Week 8 Assignment

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Due on 2018-10-03, 23:59 IST.

1) The instrument “Cross-sectioner” used for __________ measurement.
   - (a) Noise
   - (b) Vibration
   - (c) Illumination
   - (d) Overbreak

No, the answer is incorrect.
Score: 0
Accepted Answers:
(d) Overbreak

2) Which of the following has poor water resistant property?
   - (a) ANFO
   - (b) Slurry explosives
   - (c) Emulsion explosives
   - (d) NG based explosives

No, the answer is incorrect.
Score: 0
Accepted Answers:
(a) ANFO

3) In the Moh’s scale of hardness, the minerals in increasing sequence of hardness are
   - (a) calcite, gypsum, topaz, diamond
   - (b) topaz, gypsum, calcite, diamond

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4) At a surface mine office, the independent Sound Pressure Level (SPL) measured in dB(A) on account of 3 drill machines are 85, 88 and 85. If all the three machines work simultaneously, the combined SPL, in dB(A) is

- (a) 91
- (b) 90
- (c) 92
- (d) 94

No, the answer is incorrect.
Score: 0
Accepted Answers: (a) 91

5) What is the sound power level of a sound source radiating energy at a rate of 0.2 W?

- (a) 110 dB
- (b) 112 dB
- (c) 113 dB
- (d) 120 dB

No, the answer is incorrect.
Score: 0
Accepted Answers: (c) 113 dB

6) A coal heading 4m wide and 2.5m high has an advance of 1m per blast round. The amount of explosive used in blasting is 6 kg, taking specific gravity of coal as 1.5, the powder factor (tonne/kg) is

- (a) 1.66
- (b) 2.99
- (c) 2.50
- (d) 3.32

No, the answer is incorrect.
Score: 0
Accepted Answers: (c) 2.50

7) Identify the different damage zones based on the given figure

1. End break
2. Underbreak
3. Backbreak
4. Overbreak

- (a) P-1, Q-2, R-3, S-4
8) A SDL (discharge machine) of 1.0 tonne capacity operates with a cycle time of 6 minutes. The dimension of the underground face is 4 m x 3 m. Five blasts are conducted per shift with an average pull of 1.2 m in each blast. If the density of blasted coal is 1.4 tonne/m³, the time required by the SDL in the shift to lift all the prepared coal in hour is ___________.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(c) P-4, Q-2, R-3, S-1

9) The weight strength of ANFO of specific gravity 0.8 is 912 kcal/kg. The weight strength of an emulsion explosive of specific gravity 1.2 is 1824 kcal/kg. Bulk strength of the emulsion explosive relative to ANFO in percentage is ____________

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 299, 301

10) Six detonators each having resistance of 1.5 ohm are connected in parallel. A 15 V exploder is connected to the detonators by two single-core cables of resistance 3 ohm each. The current in the circuit in Ampere is ____________

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 2.3, 2.5

11) Two rows of holes are blasted by using ANFO as per the given delay numbers and the charge per hole is 90 kg. Then by
using the below given vibration predictor equation, find out the vibration level in PPV at a distance of 200 m from the last row of the blast holes. \( PPV = K(R\sqrt{W})^{-\beta} \). Where, \( K = 700, \beta = 1.4, R = \) distance from the last row to the point of interest, \( W = \) maximum charge weight per delay.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 29,32

Two rows of holes are blasted by using ANFO as per the given delay numbers and the charge per hole is 90 kg. Then by using the below given vibration predictor equation, find out the vibration level in PPV at a distance of 200 m from the last row of the blast holes.

\( PPV = K(R\sqrt{W})^{-\beta} \)

Where, \( K = 700, \beta = 1.4, R = \) distance from the last row to the point of interest, \( W = \) maximum charge weight per delay.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 24,27