

Telangana State Council Higher Education

Notations :

1.Options shown in green color and with icon are correct.

2.Options shown in red color and with icon are incorrect.

Question Paper Name :	2022-08-04 14:1 6:33
Subject Name :	120
Creation Date :	120
Duration :	120
Total Marks :	Yes
Display Marks:	None
Calculator :	No
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console?	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No
Mining Engineering 4th Aug 2022 Shift 1	No
Mining Engineering	No

Mining Engineering

Group Number :	
Group Id :	34058052
Group Maximum Duration :	
Group Minimum Duration :	120
Show Attended Group? :	No

Edit Attended Group? : No
 Break time :
 Group Marks : 120
 Is this Group for Examiner? : No
 Examiner permission : Cant View
 Show Progress Bar? : No

Mathematics

Section Id : 34058096
 Section Number : 1
 Section type : Online
 Mandatory or Optional : Mandatory
 Number of Questions : 10
 Number of Questions to be attempted : 10
 Section Marks : 10
 Enable Mark as Answered Mark for Review and Yes
 Clear Response :
 Maximum Instruction Time :
 Sub-Section Number : 1
 Sub-Section Id : 34058096
 Question Shuffling Allowed : Yes
 Question Number : 1 Question Id : 3405806121 Question Type : MCQ Option Shuffling : Yes
 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
 Correct Marks : 1 Wrong Marks : 0

One of the eigen values of $\begin{bmatrix} 4 & 5 \\ 7 & 8 \\ 10 & 11 \end{bmatrix}$ is $\frac{6}{12}$

Options :
34058024481.

34058024482. 1

34058024483. 2

34058024484. 3

Question Number : 2 Question Id : 3405806122 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

An eigen vector corresponding to eigen value 6 of the matrix $\begin{bmatrix} 1 & 2 & 3 \\ 3 & 1 & 3 \\ 3 & 1 & 2 \end{bmatrix}$

Options :

34058024485. ✘ $(-1, 1, 1)$

34058024486. ✔ $(1, 1, 1)$

34058024487. ✘ $(1, -1, 1)$

$(1, 1, -1)$

34058024488. ✘

Question Number : 3 Question Id : 3405806123 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The rank of the

$$\begin{bmatrix} -1 & 0 & 2 & 1 \\ -2 & 1 & 3 & 2 \\ 1 & 7 & 4 & 1 \\ 1 & 9 & 5 & \end{bmatrix}$$

Options :

34058024489.

2

34058024490.

3

34058024491.

34058024492. 8 4

Question Number : 4 Question Id : 3405806124 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\lim_{x \rightarrow \frac{\pi}{4}} \frac{\tan x - \tan 2x}{x - \frac{\pi}{4}}$$

Options :

1

34058024493. 8 4

1

34058024494. ✖ 4

4

1

34058024495. 2

1

34058024496. 8 2

Question Number : 5 Question Id : 3405806125 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\sum_{n=1}^{\infty} \frac{1}{n(n+1)(n+2)(n+3)} =$$

Options :

1

16

34058024497. 8

1

34058024498. 18

1

34058024499. 20

1

34058024500. ✖ 21

Question Number : 6 Question Id : 3405806126 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The directional delivative of $f(x, y) = e^{xy}$ at the point (0, 1) in the direction of $i+j$ is

Options :

34058024501.

34058024502.

34058024503.

34058024504.

Question Number : 7 Question Id : 3405806127 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let C be the ellipse $\frac{x^2}{16} + \frac{y^2}{9} = 1$, then $\int_C (3x dy + 2y dx) =$

Options :

34058024505. 8 67t

34058024506. 8 107t

127t

34058024507.

s: 147t

34058024508.

Question Number : 8 Question Id : 3405806128 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Using Lagrange's interpolation, the polynomial of smallest degree which passes through (0, 0), (1, 1), and (2, 1) is $y = ax + bx^2$, where $b =$

Options :

34058024509. $\frac{1}{2}$

34058024510. $\frac{1}{2}$ Question Number : 9 Question Id : 3405806129 Question Type : MCQ Option Shuffling : Yes

34058024511. $\frac{1}{4}$ Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

34058024512. $\frac{8}{2}$ If $y = ax + b$ is the particular integral of $y'' - y - 20y = I - 2x$, then $20a + b =$

Options :

34058024513. -1
100

34058024514. $\frac{-1}{400}$

-1

300

34058024515.

-1

34058024516. 200

Question Number : 10 Question Id : 3405806130 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of $3y'' - 11y' - 4y = 3$ is

Options :

34058024517.
$$y = ae^{-3x} + be^{4x} + \frac{3}{4}$$

34058024518. 8
$$y = ae^{-3x} + be^{4x} + \frac{3}{2}$$

34058024519. 8
$$y = ae^{-3x} + be^{-4x} + \frac{3}{4}$$

34058024520. ✓
$$y = ae^{-3x} + be^{4x} - \frac{3}{4}$$

Mining Engineering

Section Id : 34058097

Section Number : 2

Section type : Online

Mandatory or Optional : Mandatory

Number of Questions : 110

Number of Questions to be attempted : 110

Section Marks : 110

Enable Mark as Answered Mark for Review and Yes

Clear Response :

Maximum Instruction Time :

Sub-Section Number : 1

Sub-Section Id : 34058097

Question Shuffling Allowed : Yes

Question Number : 11 Question Id : 3405806131 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

As per ISRM standards, the recommended weight of the roughly spherical rock lumps to be used for determining the slake durability index in the laboratory is

Options :

Ten rock lumps each weighting 20 to 40 grams subject to a total of 250 to 350 g.

34058024521. 8

Ten rock lumps each weighting 40 to 60 grams subject to a total of 400 to 600 g.

34058024522.

Ten rock lumps each weighting 70 to 80 grams subject to a total of 750 to 850 g.

34058024523. 8

✘ Fifteen rock lumps each weighting 30 to 40 grams subject to a total of 500 to 550

34058024524.g.

Question Number : 12 Question Id : 3405806132 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If the Young's modulus of elasticity is E and Poisson's ratio is v then the Modulus of rigidity (G) of a rock sample is given by

Options :

34058024525. ✘
$$G = \frac{E}{2(1-v)}$$

34058024526. 8
$$G = \frac{E}{(1-2v)}$$

34058024527. ✓
$$G = \frac{E}{2(1+v)}$$

$$G = \frac{E}{(1 + 2\nu)}$$

34058024528. s:

Question Number : 13 Question Id : 3405806133 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Protodyaknov index test gives the approximate value of

Options :

34058024529. Shear strength of rocks

34058024530. 8 Tensile strength of rocks

Compressive strength of rocks

34058024531.

Flexural strength of rocks

34058024532.

Question Number : 14 Question Id : 3405806134 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The following parameter is not included in Bieniawski Geo-mechanical rock classification system

Options :

Intact strength of rock

34058024533.

Rock Quality Designation

34058024534. s:

Ground water condition
34058024535.

Slake Durability index of rock 34058024536.

Question Number : 15 Question Id : 3405806135 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The improved and fast method of removing rock core in exploratory drilling
is using

Options :

Bum side safety boring system 34058024537.

34058024538. Using double tube core barrel drilling system

Wire line drilling
34058024539.

34058024540. Chum drilling

Question Number : 16 Question Id : 3405806136 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The device used to prevent undue swinging of the bucket in a sinking shaft is

Options :

34058024541.

Rope capel

Rider An•angement

34058024542. 8

Detaching hook

34058024543.

34058024544. 8 Walling scaffold guides

Question Number : 17 Question Id : 3405806137 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The method of shaft sinking reconmended through loose deposits of sand up to 20 m from the surface is

Options :

s: Cementation

34058024545.

Piling 34058024546.

34058024547. 8 Tubbing

Pneumatic caisson

34058024548.

Question Number : 18 Question Id : 3405806138 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The ratio of constituents (TNT: AN: Water) in a slurry explosive is

Options :

34058024549. ✘ 20:15:65

34058024550. ✘ 15:20:65

34058024551. ✔ 20:65:15

34058024552. 8 65:15:20

Question Number : 19 Question Id : 3405806139 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In an opencast blasting, the bench height is 8 m, length of sub grade

drilling is 1.0 m the burden and spacing are 6m and 5 m. If the density of the mineral is 1.5 t/m³ and the explosive consumption is 30 kg, then the approximate powder factor would be

Options :

34058024553. 12

34058024554. 5.3

13.5

34058024555.

34058024556. 6.0

Question Number : 20 Question Id : 3405806140 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The equivalent resistance of three similar roadways of 0.09 N s m^{-8} resistance connected in parallel is

Options :

$0.27 \text{ N s}^{-8} \text{ m}^{-3}$ 34058024557.

s:

0.03 N e m^{-8}

34058024558.

$0.0033 \text{ N e m}^{-8}$

34058024559.

$0.01 \text{ N s}^{-8} \text{ m}^{-3}$

34058024560.

Question Number : 21 Question Id : 3405806141 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A centrifugal fan produces $7,200 \text{ m}^3/\text{min}$ of air at a pressure of 20 of Wg , then the Air Horse Power generated by the fan is given as

Options :

34058024561.

34058024562. 32

144

34058024563.

34058024564. 72

Question Number : 22 Question Id : 3405806142 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The bearing of line AB and BC are 210° and 80° respectively. Then the included angle LABC is

Options :

500

34058024565.

1300

34058024566.

700

34058024567.

34058024568.

2900

Question Number : 23 Question Id : 3405806143 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The first fully mechanised longwall face with powered supports was
introduced in India is

Options :

34058024569. Moonidih colliery

34058024570. ✖ Sudamdih colliery

34058024571. s: Jitpur colliery

34058024572. ✖ Chasnallah Colliery

Question Number : 24 Question Id : 3405806144 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The type of stone dust baniers recommended for Indian coal is

Options :

Indian type 34058024573.

Blitish type

34058024574.

34058024575.

German type

8

34058024576. Polish type

Question Number : 25 Question Id : 3405806145 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Graham 's ratio is defined as

Options :

$\frac{\text{CO Produced \%}}{\text{CO2 Consumed \%}} \times 100$

$\frac{\text{CO produced \%}}{\text{CO2 consumed \%}} \times 100$

34058024578. s: Nitrogen increase %

$\frac{\text{CO2 produced \%}}{\text{oxygen deficiency \%}} \times 100$

34058024579. 8

$\frac{\text{methane produced \%}}{\text{oxygen deficiency \%}} \times 100$

34058024580. ✖ oxygen deficiency %

Question Number : 26 Question Id : 3405806146 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Options :

34058024581.

Based on Coward Inflammability diagram, a methane and air mixture containing 9.5% methane and 20% oxygen can be classified as

s: Not capable of forming explosive mixture with air

Explosive

34058024582. 8

Mixture which cannot be produced from methane and air

34058024583.

34058024584. ✖ Capable of forming explosive mixture with air

Question Number : 27 Question Id : 3405806147 Question Type : MCQ Option Shuffling

: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Internal rate of return (IRR) of a project is the discount rate at which

Options :

34058024585. Net Present Value of all cash flows is zero

34058024586. ✖ Net Present Value of all cash flows is maximum

34058024587. ✖ Net Present Value of all cash flows is minimum

34058024588. 8 Net Present Value of all cash flows is optimum

Question Number : 28 Question Id : 3405806148 Question Type : MCQ Option Shuffling

: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Hoolamite tube is used to detect gas

Options :

34058024581.

8 CH4

CO

34058024590.

34058024591. S02

34058024592.

Question Number : 29 Question Id : 3405806149 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks :

A self rescuer is a / an

Options :

34058024593. Fresh air breathing apparatus

34058024594. Reviving apparatus

Self contained breathing apparatus

34058024595.

Escape apparatus

34058024596.

Options :

34058024581.

Question Number : 30 Question Id : 3405806150 Question Type : MCQ Option Shuffling

: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is an under set prop

Options :

34058024597. s: A prop which is not fully tightened to the roof

34058024598. ✖ A venical prop set nonnal to the seam inclination

34058024599. 8 A prop which tightened at the bottom

A prop which is so set that its axis is between the venical and nonnal to
34058024600. the seam

Question Number : 31 Question Id : 3405806151 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The air velocity in a ventilation duct is measured by

Options :

34058024601. Hot wire anemometer

Pitot static tube

34058024602.

Vane anemometer

34058024603.

Smoke cloud

34058024604. method

Question Number : 32 Question Id : 3405806152 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The type of shaft sinking recommended for fissured water bearing strata is

Options :

34058024605. Piling

34058024606. Pneumatic caisson

34058024607. ❌ Freezing

Cementation 34058024608.

Question Number : 33 Question Id : 3405806153 Question Type : MCQ Option Shuffling

: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The chemical used in the test tube to measure the deviation of boreholes in exploratory (drilling) is

Options :

34058024609. 8 Sulphuric acid

Nitric acid

34058024610. 8

Hydrofluoric acid

34058024611.

❌ Acetic acid 34058024612.

Question Number : 34 Question Id : 3405806154 Question Type : MCQ Option Shuffling

: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : O

Correct Marks : 1 Wrong Marks : O

The maximum permissible quantity of CO in underground atmosphere is

Options :

0.05% 34058024613.

0.5%

34058024614. 8

0.005% 34058024615.

0.0005%

34058024616.

Question Number : 35 Question Id : 3405806155 Question Type : MCQ Option Shuffling

: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : O

Correct Marks : 1 Wrong Marks : O

Antitropical ventilation means

Options :

34058024617. 8 The mineral and ventilating air move in the same direction

The mineral and ventilating air move in the opposite direction

34058024618.

The Intake air flows unidirectional from the intake to return through

34058024619. 8 Workings

The intake and return air from any district travel in opposite direction

34058024620. through parallel roadways

Question Number : 36 Question Id : 3405806156 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Pressure equalisation by consuucting pressure chamber is a method to
Control

Options :

34058024621. ✖ Fire damp explosion

34058024622. ✔ Mine fires

✖ Coal dust explosion

34058024623.

Recirculation mine air

34058024624.

Question Number : 37 Question Id : 3405806157 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The vibrations produced due to blasting primalily consist of

Options :

34058024625. ✖ Only body waves

✖ Only surface waves

34058024626.

Both body and sulface waves

34058024627.

34058024628. Only air waves

Question Number : 38 Question Id : 3405806158 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0 Self generating oxygen breathing apparatus used in nune rescue uses the following chemical to absorb C02

Options :

34058024629. Potassium Nitrate

Sodium Hydroxide

34058024630. ✖

Sodium phosphate

34058024631. ✖

Potassium

34058024632. tetroxide

Question Number : 39 Question Id : 3405806159 Question Type : MCQ Option Shuffling

: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If P is the failure load and D is the diameter of the rock sample, then. the Point Load Index (PLI) of a rock sample is calculated as per the following Equation Options

:

$$\frac{P}{\pi D^2/4}$$

34058024633. ✖ $\pi D^2/4$

34058024634.

P/D2

2P/D2

34058024635.

Question Type : MCQ Option Shuffling : Yes

2

34058024636. s: 4P / D

Question Number : 40 Question Id : 3405806160

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Hydraulic fracturing test is used to measure

Options :

34058024637. Leg pressure in longwall supports

In situ stresses in the rock

34058024638.

✘ 34058024639. situ tensile strength of coal pillars In

✘ Bending strength of coal pillars

34058024640.

Question Number : 41 Question Id : 3405806161 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Direct rope haulage is best suited for_____

Question Type : MCQ Option Shuffling : Yes

Options :

34058024641. Level ground

Undulating gradient

34058024642.

34058024643. ✓ Steep gradient

34058024644. Undulating and steep gradient

Question Number : 42 Question Id : 3405806162 Display Question Number : Yes Is

Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

As per CNR, 2017, the haulage ropes have to recapped at least once 111

Options :

34058024645. 8 a year

Six

34058024646. months

3 1/2 years

34058024647. ✖

34058024648. s: | years

Question Number : 43 Question Id : 3405806163 Question Type : MCQ Option Shuffling

: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Question Type : MCQ Option Shuffling : Yes

What inference can be drawn when contour lines lie far apart

Options :

34058024649. Depressed land

34058024650. ✖ Slope of the land is steep

34058024651. ✔ Land is gently sloping

34058024652. Ⓜ Ridge

Question Number : 44 Question Id : 3405806164

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

GIS stands for

Options :

Global information system

34058024653.

34058024654. Ⓜ Geological Information system

✔ Geographical Information system

34058024655.

34058024656. Ⓜ Group Information system

Question Type : MCQ Option Shuffling : Yes

Question Number : 45 Question Id : 3405806165 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In Mahabir Colliery of ECL on 13.11.1989, 65 trapped persons were rescued from underground with help of rocket shaped metal capel. The incident occurred due to

Options :

34058024657. ✖ Explosion

Inundation 34058024658.

Mine fire 34058024659.

34058024660. 8 Failure of Longwall face

Question Number : 46 Question Id : 3405806166 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The factor of safety used in the design of winding rope is

Options :

100

34058024661. 8

s: 2

34058024662.

34058024663.

34058024664.

Question Number : 47 Question Id : 3405806167 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Froth flotation technique involves

Options :

Separation of hydrophobic minerals from hydrophilic materials

34058024665.

34058024666. Separation of Ininerals using difference of their specific gravities
Separation of minerals using the size of the minerals
34058024667. s:

Separation of minerals using the shape of the mmerals
34058024668.

Question Number : 48 Question Id : 3405806168 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : O

Correct Marks : 1 Wrong Marks : O

Maximum damage to haulage rope caused due to

Options :

34058024669. ✖ Fatigue

Conosion

34058024670.

Wear and tear

34058024671.

34058024672. Mine climate

Question Number : 49 Question Id : 3405806169 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : O

Correct Marks : 1 Wrong Marks : O

The Rock mass classification systems that consider 'active stress' factor is

Options :

34058024673. Q-system

RMR 34058024674.

34058024675. 8 RQD

GIS

34058024676.

Question Number : 50 Question Id : 3405806170 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The velocity of the wave type that determines the 'rippability' of rock mass is

Options :

34058024677. ✖ S wave

Love wave

34058024678.

34058024679. Back wave

P wave

34058024680.

Question Number : 51 Question Id : 3405806171 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

India's coal production during the year 2021-22 has touched more than

Options :

34058024681. 770 million tonnes

622 million tonnes

34058024682. 8

555 million tonnes
34058024683.

450 million tonnes
34058024684.

Question Number : 52 Question Id : 3405806172 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Dividend is distributed to the following type of investors

Options :

34058024685. 8 Company depositors

34058024686. Credit holders

34058024687. Ordinary share holders

Debenture holders
34058024688.

Question Number : 53 Question Id : 3405806173 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Balance sheet is a financial statement depicting

Options :

Debit and credit accounts of a company
34058024689. 8

Profit and loss statement of a company
34058024690.

34058024691. Assets and liabilities of a company

34058024692. Financial budget of a company

Question Number : 54 Question Id : 3405806174 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The following form of ore reserve estimation makes basis for preparation
of Detailed Project Report for exploitation of ore reserves.

Options :

Infined reserves
34058024693.

Measured reserves
34058024694.

Indicated reserves
34058024695.

Possible reserves 34058024696.

Question Number : 57 Question Id : 3405806177 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Clifton pulley is used in

Options :

34058024705. s: Belt conveyors

34058024706. ✖ Aerial ropeways

Endless rope
haulage

34058024707.

34058024708. 8 Scraper haulage

Question Number : 58 Question Id : 3405806178 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The Primary pupose of cut holes for blasting in an underground dlivage is

Options :

34058024709. To reduce noise

34058024710. ✖ To percent over-breakage

To create smooth surface after blasting
34058024711.

34058024712. To provide free face additionally

Question Number : 59 Question Id : 3405806179 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

As per CYR 2017, in underground mines, the percentage of inflammable gas in the general body of the return air of any ventilating district should not exceed

Options :

34058024713. 1.25

34058024714. 0.75

34058024715. 0.5

4.8

34058024716.

Question Number : 60 Question Id : 3405806180 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Mmat is a day as per Mines Act 1952

Options :

34058024717.

A period of 24 hours beginning at first shift of the mine

34058024718.

A period of 24 hours beginning at mid night

34058024719.

34058024720. A period of 24 hours beginning as decided by the mine managements
A period of 24 hours beginning from sun rise

Question Number : 61 Question Id : 3405806181 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Over winding of cage in an underground shaft is prevented by an appliance Called

Options :

Detaching hook

34058024721.

Safety catch

34058024722. 8

34058024723. 8 Headgear sheave

Keps

34058024724. 8

Question Number : 62 Question Id : 3405806182 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The type of roof bolts used in water holes is

Options :

Slot and wedge

34058024725.

Perfo bolt

34058024726.

Expansion shell type

34058024727. 8

Resin bolts 34058024728.

Question Number : 63 Question Id : 3405806183 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : O

Correct Marks : 1 Wrong Marks : O

As per CMR, in every underground mine, there should be two means of egress separated from one another at a distance of at least

Options :

34058024729. 8 9m

34058024730. 8 20 m

13.5 m

34058024731.

34058024732. 8

Question Number : 64 Question Id : 3405806184 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : O

Correct Marks : 1 Wrong Marks : O

As per mines Regulations, the minimum age of the Nfine Manager should be

Options :

34058024733. ✖ 21 years

23 years ✔ 34058024734.

34058024735. 8 25 years

34058024736. NO age limit

Question Number : 65 Question Id : 3405806185 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : O Correct Marks : 1 Wrong Marks : 0

The following is the method of determining tensile strength of rocks as per ISRM standards

Options :

34058024737. ✖ Direct tensile test

Modulus of rupture test

34058024738. 8

34058024739. s: Ring test

Brazilian test

34058024740.

Question Number : 66 Question Id : 3405806186 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : O Correct Marks : 1 Wrong Marks : 0

Cassiterite is an ore of

Options :

Platinum

34058024741 ,

Tin

34058024742.

34058024743. s:

Titanium

34058024744. ✖ Mercury

Question Number : 67 Question Id : 3405806187 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

World's second largest producer of coal is

Options :

Australia

34058024745.

USA

34058024746.

Russia

34058024747.

India

34058024748.

Question Number : 68 Question Id : 3405806188 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the type of slope failure in waste dumps

Options :

Planar 34058024749.

34058024750. 8 wedge

34058024751. Circular

34058024752. ☒ Toppling

Question Number : 69 Question Id : 3405806189 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Unit for measurement of Blast induced ground vibrations is

Options :

34058024753. 8 decibels

mm/sec

34058024754.

34058024755. 8 Hertz

34058024756. 8 mm/sec²

Question Number : 70 Question Id : 3405806190 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A mine safety lamp is used to detect

Options :

Percentage of methane

34058024757.

34058024758. s: Estimate oxygen deficiency

34058024759. 8 Percentage of carbon monoxide

34058024760. ✓ Option 1 and 2 only

Question Number : 71 Question Id : 3405806191 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The minimum safe distance to be maintained during the drilling of advance boreholes while approaching water logged workings in underground mines is

Options :

34058024761. ✓ 3.0 m

34058024762. 8 2.5 m

34058024763. 8
2.0m

1.5 m

34058024764.

Question Number : 72 Question Id : 3405806192 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The atmospheric condition behind the isolation stoppings (except in case of explosion proof stoppings and unit to seal off goat) shall be ascertained at least once in everydays

Options :

34058024765. 8 15 days

34058024766. 30 days

34058024767. 8 45 days

90 days

34058024768.

Question Number : 73 Question Id : 3405806193 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The term "alidade" is associated with

Options :

34058024769. 8

Chain sutveying

34058024770. 8 Photogrammeüy

34058024770. 8

Plane table suweying

34058024771.

34058024772. Total Station

Question Number : 74 Question Id : 3405806194 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The difference between surface contour levels and underground spot levels Indicates

Options :

34058024773. 8 The distance between the roof and surface

34058024774. 8 ✖ The elevation of the underground point from the MSL

34058024775. 8 The paning thickness between two successive seams

34058024776. 8 Depth of the underground workings

Question Number : 75 Question Id : 3405806195 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the correction to departure of any side in traversing

Options :

34058024777. Connection = total error in departure x $\frac{\text{length of side to be corrected}}{\text{perimeter of the traverse}}$

34058024778. Connection = total error in departure x $\frac{\text{length of side to be corrected}}{\text{arithmetic sum of all latitudes}}$

Conection = total enor in departure x _____length of
side to be corrected

34058024779. 8

arithmetic sum of all departures

Conection = total enor in depalture x $\frac{\text{departure of side to be corrected}}{\text{sum of alt latitudes of traverse}}$

34058024780. 8

sum of alt latitudes of traverse

Question Number : 76 Question Id : 3405806196 Question Type : MCQ Option Shuffling

: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The sum of extelior angles of a closed traverse of N sides is equivalent to

Options :

$$(N- 1) \times 90^0$$

34058024781.

$$(2N - 4) \times 90^0$$

34058024782.

$$(2N + 4) \times 90^0$$

34058024783.

$$(N +1) \times 180^0$$

34058024784.

Question Number : 77 Question Id : 3405806197 Question Type : MCQ Option Shuffling

: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The angle between obsewer meridian and declination circle is given by

Options :

34058024785. ✖ Nautical angle

34058024786. ✔ Hour angle

34058024787. 8 Right angle

34058024788. 8 Declination angle

Question Number : 78 Question Id : 3405806198 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Rittinger's law of crushing states that

Options :

Energy required to reduce the size of particle is proportional to the square of the volume ratio of the feed and product

For a given machine and feed, the crushing efficiency is dependent on the size of the feed and product

34058024789.

Work required for crushing the particles is proportional to the new surface created

34058024790.

Energy required to reduce the size of particle is proportional to the square root of the volume ratio of the feed and product

34058024791.

Question Number : 79 Question Id : 3405806199 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The method of separating mixtures of minerals into two or more products on the basis of the velocity with which the grains fall through a fluid medium is called as

Options :

34058024792. Thickening

Classification 34058024794.

34058024795. 8 Jiggmg

34058024796. ✖ Tabling

Question Number : 80 Question Id : 3405806200 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The process of settlement of solids in suspension under the influence of gravity in a tank to form a thick pulp is called as

Options :

34058024797. 8 Dense media separation

34058024798. 8 Classification

Conditioning 34058024799.

34058024800. ✔ Thickening

Question Number : 81 Question Id : 3405806201 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The process of mineral separation by flowing a stream of liquid-suspended material over a screen and subjecting the screen to a vertical hydraulic pulsation is called as

Options :

Spiral concentration

34058024801.

Jigging 34058024802.

Flotation

34058024803. 8

Dense media separation

34058024804.

Question Number : 82 Question Id : 3405806202 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The mineral used in heavy media separation of coal washing is

Options :

34058024805. 8 Quartz

34058024806. Baryte

34058024807. Magnetite

Hematite 34058024808.

Question Number : 83 Question Id : 3405806203 Question Type : MCQ Option Shuffling
: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Rutile is an ore of metal

Options :

s: Aluminium

34058024809.

Titanium

34058024810.

Gennanium

34058024811 .

Zircon

34058024812. 8

Question Number : 84 Question Id : 3405806204 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

To manage is to forecast and plan, to organize, to compound, to co-ordinate and to control. This definition was given by

Options :

34058024813. Peter F. Drucker

34058024814. Henry Fayol

Karl Mal*

34058024815.

Stewafi

34058024816. 8

Question Number : 85 Question Id : 3405806205 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

For determining RQD of rock mass, the rock core lengths of more than are considered.

Options : s: 5 cm

34058024817.

10 cm

34058024818.

12.5 cm

34058024819.

15 cm

34058024820.

Question Number : 86 Question Id : 3405806206 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Side discharge loaders (SDL) used in underground coalmines are

Options :

34058024821. Wheel mounted

Tyre mounted

34058024822. 8

34058024823. Crawler mounted

Skid mounted

34058024824.

Question Number : 87 Question Id : 3405806207 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which among the following geological features, the older rocks occur relatively at shallow depths over younger ones

Options :

Normal fault

34058024825.

Reverse fault 34058024826.

anticline

34058024827.

Unconformity

34058024828.

Question Number : 88 Question Id : 3405806208 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A water garland is constructed during

Options :

34058024829. ✖ Hydraulic mining

Creating a box cut in opencast mining

34058024830. 8

Tunnel driving

34058024831.

Shaft sinking

34058024832.

Question Number : 89 Question Id : 3405806209 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The coal formed in the nonli eastern region of India belong to

Options :

34058024833. Tertiary period

34058024834. Pennian period

34058024835. Gondwana period

34058024836. Cretaceous period

Question Number : 90 Question Id : 3405806210 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Pressure bumps in underground coal mines occur due to

Options :

Yielding of pillars

34058024837.

Sudden release of energy due to blasting

34058024838.

Failure of massive strong strata rupture in the overlying strata

34058024839.

34058024840. Direct failure of overstressed coal pillars

Question Number : 91 Question Id : 3405806211 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the symptom of impending roof fall in a depillaling district

Options :

34058024841. The prop when tapped with a stick produces a dull sound

✘ The prop when tapped with a stick produces a ringing sound

34058024842.

Loosening of prop

34058024843. 8

Sweating of coal pillars takes place

34058024844. 8

Question Number : 92 Question Id : 3405806212 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the suitable method of stoping in which production can be increased using induced blasting technique

Options :

Sub level stoping

34058024845.

34058024846. Square set stoping

34058024847. 8 Cut and fill stoping

34058024848.

Block caving

Question Number : 93 Question Id : 3405806213 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

During the extraction pillars in Bord and Pillar method of mining, the reduction of pillars is permitted up to a distance of _____

Options :

34058024849. Two pillars

34058024850. Four pillars

34058024851. Three pillars

34058024852. One pillar

Question Number : 94 Question Id : 3405806214 Question Type : MCQ Option Shuffling

: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The maximum life of winding rope in years is

Options :

34058024853. 3.0

34058024854. e 3.5

34058024848.

34058024855. 2 2.0

5.0

Question Number : 95 Question Id : 3405806215 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which is not an underground metal mining method

Options :

34058024857. Wongowalli method

Sub-level stoping method

34058024858.

Cut and Fill mining

34058024859. s:

VCR mining

34058024860.

Question Number : 96 Question Id : 3405806216 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A vertical opening driven downwards connecting two levels in an
mine is called as

Options :

34058024848.

34058024861. Drift

34058024862. Cross cut

Winze

Raise

34058024864.

Question Number : 97 Question Id : 3405806217 Question Type : MCQ Option Shuffling

: Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Mineral industry approximately contributes _____ % of GDP in Indian national economy in the year 2021

Options :

34058024865. 1 2

34058024866. 2.5

34058024867. ✖ 5.5

34058024868. s: 8.6

Question Number : 98 Question Id : 3405806218 Question Type : MCQ Option Shuffling

: Yes

34058024848.

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0 Which is the

leading state in Mica production in India

Options :

Andhra Pradesh 34058024869.

34058024870. 8 Bihar

Jharkhand

34058024872. 8 Rajasthan

Question Number : 99 Question Id : 3405806219 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Majority of the accidents in Indian underground mines is caused due to

Options :

Roof fall

34058024873.

Inundation

34058024874. s:

Gas

34058024875. ✖ explosion

34058024848.

34058024876. Mine fires

Question Number : 100 Question Id : 3405806220 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The process of extraction of soluble metal compounds by reaction with acid or basic solvents or water is called as

Options :

34058024877. Hydraulicking

Leaching

34058024879. ✖ Dredging

34058024880. 8 Placer mining

Question Number : 101 Question Id : 3405806221 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The motive power for the jack harmner is derived from

Options :

34058024881. 8 Elecfrical power

34058024882. ✖ Diesel power

34058024848.

34058024883. Compressed air

Hydraulic power

34058024884. 8

Question Number : 102 Question Id : 3405806222 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

With reference to shaft sinking, a brine solution is made of

Options :

Calcium chloride

34058024885.

34058024886. Magnesium chloride

Ammonium chloride 34058024887.

s:

34058024888. s: Sodium chloride

Question Number : 103 Question Id : 3405806223 Question Type : MCQ Option
Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator :

None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Staggered junctions in underground panel development faces which of the following problems.

Options :

34058024889. ✘ Difficulty in setting props

Problem in laying transpon system

34058024890.

Problem in (hilling and blasting

34058024891. 8

34058024892. 8 Difficulty in ventilation survey

Question Number : 104 Question Id : 3405806224 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the type of mechanical stowing from the following

Options :

34058024893. s: Hydro-pneumatic stowing

34058024894. ✔ Throwing belts

Chamber type stowing machines

34058024895. 8

Stowing by underground

34058024896. ✖ boreholes

Question Number : 105 Question Id : 3405806225 Question Type : MCQ Option

Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator :

None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In India, coal seams having a thickness of are termed as thick seams.

Options :

34058024897. 8 3.0 m and more

34058024898. 9.0 m and more

4.8 m and more

34058024899.

1.5 m and more

34058024900. 8

Question Number : 106 Question Id : 3405806226 Question Type : MCQ Option

Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator :

None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The cause of majority of fatal and serious accidents occur in opencast mines are due to

Options :

34058024901. s: Side falls

Dumpers and trucks

34058024902.

Fall of persons and objects

34058024903. ✖

34058024904. ✖ Opencast machinery other than dumpers and trucks

Question Number : 107 Question Id : 3405806227 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The gradation of non-coking coal in India is based on

Options :

34058024905. Ash content alone

Ash and moisture content alone

34058024906.

Ash, moisture and gross calorific value

34058024907.

Gross Calorific Value (GCV) alone

34058024908.

Question Number : 108 Question Id : 3405806228 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the most appropriate formula to estimate the compressive strength of underground coal pillars.

Options :

34058024909. 8 Brady's formula

34058024910. Salamon's formula

34058024911. Aldis formula ✖

34058024912. Coulomb formula

Question Number : 109 Question Id : 3405806229 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Identify the controlled blasting technique among the following

Options :

Hydraulic fracttlling

34058024913. 8

Line drilling and pre splitting

34058024914.

Blasting by using permitted explosives

34058024915.

Blasting by using sluny explosives

34058024916.

Question Number : 110 Question Id : 3405806230 Question Type : MCQ Option
Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No
Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The purpose of the triggered water barriers in underground coal mines is

Options :

To control mine inundation

34058024917.

To control mine fires

34058024918. 8

34058024919. To control coal dust explosions

To control fire damp explosions

34058024920.

Question Number : 111 Question Id : 3405806231 Question Type : MCQ Option
Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator :
None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Lang's Lay means

Options :

Laying of concentric sheaths of wires in one direction around a central wire

34058024921.

Laying of individual wires to form a single stranded rope

34058024922. 8

Question Number : 110 Question Id : 3405806230 Question Type : MCQ Option
Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No
Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The wires and strands are wound in opposite direction
34058024923.

The wires and strands are wound in the same direction
34058024924.

The unit for measurement of illumination is

Options :

34058024925. s: Candela

Steradian

34058024926. 8

Lux

34058024927.

34058024928. s: Lumen

Question Number : 113 Question Id : 3405806233 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The main advantage of nonel initiating systems in blasting is

Options :

Delays can be set in increments of 1 to 6000 ms

34058024929.

Question Number : 110 Question Id : 3405806230 Question Type : MCQ Option
Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No
Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A pre detennined firing pattem can be programmed in advance

34058024930. 8

Not affected by stray electric cun•ent or electric hazard

34058024931.

Very cheap compared to detonating tube

34058024932.

Hirschbach method is a technique used in

Options :

34058024933. 8 Shaft correlation

collecting gas samples from sealed off areas

34058024934.

34058024935. 8 Stoping method

34058024936. Methane drainage

Question Number : 115 Question Id : 3405806235 Question Type : MCQ Option
Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator :
None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Accumulation test is conducted for

Options :

Question Number : 110 Question Id : 3405806230 Question Type : MCQ Option
Shuffling : Yes Display Question Number : Yes IS Question Mandatory : No
Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

34058024937. Detennining the circuit connectivity before blasting

34058024938. Determining the presence of gas using flame safety lamp

Detennining the percentage of gas using flame safety lamp inmine

34058024939. 8 atmosphere

34058024940.

s: Detennining the status of fire in the sealed off areas

Question Number : 116 Question Id : 3405806236 Question Type : MCQ Option

Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator :

None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Kriging is method of _____

Options :

34058024941. ✖

Spatial interpolation technique used m ore body modelling

34058024942.

34058024943. 8

Detennining the overall life of a mine

Determining stmctural parameter of a mineral deposit

Determining factor of safety of a ultimate pit limit

34058024944.

34058024940.

Question Number : 117 Question Id : 3405806237 Question Type : MCQ Option

Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator :
None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The base charge in an electric detonator consists of

Options :

Lead azide

34058024945. 8

34058024946. ✖ Lead styphnate

✖ Nitroglycelin

PETN 34058024948.

Question Number : 118 Question Id : 3405806238 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Discounted cash flow analysis is performed to determine

Options :

Amortization of equipment

34058024949. .

34058024950.

Net present value of a company

34058024951. 8

34058024940.

Depreciation of mining machineries used in the company

34058024952.

Question Number : 119 Question Id : 3405806239 Question Type : MCQ Option
Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator :
None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In hydraulic stowing, the ratio of sand to water (by volume) generally used
1:1 is

Options :

34058024953. 1 1

1 5

34058024955. 2 1

34058024956. .

Question Number : 120 Question Id : 3405806240 Question Type : MCQ Option
Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator :
None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Low shock and high detonation pressure explosive is generally used in

Options :

34058024957. Hard and jointed rock mass

34058024940.

34058024958. Soft and unconsolidated rocks

34058024959. ✎ Hard and massive intact rock
mass

Soft and massive intact rock mass

34058024960. 8