

## **MINER EXAMINATION STUDY GUIDE**

1) *How do you examine your working place?*

- a) Note if the adopted roof control plan was complied with.
- b) Visually look for loose rock, cracks, slips, clay veins, cutters, pots, or kettle bottoms in the roof.
- c) Note if the timbers are taking weight by cap pieces squeezing, posts or cross bars bent or broken.
- d) Note if bottom is heaving and ribs spalling.
- e) While examining the place, note if the mine examiner's initials and dates are marked in the face area.
- f) If no dangers are visually noted, test the roof by holding the fingers of hand against the roof and strike the roof with a bar or hammer to feel if a vibration exists or a dull sound which designates a bad roof.
- g) Note if the line curtain is properly hung and that the ventilation is being conducted to the face.
- h) Note if the place is properly cleaned up and rock dusted.

2) *If any danger existed, what action would you take?*

- a) If I could remove the danger without endangering myself, I would.
- b) If not, I would danger the place off and report it to the foreman.

3) *How often should you test the roof?*

- a) Frequently, and as often as necessary, especially when setting or changing timbers.

4) *What is the maximum roof support spacing in the mine's approved roof control plan?*

- a) ***(This response varies by each mine)***

5) *Are you permitted by law to enter old workings or leave the working place assigned to you without permission? Why or why not?*

- a) No. Because if you become injured or lost, no one would know where you were. Also, it is the law.

6) *Who must use eye protection?*

- a) Everyone doing eye hazardous work, such as digging coal or rock, setting posts, using hammers, chisels and anyone riding in an open mantrip.

7) *Why must you check in and out the mine when you enter and leave?*

- a) So that anyone knows whether you are in or out of the mine.

- 8) *If a person is intoxicated, is he permitted in or around the mine? Why or why not?*
- a) No. It is the law and he could endanger himself and his fellow workmen.
- 9) *What kind of clothing should a person wear who works around machinery or haulage equipment?*
- a) Snug fitting clothing.
- 10) *Are you permitted to charge, tamp, or fire shots in the mine? Why or why not?*
- a) No. I am not certified or qualified.
- 11) *Name five (5) things you should know the locations of in case of an emergency.*
- a) Emergency shelter locations
  - b) First-aid equipment
  - c) Location of power center and nips or plugs
  - d) Location of fire extinguishers, water and/or rock dust
  - e) Escapeway, self-rescuer (SCSR)
  - f) Transportation, drinking water
  - g) Lifeline location
- 12) *What is a manhole?*
- a) A shelter hole cut in the coal and/or rock strata for a person to get into when moving trips are passing by.
- 13) *What tool should be used for pulling down rock?*
- a) A bar of suitable length so that one can stay out of danger while pulling rock.
- 14) *What is first aid?*
- a) First aid is the temporary but immediate treatment to anyone sick or injured until the arrival of a doctor or physician.
- 15) *What are the fundamentals of first aid?*
- a) Artificial respiration
  - b) Control of bleeding
  - c) Treatment for physical shock
  - d) Treatment of cuts, wounds or burns.
  - e) Fracture and dislocations
  - f) Transportation

16) *Why are they listed in this order?*

- a) This is in the order of importance. For example, control of bleeding does not help if one is not breathing and so forth.

17) *What is physical shock?*

- a) It is the complete collapse of a person's respiratory, circulatory, and nervous system.

18) *What is a pressure point?*

- a) It is a point on the body where the artery comes near the surface over a bony structure.

19) *How many are there?*

- a) Twenty-two – eleven on each side.

20) *What purpose can knowing their location serve?*

- a) One can control bleeding at these points.

21) *What is a tourniquet?*

- a) A device such as a belt, rope, and so on used to stop bleeding as a last resort.

22) *What is a compound fracture?*

- a) It is fracture when the bone protrudes through the skin or flesh.

23) *Who should take first aid?*

- a) Everyone.

24) *Who must have eye protection on their person?*

- a) Anyone entering a mine?

25) *How many splices are allowed on a shuttle car trailing cable?*

- a) Four (4). After fifth, changes must be made before operating machine.

26) *How often should a shuttle car operator check his cable?*

- a) The machine operator shall examine the exposed portion of the trailing cable for his machine at the beginning of each shift for abrasions and other defects. The remainder of the trailing cable shall be examined within the first hour upon arrival of the producing shift in the working section.

27) *What do you do if the shuttle car is arcing or sparking?*

- a) Shut down, pull power, inform foreman.

28) *What is the minimum quantity of air required across the last open crosscut?*

- a) Nine thousand (9,000) cubic feet per minute.

29) *What explosive gas is most likely to be found in a battery charging station?*

- a) Hydrogen.

30) *What is the most prevalent hazardous gas found in bituminous coal mines?*

- a) Methane

31) *What is black damp?*

- a) Oxygen deficiency

32) *Where is black damp most likely to be found?*

- a) Abandoned or poorly ventilated mines.

33) *If, as a miner, you would find a check curtain down, what would you do?*

- a) Tell your foreman.

34) *What is the single biggest cause of fatalities in coal mines?*

- a) Falls of roof and coal.

35) *What would you do if you discovered a small fire in the mine?*

- a) First, try to extinguish it. Then, if you cannot extinguish it, notify your foreman and any person who may be in by the fire.

36) *When operating a shuttle car, what direction should the headlights be on?*

a) Direction of travel.

37) *When operating a shuttle car, what direction should the operator be facing?*

a) Direction of travel.

38) *How many apprentice miners are permitted to work with a certified individual?*

a) Two.

39) *Where do you apply rock dust?*

a) Roof, ribs, and bottom.

40) *Why do you use rock dust?*

a) To neutralize the combustibility of coal dust.

41) *Why do we have mine examiners?*

a) To examine the mine to determine whether it is safe for person to enter.

42) *What would you do if the roof conditions got so bad that you did not think you could make the place safe?*

a) Danger off all entrances to the area and report it to your foreman.

43) *When should people get on or off mantrips?*

a) When the mantrip is at a complete stop.

44) *Where is it safe to cross a belt conveyor?*

a) At crossover/crossunder locations.

45) *Why is a pull cord installed a long the belt line?*

a) To stop the belt in the event of an emergency.

46) *As a miner working on the longwall face, you hear the audio alarm. What does this indicate?*

a) The face conveyor coal chain is about to be started.

- 47) *Where are you permitted to travel on the longwall face?*
- a) Travel is permitted only under the shields.
- 48) *While working on the longwall headgate, you need to set jacks or timbers on the face side of the crusher. What safety precautions would you take?*
- a) Cross only at the stage loader crossover
  - b) Be aware of the location of the shear
  - c) Stay clear of the crusher
  - d) Evaluate your roof and rib conditions
  - e) Wear safety glasses
- 49) *As a miner, you are investigating why a main line belt is down and find the drive and take-up jammed with coal and rock. What procedures would you take before removing the guarding?*
- a) Shut off and lock out the nearest stop switch
  - b) Disconnect and tag the belt drive power supply
  - c) Notify the mine official in charge
- 50) *When are you permitted to travel inby supported roof?*
- a) Traveling inby supported roof is prohibited unless installing roof supports.
- 51) *What items of personal protective equipment are you required to wear underground?*
- a) Hard hat, glasses, leg bands, protective footwear, SCSR, protective gloves, snug fitting clothing.
- 52) *What governs the speed of mantrips?*
- a) The speed of mantrips shall be governed by the mine foreman and shall be operated at safe speeds consistent with road conditions and type of equipment used.
- 53) *What do you check on a mantrip pre-operational check?*
- a) Lights, sanders, safety chains, jack, bar, cleanliness of equipment, warning devices, SCSRs, brakes, mechanical functions, battery condition.
- 54) *What should you do if you find smoking articles in your pocket after going in the mine?*
- a) Report it to your foreman or a mine official.