelves of the slowly rotating inclined slotted perforated cylinder
 - Coal pieces are broken by the gravity impact of falling coal on hard stones of the slowly rotating inclined slotted perforated cylinder
31. Ring Granulators rotate at
- 12-15 RPM
 - 120-150 RPM
 - 570 RPM
 - 5700 RPM
32. Reduction of ROM coal to (-) 20 mm size can be done in a
- Rotary Breaker
 - Ring Granulator
 - Impactor Crusher
 - Single Roll crusher
33. Screening of (-) 20 mm coal before it is fed to ring granulators helps in
- Increase in energy consumption by adding VGF
 - Faster crushing of coal in crushers
 - Decrease in energy consumption of crushers
 - Decrease in dust emission from crushers
34. Cage bars or screen plate are used in
- Primary Crushers
 - Ring Granulators
 - Single Roll Crushers
 - Vibrating screens
35. In the process of size reduction of coal, minimum power is consumed in

- a. Primary Crushers
 - b. Ring Granulators
 - c. Single Roll Crushers
 - d. Two Roll Crushers
36. General guideline for coal storage quantity in a rail fed thermal power station is
- a. For 20 days consumption
 - b. For 15 days consumption
 - c. For 30 days consumption
 - d. For 45 days consumption
37. A Stacker reclaimer machine can be used
- a. For both stacking and reclaiming at the same time
 - b. For either stacking and reclaiming at a time
 - c. For stacking only
 - d. For reclaiming only
 - e.
38. Reclaiming of coal with a stacker reclaimer machine is initiated by
- a. Slew drive
 - b. Bucket wheel
 - c. Boom Conveyor
 - d. Luffing Cylinder
39. Travelling tripper is used to
- a. Feed coal from one coal bunker to another bunker
 - b. Feed coal from transfer chute to bunkers
 - c. Feed coal from horizontal conveyor to bunkers
 - d. Feed coal into bunkers when conveyor trips
40. Cyclone Separators of a Dust Extraction System are used to
- a. Separate fine dust particles from the air being sucked by dust extraction fans
 - b. Separate coarse dust particles from the air being sucked by dust extraction fan
 - c. Separate fine and coarse dust particles from the air around crushers
 - d. Separate coarse dust particles from the air around crushers
41. In a Dust Suppression System, Dry Fog is generated by
- a. Drying the water mist from a water nozzle with air
 - b. Injecting water and air in a nozzle
 - c. Injecting water on a stream of air
 - d. Injecting air on a jet of water
42. Coal rakes having BOBR wagons can be unloaded at Track Hopper (True/False)
43. Coal rakes having Box - N wagons can be unloaded at Wagon Tippler (True/False)
44. Electric power supply to the paddle feeders is extended through flexible copper cables rolled on Cable Reel Drums (True/False)

45. Magnetic Separators can pick up magnetic particles from coal on a running conveyor but cannot pick up non-magnetic particles (True/False)
46. Marshaling equipment used to pull a complete rake of 58 wagons is called Side Arm Charger (True/False)
47. In the latest wagon tippler installations equipment used to feed coal from hopper to receiving conveyor is called apron feeder (True/False)
48. In a conveyor belt Rubber is used at top and bottom to protect nylon-nylon carcass from impact of falling coal pieces (True/False)
49. Nomenclature of a conveyor belt of 1400 mm width, made of Nylon-Nylon Fabric of 5 plies, having top cover thickness of 5 mm & bottom cover thickness of 2 mm tensile strength of 1250 N/mm, and grade being Fire Retardant shall be 1400 NN 1250/5 5+2 FR (True/False)
50. Impact Idlers are installed at gap of 0.6 m (True/False)
51. In case an operator standing in the middle of a conveyor wants to stop a running conveyor, he can do so by pulling the cord of pull cord switch (True/False)
52. In case speed of a running conveyor belt reduces to half, this shall automatically trip after detection of such abnormality by Under Speed Switch (True/False)
53. Whenever a conveyor belt runs out of centre, it is automatically brought to centre by Self Aligning Idlers (True/False)
54. Coal sticking to carrying side of a conveyor belt is removed by Belt Scraper (True/False)
55. Complete blockage of a transfer chute is detected by Chute Block Switches (True/False)
56. Magnetic Separators installed at drive pulley are called In Line Magnetic Separators (ILMS) (True/False)
57. Coal flow rate of a conveyor can be measured with the help of Belt Weigher (True/False)
58. Equipment used to obtain a small representative sample of the whole consignment of coal is called Coal Sampling Equipment (True/False)
59. Vibrating Grizzly Feeder is supported on a set of Springs/Spring Foundations (True/False)
60. Technology of gravity impact for separating stones from coal is adopted in Rotary Breakers (True/False)
61. In case of a Ring Granulator crushed coal is forced to pass through the gaps between Cage bars or screen plate (True/False)
62. Power consumption during crushing among ring granulators, single roll crushers and impact crushers is least in Single Roll Crushers (True/False)
63. Guideline for storage quantity in a pit head thermal power station is for 15 days stock (True/False)

64. BOBR stands for
- Bottom Opening Bottom Raise
 - Bottom Opening Bigger Release
 - Bottom Opening Bottom Release
 - Bottom Opening Bottom Rake
65. Loading Operation of BOBR rake under normal conditions may take
- 2-3 hours
 - 45-60 minutes
 - 15-20 minutes
 - 7 hours
66. Paddle Feeders are used to
- Feed coal from wagons to conveyor in a track hopper
 - Feed coal from coal table of track hopper to conveyor belt
 - Feed coal from silo to wagons
 - Feed coal from wagon to track hpper
67. Paddle Feeders can perform their work even while moving (True/False)
68. Wagon Tipplers are normally rated for unloading rate of about
- 10 tipplers per hour
 - 15 tipplers per hour
 - 25 tipplers per hour
 - 35 tipplers per hour
69. Side Arm Charger is used to
- Tipple the wagon tippler table for unloading coal from it
 - Push empty wagons after unloading only
 - Place loaded wagon wagon tippler table and push empty wagons after unloading
 - Support wagon from side with its Arm during unloading
70. Apron Feeder is used to
- Feed coal from conveyor to crushers
 - Feed coal from wagon to wagon tippler hopper
 - Feed coal from wagon tippler hopper to receiving conveyor
 - Feed coal wagon to wagon tippler hopper
71. Number of wagons which can be placed on track hopper at a time is
- 28-29
 - 17-18
 - 58-59
 - 9-10
72. In the process of unloading of wagons on wagon tippler, set sequence of the activities in order (i) Start pulling the rake with the help of SAC (ii) Lower the arm of SAC and couple with the wagon (iii) Start tipping operation (iv) Decouple SAC from the wagon and raise its Arm

- a. (iv) (iii) (i) (ii)
 - b. (ii) (i) (iv) (iii)
 - c. (ii) (iii) (i) (iv)
 - d. (iii) (ii) (iv) (i)
73. Stone pickers are
- a. Mechanised picking arm to separate stone from coal in coal stockyard
 - b. Hydraulic arms to lift stones from coal moving in running conveyors
 - c. Persons to pick up stone from coal moving in a running conveyor
 - d. Persons to pick up stone in coal stockyard
74. Dribble conveyor
- a. Feeds coal from wagon tippler hopper to receiving conveyor
 - b. Feeds spilled coal from pit of wagon tippler hopper to receiving conveyor
 - c. Feeds spilled coal from apron feeder to receiving conveyor
 - d. Feeds coal from apron feeder to receiving conveyor
75. While unloading coal from BOBR rake, loco is to be decoupled from the rake (True/False)
76. During the period when wagon is being unloaded on a wagon tippler, SAC moves to pull another wagon, with its arm in raised position (True/False)
77. Opening size of grizzly on track hopper is
- a. 250 x 250 mm
 - b. 250 x 350 mm
 - c. 350 x 350 mm
 - d. 350 x 250 mm
78. In order to carry out accounting of coal, belt weighers are provided on
- a. Receiving Conveyors
 - b. Bunkering Conveyors
 - c. Boom Conveyor of Stacker Reclaimer
 - d. All the above
79. Non-magnetic tramp metals are detected by Metal Detectors which trip the conveyor, and such pieces are to be picked manually from the conveyor belt (True/False)
80. 3.3 kV HT Crusher motor is designed for a maximum of
- a. 5 starts per hour
 - b. 10 starts per hour
 - c. 2 starts per hour
 - d. 1 starts per hour
81. Before coal is fed into a crusher it is screened by Vibrating Grizzly feeder in order to
- a. Reduce load on the crusher
 - b. To reduce wear and tear of crusher internals
 - c. To help in reducing generation of fine coal dust

- d. All the above
82. Crushers in a thermal power station are normally designed for
- a. 90% output of (-) 50 mm size
 - b. 98% output of (-) 20 mm size
 - c. 98% output of (-) 50 mm size
 - d. 90 %output of (-) 20 mm size
83. Oversized crusher coal output can be due to low supply voltage (True/False)
84. Oversized coal pieces coming out of crusher can be due
- a. Missing crusher hammer
 - b. More gap between crusher rotor and screen plate
 - c. Damaged screen plate
 - d. Any of the above reasons
85. Air cannons are used to
- a. Shoot sharp arrows with compressed air at coal build up inside hopper to clear it
 - b. Shoot instantaneous powerful burst of compressed air from outside the build up area in a hopper to dislodge the build up
 - c. Shoot instantaneous powerful burst of compressed air from top of hopper to dislodge the build up
 - d. Shoot sharp arrows with compressed air to fly away birds in coal handling plant
86. In case a hopper gets choked once or maximum twice a year, it is better to install air cannon (True/False)
87. If air cannons are operated in a completely choked hopper, this can aggravate the situation (True/False)
88. In case a hopper gets totally choked with coal, the method used to clean the same in advanced countries is
- a. To use a jet of water from bottom
 - b. To use a jet of water from top
 - c. To drill a hole from side with a screw cutter and then removing coal from sides with chain cutter
 - d. To drill a hole in the centre with a screw cutter and then removing coal from sides with chain cutter
89. Chokage of a hopper can take place due to detachment of liner plate (True/False)
90. Chokages from a hopper can be removed by
- a. Putting more coal on the choked hopper to get it cleared by additional weight
 - b. Directing jets of water from top
 - c. Poking the build up area with a sharp edged rod mounted in front of a bamboo
 - d. Adopting all the three method mentioned above
91. Before starting a coal crushing plant, the most important point to be ensured is that

- a. ILMS of the stream to be taken in service is charged and position of RPGs, FGs is correct.
 - b. Screen plate of VGF is clean, oil level in drive assembly of VGF is adequate with crusher doors closed
 - c. Scoop coupling oil pump is healthy and its cooling water is available
 - d. All three mentioned above
92. Scoop of crusher fluid coupling gets engaged
- a. Immediately before starting of crusher motor
 - b. Immediately after starting of crusher motor
 - c. Immediately before starting coal feeding in the crusher
 - d. Immediately after starting coal feeding in the crusher
93. Before starting a conveyor the following point is not to be ensured
- a. Correct Oil level in gear box
 - b. Correct Flap Gate position as per selected path
 - c. Availability of compressed air supply
 - d. Conveyor free of men and materials
94. Before starting a conveyor all inspection doors of transfer chutes should be closed (True/False)
95. Internal belt scraper is installed at head end of the conveyor belt (True/False)
96. While stacking coal by Stacker Reclaimer the position of the boom should be kept at minimum height over the stacking point
- a. To save energy
 - b. To reduce the dust emission
 - c. To save time
 - d. All the above three
97. Coal is normally stacked and compacted in the coal stockyard after crushing
- a. To keep the coal always ready for emergency feeding to bunkers
 - b. To remove any moisture present in coal to avoid chokage of bunkers
 - c. To minimize the amount of air entrapped between the coal particles of coal
 - d. To prevent the coal stack pile from getting disturbed during heavy rains
98. Dry coal and wet air is the most critical combinations as far as spontaneous combustion of coal is concerned (True/False)
99. Which of the following step to prevent fires in coal stockyard is incorrect
- a. Stacking of coal layer by layer and compacting each layer
 - b. Wetting the coal with water before stacking
 - c. Stacking of freshly mined coal over old stacked coal
 - d. Sprinkling of coal stockyard with water
100. FIFO stands for First In first Open (True/False)
101. Bypass chute of a bunker is used
- a. To feed coal from bunker to mill in case main opening of bunker is blocked
 - b. To feed the coal in bunkers from second conveyor
 - c. To empty the coal from bunker

- d. To facilitate entry of water inside the bunker in case of high temperature of coal
102. In case a CO(Carbon Oxide) sensor indicates higher CO, this is an indication of oxidation of coal taking place (True/False)
103. CRD stands for
- a. Control Reel Drum
 - b. Cable Recovery drum
 - c. Cable Reel Drum
 - d. Control Recovery Drum
104. In case of detection of minor smoke in a coal bunker, best solution is to run the mill and empty that bunker (True/False)
105. While starting a stacker reclaimer for stacking operation, set the points in sequence (i) Move the machine to a suitable place where stacking is to be done (ii) Start the yard Conveyor (iii) Start the boom conveyor (iv) Start hydraulic system and set boom conveyor height by luffing
- a. (i) (ii) (iii) (iv)
 - b. (iii) (ii) (ii) (iv)
 - c. (iv) (ii) (iii) (i)
 - d. (iii) (iv) (ii) (i)
106. Stacking of coal is done by moving the stacker recalimer and keeping the luffing and slewing position unchanged (True/False)
107. Coal dust being collected in the case of a dust extraction system of dry type dust collection, is sent back to coal bunker or conveyor (True/False)
108. Both water pressure and air pressure need to be monitored in the case of dry fog type Dust Suppression System (True/False)
109. During reclaiming slewing operation as well as traverse movement of the reclaimer is to be done (True/False)
110. During inspection of a running conveyor the most important point to be checked is
- a. Bearing Temperatures of motor, pulleys, crusher bearings
 - b. Vibration/noise level of motor bearing, fluid couplings, pulleys
 - c. Condition of belt joints
 - d. All the three mentioned above
111. During inspection of a running stacker reclaimer the most important point to be checked is
- a. Gear box oil level of bucket wheel
 - b. Oil level of hydraulic tank for boom luffing

- c. Condition of belt joints of boom conveyor
 - d. All the three mentioned above
112. During site inspection of a running crusher house the following is not required to be inspected
- a. Oil level and temperatures of Gear boxes
 - b. Oil level and temperature of scoop Fluid couplings
 - c. Condition of ILMS belt
 - d. Power supply voltage
113. Jamming of tripper chute can be inspected
- a. With the belt and tripper in running condition
 - b. With the belt and tripper in stopped condition
 - c. With the belt and tripper in stopped condition and after information to control room
 - d. With the belt and tripper in stopped condition and after information to control room and after operating Emergency Push Botton
114. After a wagon has been unloaded at a wagon tippler the most important point to be noted is to observe whether
- a. The outhaul track is free of wagons
 - b. The rail table is in level with inhaul/outhaul rails
 - c. There is no stone in the coal unloaded
 - d. Water spray on the unloaded coal is taking place
115. Most important safety precaution to be taken before a belt jointing is to be carried out, include
- a. Putting CCTV over the area of belt jointing
 - b. Arranging water supply at the area of belt jointing
 - c. Clamping the conveyor belt with strong metallic clamps
 - d. All the three mentioned above
116. Greasing of pulley plummer blocks (working under normal conditions) by opening top cover can be done
- a. Once every month
 - b. Once every 3 months
 - c. Once every 6 months
 - d. Once a year
117. Before starting a vertical pump which of the following checks is not true
- a. Check that oil level is normal
 - b. Check that pump rotor rotates freely
 - c. Check that air vents are closed
 - d. Check that Emergency Push Botton is released
118. Before starting a horizontal pump which of the following checks is not true

- a. Check that suction pressure is above the set point
 - b. Check that suction valve is open discharge
 - c. Check that discharge valve is open
 - d. Check that Emergency Push Botton is released
119. In normal case of a clutch
- a. Both driving disc and driven disc remain coupled and power transmission can take place
 - b. Both driving disc and driven disc remain coupled but power transmission can take place only after operation by steel wire/lever
 - c. Both driving disc and driven disc remain de-coupled and power transmission can take place only after coupling operation by steel wire/lever
 - d. Both driving disc and driven disc remain de-coupled and power transmission can take place
120. The gear box are filled with oil
- a. to provide lubrication to the bearings only
 - b. to dissipate heat generated due to friction between the gears
 - c. to provide lubrication to bearings and gears as well as to dissipate heat generated due to friction between the gears
 - d. to provide lubrication to the gears only
121. Normally the oil temperature of gear boxes should not go beyond
- a. 55° C
 - b. 65° C
 - c. 75° C
 - d. 95° C
122. In the case of a fluid coupling the energy is transmitted from driving side to driven side
- a. Through impeller and runner connected physically
 - b. Through impeller and runner not connected physically
 - c. Through impeller (working like a pump) and runner (working like a turbine) and pressurised oil being transmitted through a metallic pipe
 - d. Through impeller (working like a oil pump) and runner (working like a turbine run by oil) and pressurised oil being transmitted through a rubber hose
123. Output speed of a fluid coupling can be varied
- a. In case of a traction type coupling by controlling the amount of oil inside it
 - b. In case of a scoop type coupling by controlling the amount of oil inside it
 - c. In case of a traction type coupling by controlling the temperature of oil inside
 - d. In case of a scoop type coupling by controlling the pressure of oil inside
124. Slippage of belt at drive pulley, other pulleys cannot be due to
- a. Presence of oil or water on non-carrying surface of belt

- b. Belt overloading
 - c. Belt underloading
 - d. Inadequate tension on take up pulley
125. Belt running out of centre with sway cannot be due to
- a. Coal not falling in the centre of the belt
 - b. Self aligning idlers jammed, not functioning, their side rollers missing
 - c. Belt Joint not aligned
 - d. More than required tension on take up pulley
126. If a motor takes start but belt conveyor does not take start, the possible reason can be due to
- a. Inadequate oil in the fluid coupling
 - b. Failure of gear coupling
 - c. Belt overloaded
 - d. Any of the above reasons
127. High vibration of crusher bearings, foundation, floor cannot be due to
- a. Broken crusher hammers
 - b. Loose bolts of plummer blocks of its bearings
 - c. Misalignment of drive coupling
 - d. High temperature of oil in fluid coupling
128. A bulldozer in a coal handling plant is used
- a. For feeding coal from heap into underground hopper
 - b. For leveling the coal stock piles
 - c. For compacting coal in the coal stockpiles
 - d. For all the above mentioned purposes
129. Following activity has not been seen as major operation leading to accidents in CHP
- a. Trying to free a stalled idler roll by hand when the conveyor is running
 - b. Wearing loose or bulky clothing near moving conveyor, crusher, other equipment
 - c. Removing sticky coal from head pulley or tail pulley when the conveyor is stopped and EPB is pressed
 - d. Working below or near a unguarded equipment (drive pulley, tail pulley, snub pulley, fluid coupling, coupling)
130. "Lockout" means
- a. locking the electrical panel (after racking in circuit breaker or after taking out fuses) so as to ensure that nobody can switch ON the electric supply by mistake
 - b. locking the electrical panel (after racking out circuit breaker or after taking out fuses) so as to ensure that nobody can switch ON the electric supply by mistake
 - c. locking the electrical panel (after racking in circuit breaker or after taking out fuses) so as to ensure that nobody can switch OFF the electric supply by mistake

- d. locking the electrical panel (after racking out circuit breaker or after taking out fuses) so as to ensure that nobody can switch OFF the electric supply by mistake
131. In order to avoid accidents the following must be followed
- a. Conductance of a 'safety walk around' survey by operator prior to restarting the conveyor/ equipment
 - b. Never to exceed rated capacities of conveyors, paddle feeders, trippers, crushers, stacker reclaimers etc
 - c. By wearing Personal Protective Equipment (PPE) like safety helmet, safety shoes (with steel toe), safety glass when going near conveyors, crushers, other equipment
 - d. By adopting all the three steps mentioned above
132. In order to prevent fugitive dust emission from coal stock piles
- a. Coal stockpiles should be sprayed with water during stacking and afterwards
 - b. Compaction of coal stockpiles should be done layer by layer
 - c. Provision of green belt and buffer zones around coal stockpiles should be made
 - d. All the above mentioned steps should be taken
133. One of the unsafe practice while working in Battery Room is
- a. Laying of rubber mats along the cell rows
 - b. Keeping the eye wash shower in service and easily approachable
 - c. Working on cells without hand gloves
 - d. Keeping the battery room floor clean
134. Preventive Maintenance of Conveyor Belt does not include
- a. Checking condition of idlers, and replacement, if any
 - b. Checking condition of ropes of gravity take up
 - c. Checking belt joints, and repair/rejointing, if required
 - d. Checking the strength of belt
135. Preventive Maintenance of gear box includes
- a. Cleaning gear box and breather plug
 - b. Checking of cooling fan of gear box
 - c. Checking of oil condition, and replacement, if required
 - d. Carrying out all the above mentioned activities
136. During monthly preventive maintenance of fluid coupling, the following may not be required
- a. Checking coupling bolts for tightness
 - b. Checking oil level and oil condition
 - c. Replacement of oil
 - d. Checking multi disc unit
137. Preventive Maintenance of pulleys does not include
- a. Checking of plummer blocks
 - b. Checking of pulley lagging

- c. Greasing at all points on plummer blocks
 - d. Dismantling and reinstallation of pulley
138. Preventive Maintenance of Flap gates includes
- a. Checking condition of liners and mother plate
 - b. Checking actuator condition
 - c. Checking free movement of Flap gate
 - d. All the above mentioned activities
139. Preventive Maintenance of crusher does not include
- a. Checking tightness of all nuts and bolts
 - b. Checking condition of hammers, liner plates, screen plates/cage bars etc
 - c. Balancing of rotor
 - d. Checking condition of glands, sealing and plummer blocks
140. Preventive Maintenance of Dust Extraction System does not include
- a. Checking tightness of all nuts and bolts
 - b. Checking condition of V-belts
 - c. Checking condition of bag filter
 - d. Measuring air velocities at different locations
141. Preventive maintenance of hydraulic power pack may skip
- a. Cleaning of filters, breathers
 - b. Checking of valves, manifolds and oil cooler
 - c. Calibration of pressure and temperature switches
 - d. Checking tightness of all nuts and bolts
142. During preventive maintenance of pumps the following must be carried out
- a. Checking tightness of all bolts and nuts, greasing at all points
 - b. Checking condition of all glands
 - c. Checking of suction strainer
 - d. All the above mentioned activities
143. During preventive maintenance of vibro feeder the following need not be done
- a. Checking of spring condition and spring bolt tightness
 - b. Checking of bed and deck plate condition
 - c. Measurement of all unbalance counter weights using weighing scale
 - d. Checking discharge chute condition
144. Monthly preventive maintenance of electric hoist may skip
- a. Checking of proper movement of rope guide
 - b. Testing for free traverse movement of hoist
 - c. Load testing of hoist at 1.2 times the rated capacity
 - d. Checking of all nuts and bolts

145. Monthly preventive maintenance of elevator may not include
- Checking condition of brake system
 - Greasing of guide pipe bearings, pinions
 - Checking condition of safety door
 - Inspection and certification from an external agency
146. For cold belt jointing the following is not required
- Ply cutting knife, angled knife, knife with flexible blade
 - Hammer
 - Belt vulcanising machine
 - Wire brush
147. Hygrometer is used
- To measure specific gravity of acid inside a battery
 - To measure impurities of the acid inside a battery
 - To measure resistance of acid inside a battery
148. Power Tariff of Central Generation Companies is fixed by
- Central Generation Companies themselves
 - Central Electricity Regulatory Commission
 - State Electricity Regulatory Commission
 - State Electricity Distribution Commission
149. The reporting of Operator Coal Handling – Thermal Power Generation to General Manager of the power station is, other than senior CHP executives, through
- Head of main plant operation
 - Head of main plant Operation and Maintenance
 - Head of main plant maintenance
 - Head of Erection
150. One of the major functions of a Power Generating Company is
- To generate power from coal based upon its installed capacity
 - To generate power from coal based upon availability of coal
 - To generate power from coal as per requirement of various customers
 - To generate power from coal based upon profitability
151. Every thermal power station must carry a periodical review of pollution levels in the air in surrounding areas (True/False)
152. The main purposes of Electricity Act 2003 are
- Creates liberal framework for power development
 - Creates competitive environment and facilitates private investment
 - Allows multiple licensing in distribution
 - All the above

153. Appellate Tribunal board hears appeal against the order of:

- a. District court
- b. High Court
- c. Session Court
- d. CERC and SERC

154. One of the responsibilities of Operator Coal Handling is to make adjustments or minor adjustments, such as tightening leaking gaskets & pipe joints (True/False)

155. In a Government Thermal Power Station, the recruitment for Operator Coal Handling can be done by Head of O&M of a plant (True/False)

Question Bank CHP

Viva and OJT

Questions for Viva

1. What are the job duties and responsibilities of an Operator – Coal Handling ?
2. What is the purpose of installing a magnetic separator in a coal handling plant ?
3. What is the purpose of using Vibrating Screens ?
4. What is the out size of coal after crusher
5. What is the purpose of Paddle Feeders in a coal handling plant ?
6. Name various types of pulleys used in a belt conveyor system ?
7. Name various protection switches installed on a belt conveyor
8. While starting coal conveyor system for stacking which equipment or conveyor is started first ?
9. How can the fires in coal stockyard be prevented ?
10. What is the maximum recommended oil temperature in a gear box ?
11. What are the two types of fluid couplings used ?
12. What can be reasons for fluid coupling of a conveyor not achieving desired speed ?
13. What are the preventive maintenance checks for a conveyor belt ?
14. What are safety precautions to be taken in CHP ?
15. What are the actions to be taken to prevent fugitive dust emission from coal stock piles ?

Questions for OJT

1. Which type of wagons were used to bring coal to the thermal power plant (where the Operator – Coal Handling got OJT) ?
2. What was the average unloading time of a complete coal rake ?
3. How the coal wagons were placed on wagon tippler ?
How is the feeding rate of coal from stacker reclaimer controlled ?
4. While starting coal conveyor system for direct feeding to bunkers which conveyor is started first ?
5. While on a round to a running conveyor, which are the most important checks to be made ?
6. What can be reasons for self shutdown of a conveyor ?
7. What can be causes of high vibration of crusher bearings, foundation ?
8. What are the precautions to be taken while carrying out belt jointing ?

9. How is the electric power given to various equipment of mobile machines like stacker reclaimer ?