

## 2012 KCA Pre-shift Contest – Written Examination

Put the correct letter ( A, B, or C) in the blank.

- Ventilation shall be sufficient to keep methane percentage in the return of any split to not more than \_\_\_\_\_%.  
a. 1                              b. 1.5                              c. 2\*
- Mantrips shall be operated at a safe speed, in no event at a speed in excess of \_\_\_\_\_ mph.  
a. 10                              b. 12\*                              c.15
- Caches of self rescuers shall be examined at least once each \_\_\_\_\_.  
a. day                              b. week\*                              c. month
- The volume of gas increases as barometric pressure decreases.  
a. true\*                              b. false
- Blackdamp is an atmosphere in which oxygen content is less than \_\_\_\_%.  
a. 19.5                              b.12                              c.16\*
- What minimum space shall be provided for the passage of personnel near stationary electrical equipment ?  
a.2.5 feet                              b. 3 feet\*                              c. 3.5 feet

7. The 2<sup>nd</sup> fundamental of first aid is \_\_\_\_\_.

a. care of dislocations & fractures

b. restore breathing

c. control bleeding\*

8. A broken bone should be straightened, if possible, before splinting.

a. true

b. false\*

9. Class \_\_\_\_\_ fires involve flammable liquids.

a. A

b. B\*

c. C

10. Which gas should be absent from air samples before an attempt is made to unseal a mine fire

a. Methane

b. Carbon Dioxide

c. Carbon Monoxide\*

11. The minimum amount of oxygen allowed in mine air is \_\_\_\_\_ %.

a. 21

b. 19.5\*

c. 16

12. For ventilation purposes, total mine resistance can be determined where?

a. last open crosscut

b. return split

c. at the fan\*

13. What is the most Nitrogen Dioxide (NO<sub>2</sub>) that can be present in mine air ?

a. 10ppm

b. 25ppm

c. 3ppm\*

14. Carbon Monoxide is a non-explosive gas.

a. true

b. false\*

15. The approximate ignition temperature of methane is \_\_\_\_\_.

- a. 935 degrees                      b. 655 degrees                      c. 1200 degrees\*

16. No person who works in close proximity to diesel equipment shall be permitted to work more than a \_\_\_\_\_ hour continuous shift.

- a. 8    b. 10\*    c. 12

17. Any opening that is more than \_\_\_\_\_ feet wide shall be supported by a combination of roof bolts and conventional support(or longer bolts).

- a. 16    b. 18    c. 20\*

18. \_\_\_\_\_ means a person certified by the commissioner to perform particular work duties in & around a coal mine.

- a. qualified person                      b. experienced miner                      c. certified person\*

19. Manddoors shall be installed on the intake & return at intervals not to exceed \_\_\_\_\_ feet when the height of the coal is above 48”.

- a. 300    b. 500\*    c. 600

20. The mine foreman or his assistants shall visit & examine each working place in the mine at least every \_\_\_\_\_ hours while miners are at work.

- a. 2    b. 4\*    c. 8

21. At least \_\_\_\_\_ EMT(s) or MET(s) are required on every production shift.

- a. 2\*    b. 1    c. 3

22. Low voltage means up to & including \_\_\_\_\_ volts.

a. 220

b. 440

c. 660\*

23. Mine fans must be offset at least \_\_\_\_\_ feet to 1 side or above the opening.

a. 10

b. 15\*

c. 20

24. \_\_\_\_\_ is air that has ventilated all working places on the split.

a. Intake air

b. Neutral air

c. Return air\*

25. While equipment is operated at the face, an examination for gas will be made at not more than \_\_\_\_\_ minute intervals.

a. 15

b. 20\*

c. 25