1.
3, 4, 7, 11, 18, 29,?
(A)
31
(B)
39
(C)
43
(D)
47
Answer: (D) 47
2.
AGMSY, CIOUA, EKQWC,, IOUAG, KQWCI
(A)
GMSYE
(B)
FMSYE
(C)
GNSYD

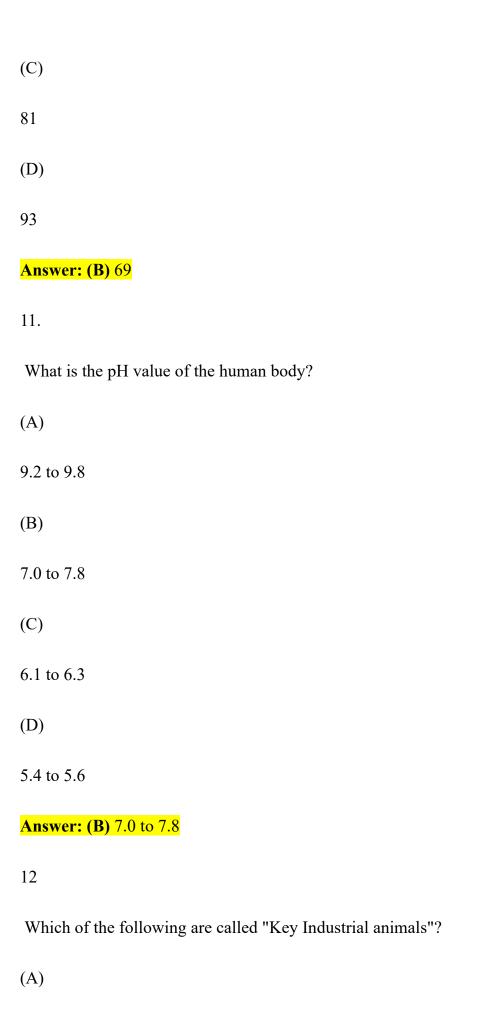
(D)
FMYES
Answer: (A) GMSYE
3.
975, 864, 753, 642,?
(A)
431
(B)
314
(C)
531
(D)
532
Answer: (C) 531
4.
8, 24, 12,, 18, 54
(A)
28
(B)

36
(C)
46
(D)
38
Answer: (B) 36
5
Ashok's mother was 3 times as old Ashok 5 years ago. After 5 years she will be twice
as old as Ashok. How old is Ashok today?
(A)
10 years
(B)
15 years
(C)
20 years
(D)
25 years
Answer: (B) 15 years

6.
M is the son of P. Q is the granddaughter of 0 who is the husband of P. How is M
related to O?
(A)
Son
(B)
Daughter
(C)
Mother
(D)
Father
Answer: (A) Son
7.
In a row of boys, Srinath is 7th from the left and Venkat is 12th from the right. If they
interchange their positions, Srinath becomes 22nd from the left. How many boys are
there in the row?
(A)

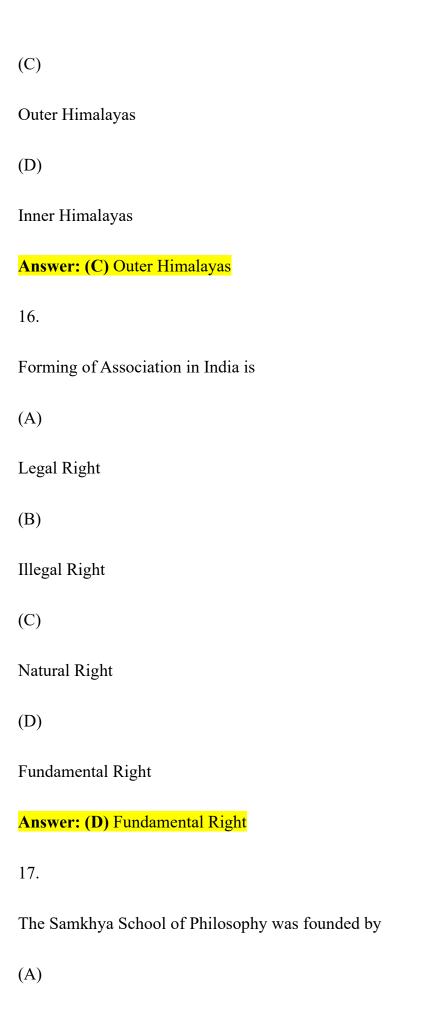
19
(B)
31
(C)
33
(D)
34
Answer: (C) 33
8.
Peter walked 8 kms. west and turned right and walked 3 kms. The again he turned
right and walked 12 kms. How far is he from the starting point?
(A)
7
(B)
9
(C)

Answer: (D) 8
9.
FGID : OPQR : : BCDE : ?
(A)
KLMJ
(B)
KLMN
(C)
IUVW
(D)
STUW
Answer: (B) KLMN
10.
17:60::20:?
(A)
57
(B)



Producers
(B)
Tertiary consumers
(C)
Primary consumers
(D)
None
Answer: (C) Primary consumers
13
Which of the given amendments made it compulsory for the president to consent to
the constitutional Amendment bills?
(A)
27th
(B)
29th
(C)
24th
(D)

Answer: (C) 24th
14.
Elections to panchayats in state are regulated by
(A)
Gram panchayat
(B)
Nagar Nigam
(C)
Election Commission of India
(D)
State Election Commission
Answer: (D) State Election Commission
15
Which of the following Himalayan regions is called "Shivalik's"?
(A)
Upper Himalayas
(B)
Lower Himalayas

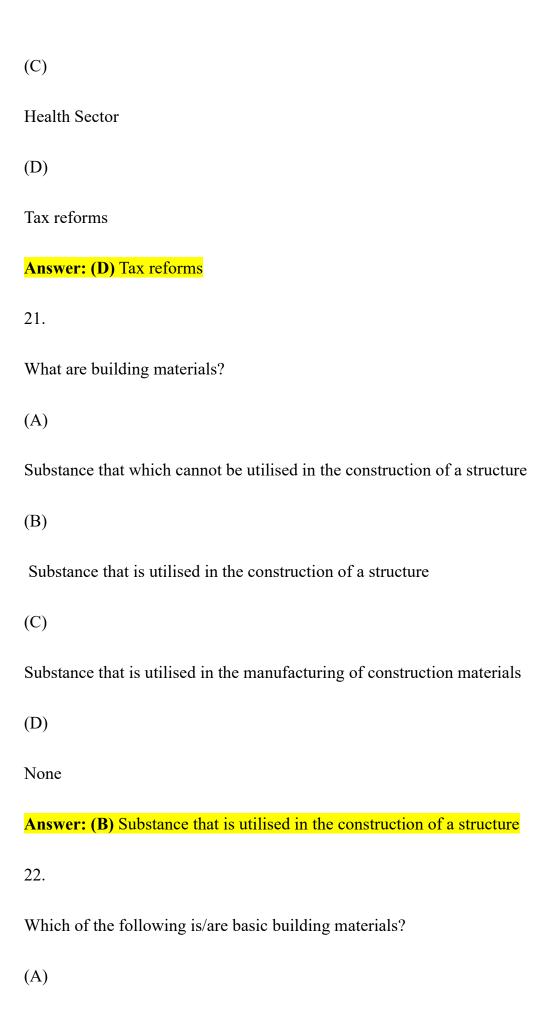


Gautam Buddha
(B)
Mahipala
(C)
Gopala
(D)
Kapila
Answer: (D) Kapila
18
Right to emergency medical aid is a
(A)
Legal Right
(B)
(B) Illegal Right
Illegal Right
Illegal Right (C)

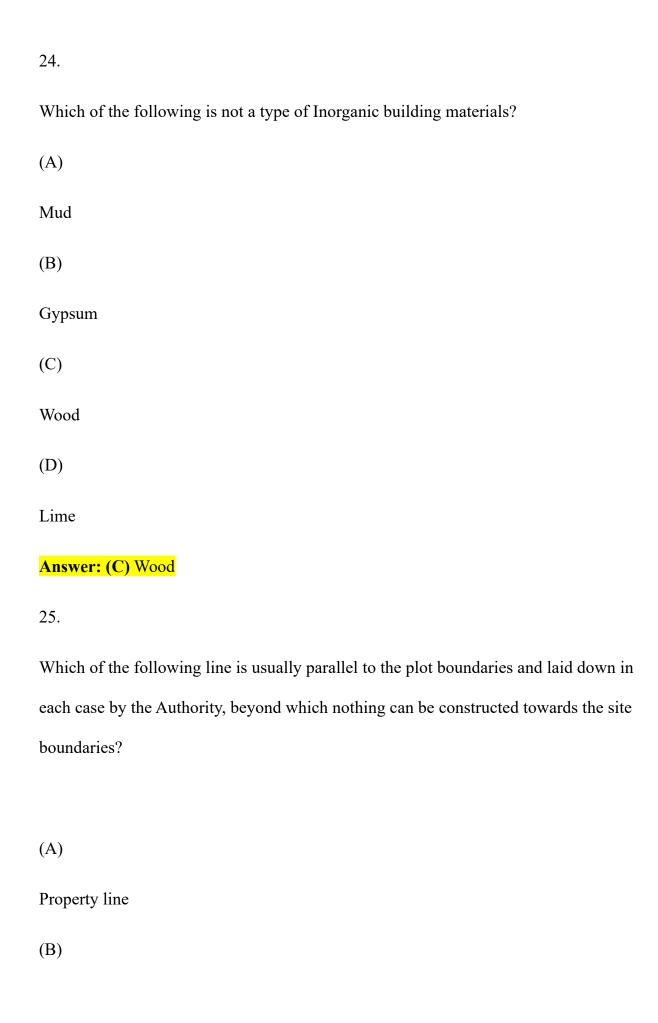
Answer: (D) Fundamental Right

On the recommendation of which of the given committee, the abolition of reservation
of items for the small-scale sector in industry is considered?
(A)
Lohia Committee
(B)
Narasimhan Committee
(C)
Ajit Kumar Committee
(D)
Abid Hussain Committee
Answer: (D) Abid Hussain Committee
20.
Chelaiya Samiti is related to which of the following?
(A)
Banking sector
(B)
Insurance sector

19.



Answer: (A) Inorganic materials and Organic materials
All of these
(D)
Binders
(C)
Waterproofing compounds
(B)
Inorganic materials and Organic materials
(A)
Which of the following is/are the classification of building materials?
23.
Answer: (D) All of these
All of these
(D)
Brick
(C)
Cement
(B)
Wood



Building line
(C)
Plot line
(D)
Control line
Answer: (B) Building line
26.
Which of the following building material have high Seismic resistance and flexibility
of nailed joints.
(A)
Husk
(B)
Bamboo
(C)
Timber
(D)
Ply
Answer: (C) Timber

27.
Construction of cavity walls as external walls to protect the building from the outside
heat or cold as the hollow space between two walls act as an
(A)
Destructive material
(B)
Burning material
(C)
Building material
(D)
Insulating material
Answer: (D) Insulating material
28.
Which of the following type of foundation is used for the construction of building on
black cotton soil?
(A)

Grillage foundation

(B)
Inverted arch foundation
(C)
Floating foundation
(D)
Mat foundation
Answer: (D) Mat foundation
29.
What is concrete?
(A)
A mixture of homogenous materials
(B)
A mixture of material and hydrogen
(C)
A mixture of cement and hydrogen sulphide
(D)
A mixture of cement, water, and aggregates
Answer: (D) A mixture of cement, water, and aggregates
30.

Why concrete technology is needed?
(A)
Concrete technology is needed to build a building
(B)
Concrete technology is needed to address properties of concrete
(C)
Concrete technology is needed to produce building materials
(D)
None
Answer: (B) Concrete technology is needed to address properties of concrete
31.
31. Who is the father of concrete technology?
Who is the father of concrete technology?
Who is the father of concrete technology? (A)
Who is the father of concrete technology? (A) William Aspdin
Who is the father of concrete technology? (A) William Aspdin (B)
Who is the father of concrete technology? (A) William Aspdin (B) Royston Saint John

None
Answer: (A) William Aspdin
32.
What is the objective of concrete technology?
(A)
To find the material strength
(B)
Calculate the amount of cement required
(C)
To define and understand concepts related to Cement
(D)
To define and understand concepts related to Concrete technology
Answer: (D) To define and understand concepts related to Concrete technology
33.
For a compressive strength of 3000 psi, the lightweight cement content is
pounds per cubic yard.
(A)

400-590

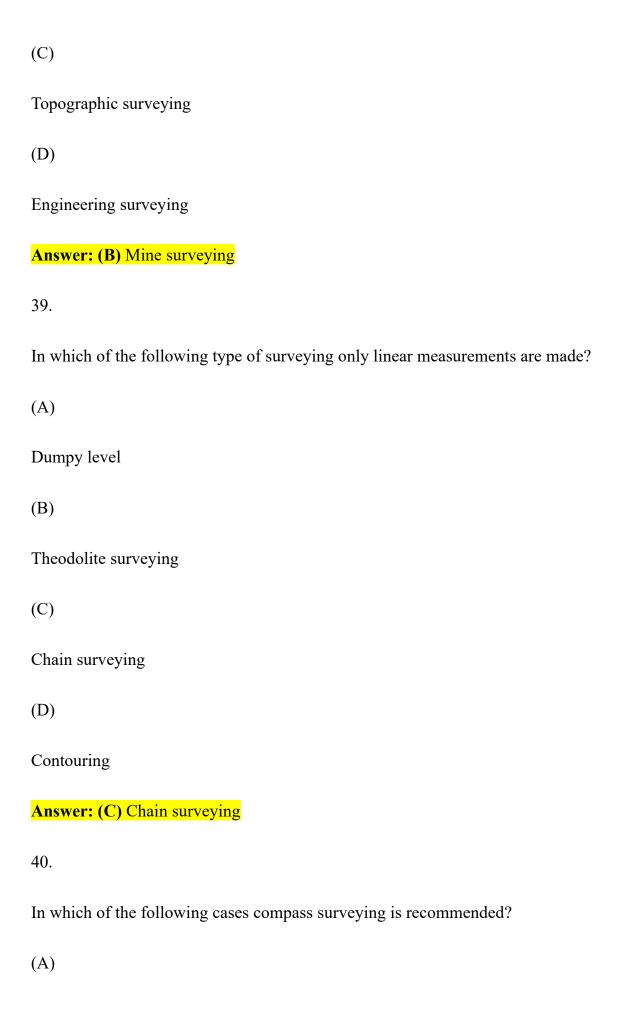
(B)
440-560
(C)
430-560
(D)
730-750
Answer: (B) 440-560
34.
What is the importance of the Standard Consistency Test?
(A)
It is used to determine the quality of water
(B)
It is used to determine the quality of aggregates
(C)
It is used to determine the quality of cement
(D)
None
Answer: (A) It is used to determine the quality of water

35.

Hydration of cement is chemical reaction of cement with
(A)
base
(B)
acid
(C)
salt and acid
(D)
water
Answer: (D) water
36.
Which of the following cement is used for interior and exterior decorative works?
(A)
Low Heat Cement
(B)
High Alumina Cement
(C)
Rapid Hardening Cement
(D)

Colored Cement

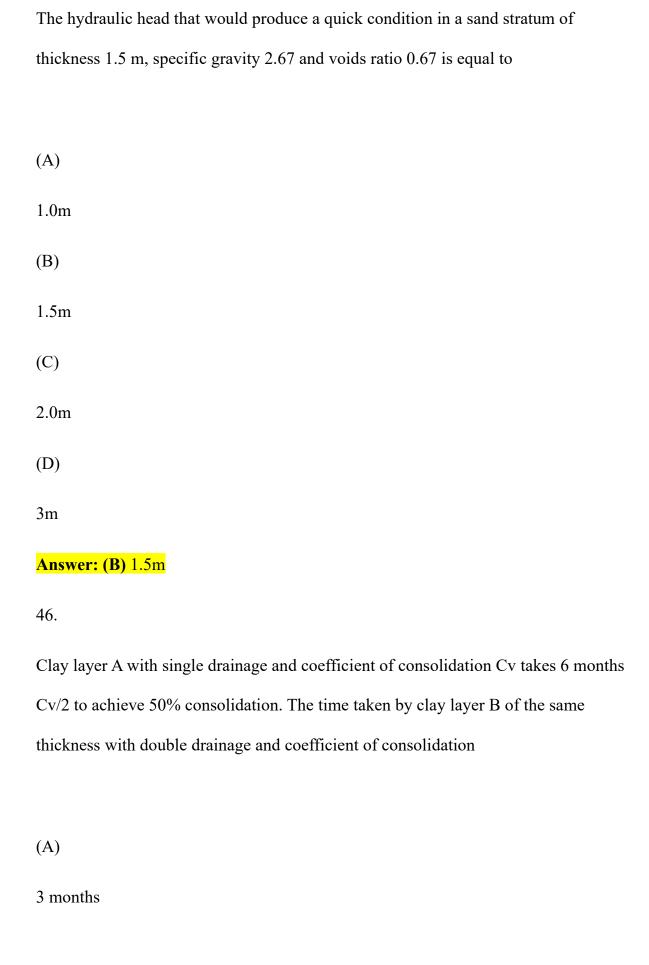
Answer: (D) Colored Cement
37.
Which of the following is the first principle of surveying?
(A)
Whole to whole
(B)
Part to part
(C)
Part to whole
(D)
Whole to part
Answer: (D) Whole to part
38.
Which of the following type of surveying is used for exploring mineral wealth?
(A)
Military surveying
(B)
Mine surveying

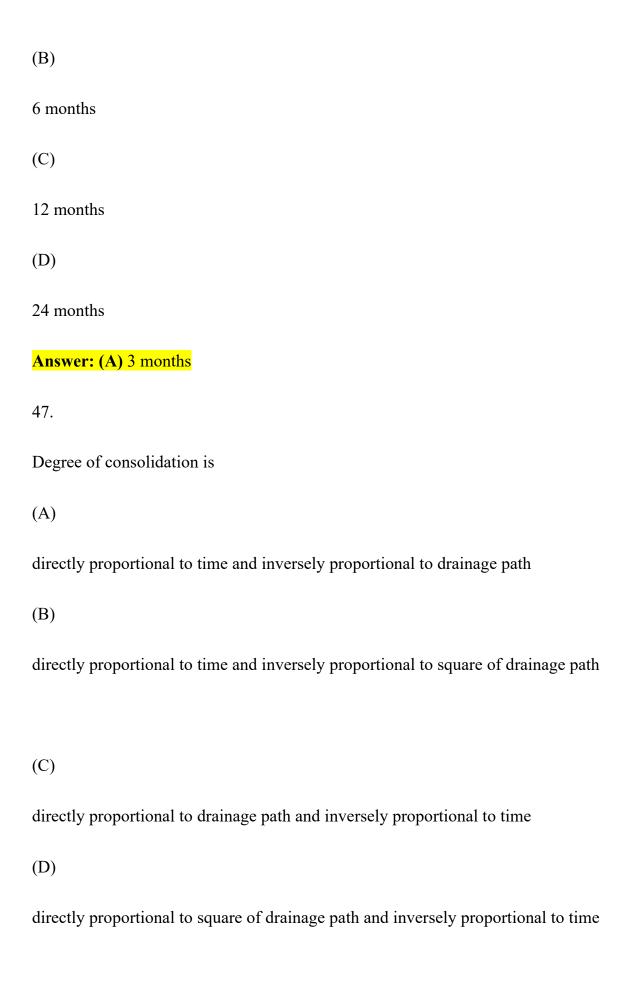


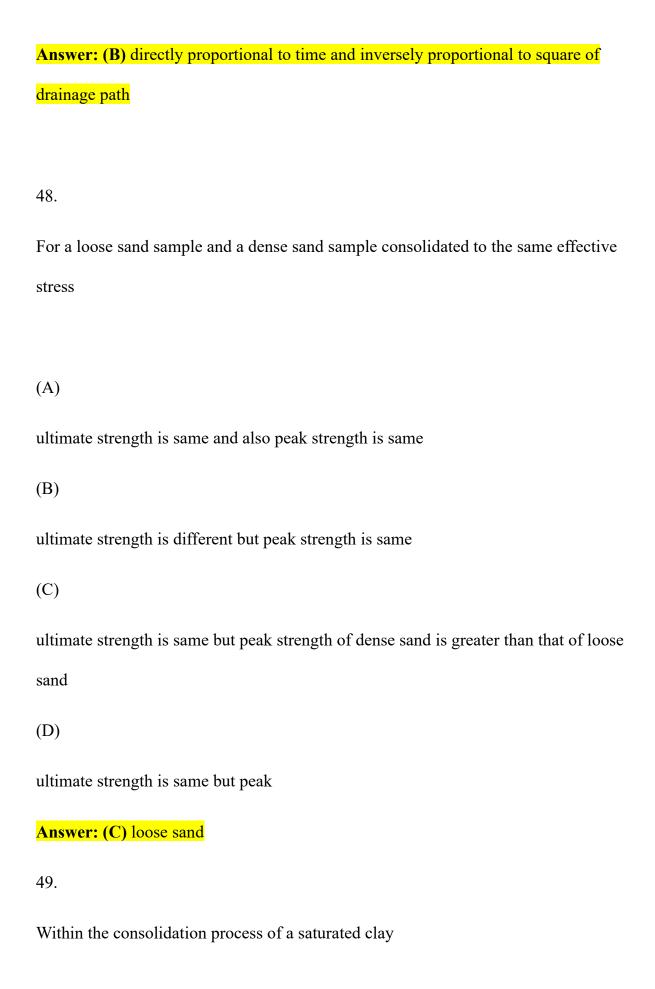
When area is small, undulating and not details are crowded
(B)
When area is large, undulating and crowded with many details
(C)
When area is small, even and crowded with many details
(D)
When area is large, even and crowded with many details
Answer: (B) When area is large, undulating and crowded with many details
41.
Which of the following is not required for chain surveying?
(A)
Dumpy level
(B)
Pegs
(C)
Arrows
(D)
20 m chain
Answer: (A) Dumpy level

42.
Which of the following is the last step in chain surveying?
(A)
Fixing
(B)
Reconnaissance
(C)
Running survey lines
(D)
Marking
Answer: (C) Running survey lines
43.
Which of the following type of ranging is done if both ends of surveying lines are
visible?
(A)
Indirect
(B)
Reciprocal

(C)
Unable to do
(D)
Direct
Answer: (D) Direct
44.
In which of the following type of surveying in the mean surface of the earth is
considered as a plane and the spheroidal shape is neglected?
(A)
Plane Surveying
(B)
Geodetic Surveying
(C)
Hydrographic Surveying
(D)
Topographic Surveying
Answer: (A) Plane Surveying
45.







(A)
a gradual increase in neutral pressure and a gradual decrease in effective pressure
takes place and sum of the two is constant
(B)
a gradual decrease in neutral pressure and a gradual increase in effective pressure
takes place and sum of the two is constant
(C)
both neutral pressure and effective pressure decrease
(D)
both neutral pressure and effective pressure increase
Answer: (B) a gradual decrease in neutral pressure and a gradual increase in effective
pressure takes place and sum of the two is constant
50.
Rise of water table in cohesionless soils up to ground surface reduces the net ultimate
bearing capacity approximately by

(A)
25%
(B)
0.5
(C)
0.75
(D)
0.9
Answer: (B) 0.5
51.
Terzaghi's bearing capacity factors Nc, Nq and Nr are functions of
(A)
cohesion only
(B)
angle of internal friction only
(C)
both cohesion and angle of internal friction
(D)
None

Answer: (B) angle of internal friction only

52.

The flownet for an earthen dam with 30 m water depth consists of 25 potential drops

and 5 flow channels. The coefficient of permeability of dam material is 0.03 mm/sec.

The discharge per meter length of dam is

(A)

0.00018 m3/sec

(B)

0.0045 m3/sec

(C)

0.18 m3/sec

(D)

0.1125 m3/sec

Answer: (A) 0.00018 m3/sec

53.

A simply supported beam A carries a point load at its mid span. Another identical

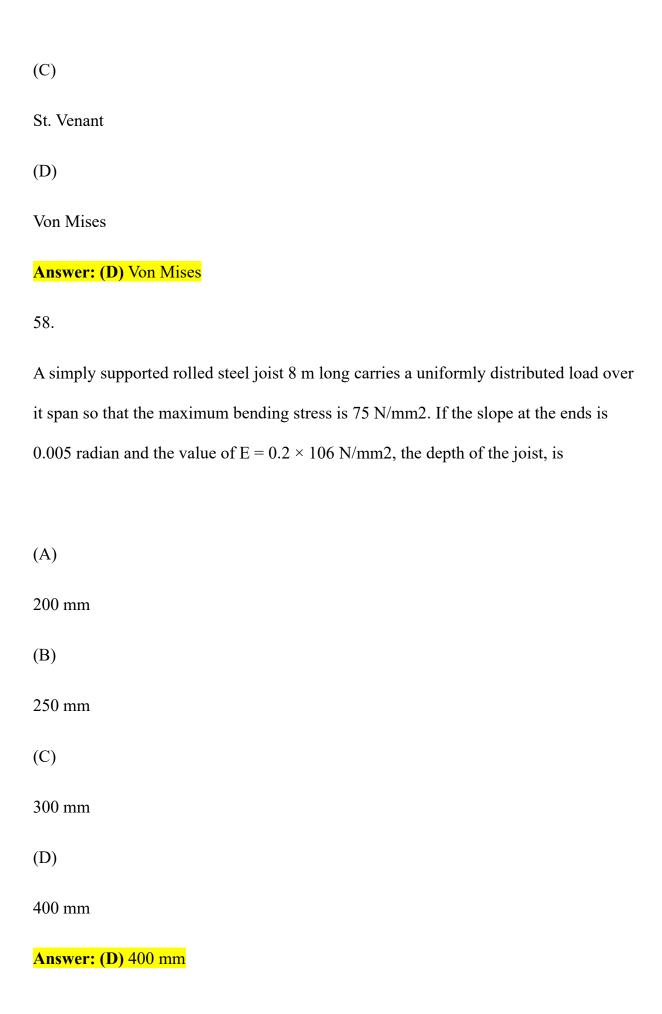
beam B carries the same load but uniformly distributed over the entire span. The ratio

of the maximum deflections of the beams A and B, will be

(A)
2\3
(B)
3\2
(C)
5\8
(D)
8\5
Answer: (D) 8\5
54.
The ratio of the maximum deflections of a simply supported beam with a central load
W and of a cantilever of same length and with a load W at its free end, is
(A)
1\8
(B)
1\10
(C)

1\12
(D)
1\16
Answer: (D) 1\16
55.
The ratio of the length and depth of a simply supported rectangular beam which
experiences maximum bending stress equal to tensile stress, due to same load at its
mid span, is
(A)
1\2
(B)
2\3
(C)
1\4
(D)
1\3
Answer: (B) 2\3
56.

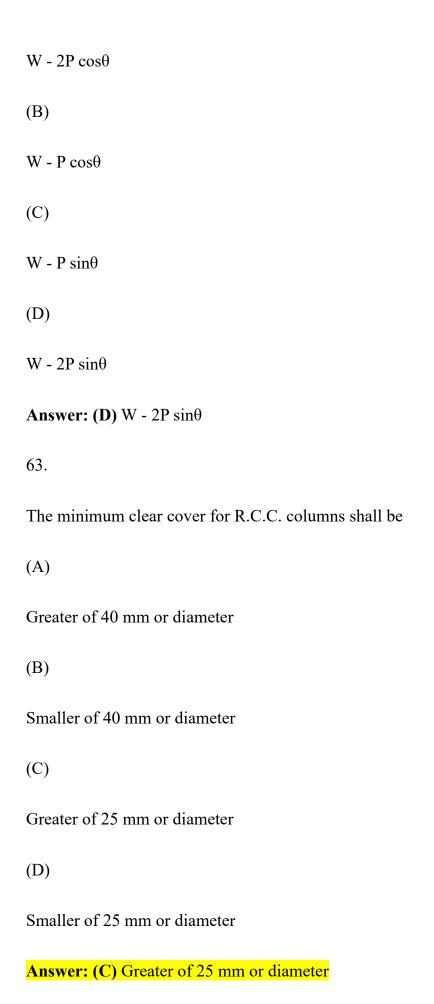
The ratio of the length and diameter of a simply supported uniform circular beam
which experiences maximum bending stress equal to tensile stress due to same load at
its mid span, is
(A)
1\8
(B)
1\4
(C)
1\2
(D)
1\3
Answer: (C) 1\2
57.
Shear strain energy theory for the failure of a material at elastic limit, is due to
(A)
Rankine
(B)
Guest or Trecas



59.
A compound truss may be formed by connecting two simple rigid frames, by
(A)
Two bars
(B)
Three bars
(C)
Three parallel bars
(D)
Three bars intersecting at a point
Answer: (B) Three bars
60.
A truss containing j joints and m members, will be a simple truss if
(A)
m = 2j - 3
(B)
j = 2m - 3
(C)
m = 3j - 2

(D) j = 3m - 2**Answer:** (A) m = 2j - 361. In a pre-stressed member it is advisable to use (A) Low strength concrete only (B) High strength concrete only (C) Low strength concrete but high tensile steel (D) High strength concrete and high tensile steel Answer: (D) High strength concrete and high tensile steel 62. In a pre-stressed beam carrying an external load W with a bent tendon is having angle of inclination θ and pre-stressed load P. The net downward load at the centre is

(A)

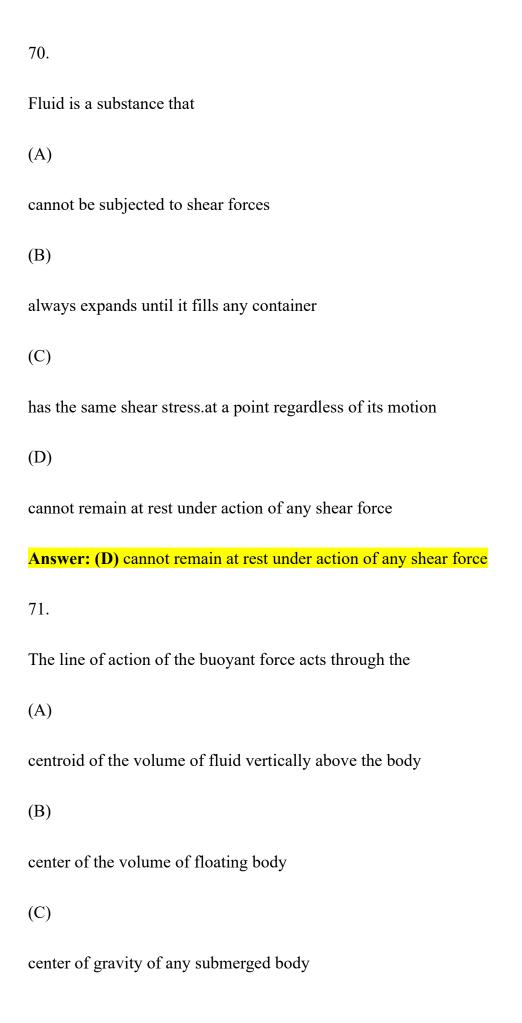


64.
If the length of an intermediate span of a continuous slab is 5 m, the length of the end
span is kept
(A)
4.5 m
(B)
4.0 m
(C)
3.5 m
(D)
3.0 m
Answer: (A) 4.5 m
65.
A foundation is called shallow if its depth, is
(A)
One-fourth of its width
(B)
Half of its width

(C)
Three-fourth of its width
(D)
Equal to its width
Answer: (D) Equal to its width
66.
A T-beam behaves as a rectangular beam of a width equal to its flange if its neutral
axis
(A)
Remains within the flange
(B)
Remains below the slab
(C)
Coincides the geometrical centre of the beam
(D)
None
Answer: (A) Remains within the flange
67.

According to I.S.: 456, slabs which span in two directions with corners held down,
are assumed to be divided in each direction into middle strips and edge strips such that
the width of the middle strip, is
(A)
Half of the width of the slab
(B)
Two-third of the width of the slab
(C)
Three-fourth of the width of the slab
(D)
Four-fifth of the width of the slab
Answer: (C) Three-fourth of the width of the slab
68.
If the permissible compressive stress for a concrete in bending is C kg/m2, the
modular ratio is
(A)
2800/C
(B)

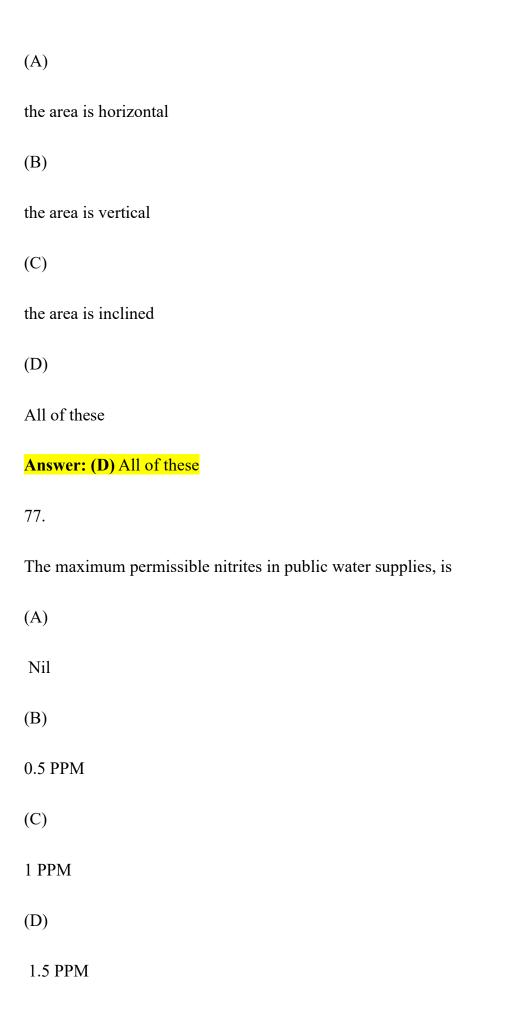
2300/2C
(C)
2800/3C
(D)
2800/C2
Answer: (C) 2800/3C
69.
According to the principle of buoyancy a body totally or partially immersed in a fluid
will be lifted up by a force equal to
(A)
the weight of the body
(B)
more than the weight of the body
(C)
less than the weight of the body
(D)
weight of the fluid displaced by the body
Answer: (D) weight of the fluid displaced by the body

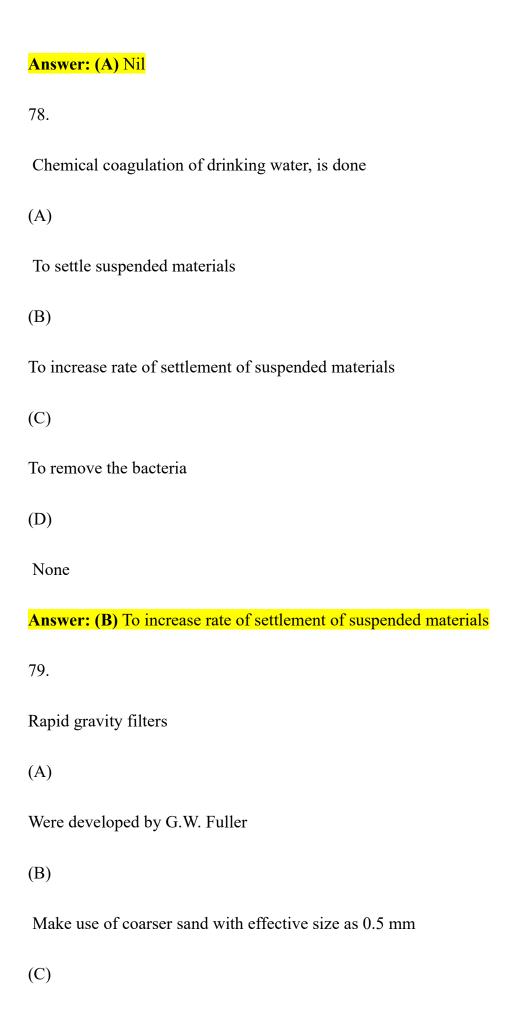


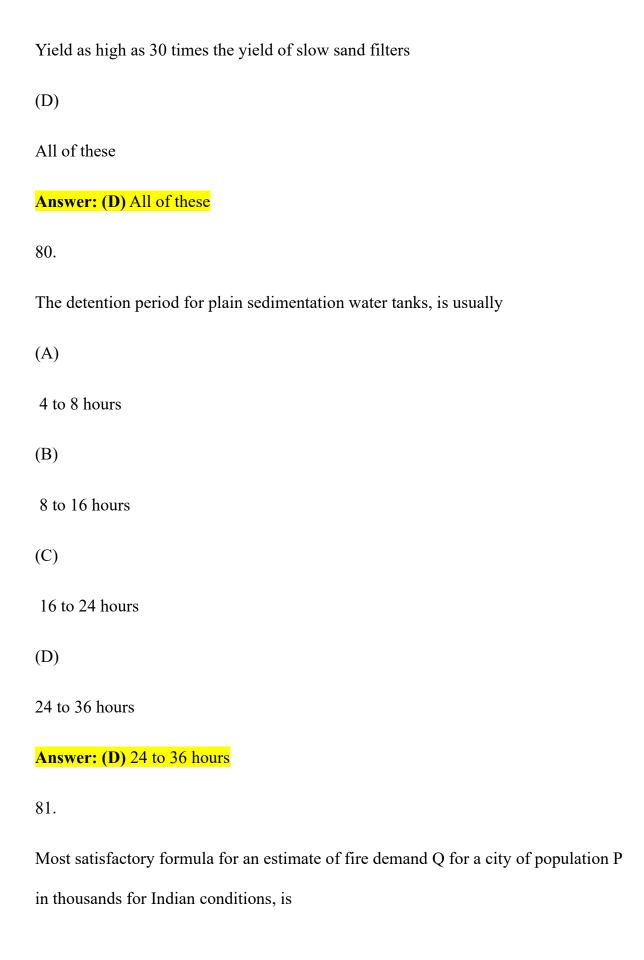
(D) centriod of the displaced volume of fluid Answer: (D) centriod of the displaced volume of fluid 72. A vertical rectangular plane surface is submerged in water such that its top and bottom surfaces are 1.5 m and 6.0 m res-pectively below the free surface. The position of center of pressure below the free surface will be at a distance of (A) 3.75 m (B) 4.0 m(C) 4.2m (D) 4.5m Answer: (C) 4.2m 73.

The region between the separation streamlines and the boundary surface of the solid
body is known as
(A)
wake
(B)
drag
(C)
lift
(D)
boundary layer
Answer: (A) wake
74.
The horizontal component of buoyant force is
(A)
negligible
(B)
same as buoyant force
(C)

zero
(D)
None
Answer: (C) zero
75.
Metacentric height is given as the distance between
(A)
the center of gravity of the body and the meta center
(B)
the center of gravity of the body and the center of buoyancy
(C)
the center of gravity of the body and the center of pressure
(D)
center of buoyancy and metacentre
Answer: (A) the center of gravity of the body and the meta center
76.
The total pressure force on a plane area is equal to the area multiplied by the intensity
of pressure at the centriod, if







(A)
Q = 1115 (p/5 + 20)
(B)
$Q = 1640 \ \sqrt{P} \ (1 - 0.01 \ \sqrt{P})$
(C)
$Q = 3180 \sqrt{P}$
(D)
None
Answer: (C) $Q = 3180 \sqrt{P}$
82.
After cleaning a slow sand filter, the filtered water is not used for
(A)
6 hours to 12 hours
(B)
12 hours to 18 hours
(C)
18 hours to 24 hours
(D)

24 hours to 36 hours

Answer: (D) 24 hours to 36 hours
83.
A city supply includes
(A)
Domestic water demand
(B)
Industrial and commercial water demands
(C)
Demand for public uses and fire
(D)
All of these
Answer: (D) All of these
84.
Turbidity is the ability of water to
(A)
Scatter light
(B)
Retain suspended solids

(C)

Retain colloidal solids in suspension
(D)
Detain dissolved solids
Answer: (A) Scatter light
85.
What is Highway Engineering?
(A)
Highway Engineering is a specialized field of Civil Engineering
(B)
Highway Engineering is a specialized field of Concrete Technology
(C)
Highway Engineering is a specialized field of Transportation Engineering
(D)
None
Answer: (C) Highway Engineering is a specialized field of Transportation
Engineering
86.
What is the use of highways?

(A)
Highways were created to connect cities and villages
(B)
Highways is the quickest option
(C)
Highways reduce travel time by half
(D)
All of these
Answer: (D) All of these
87.
Which of the following is a commercial element in highway construction?
(A)
Material
(B)
Environmental aspects
(C)
Installation technique
(D)
Traffic

Answer: (B) Environmental aspects
88.
The New highway project is divided into how many stages?
(A)
Four
(B)
Three
(C)
Two
(D)
One
Answer: (B) Three
89.
Which of the following does not include in the phases of highway planning?
(A)
Financing
(B)
Showing the phasing of a plan in the five-year plan
(C)

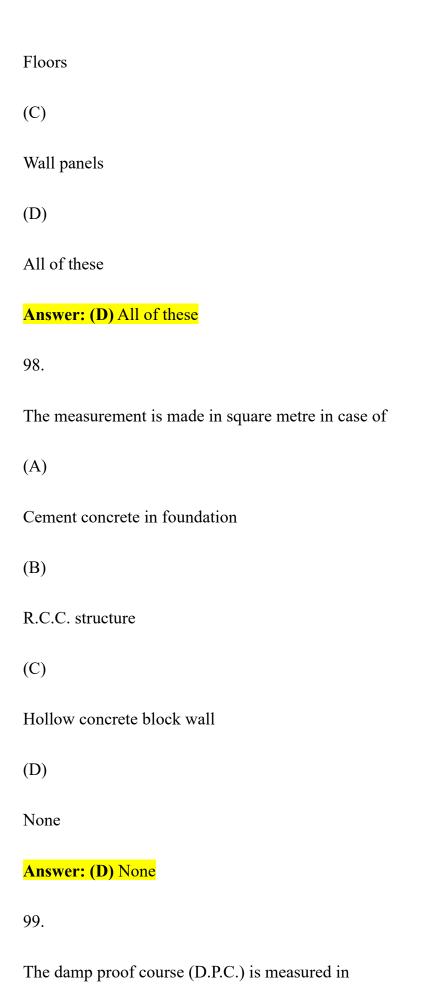
Assessment of road length requirement
(D)
Preparation of master plan
Answer: (A) Financing
90.
As per the Nagpur plan, the un-surfaced roads were meant for
(A)
Other district road and village road
(B)
Major district road
(C)
State highway
(D)
National highway
Answer: (A) Other district road and village road
91.
Which of the following is not considered when designing highways?
(A)
Settlement

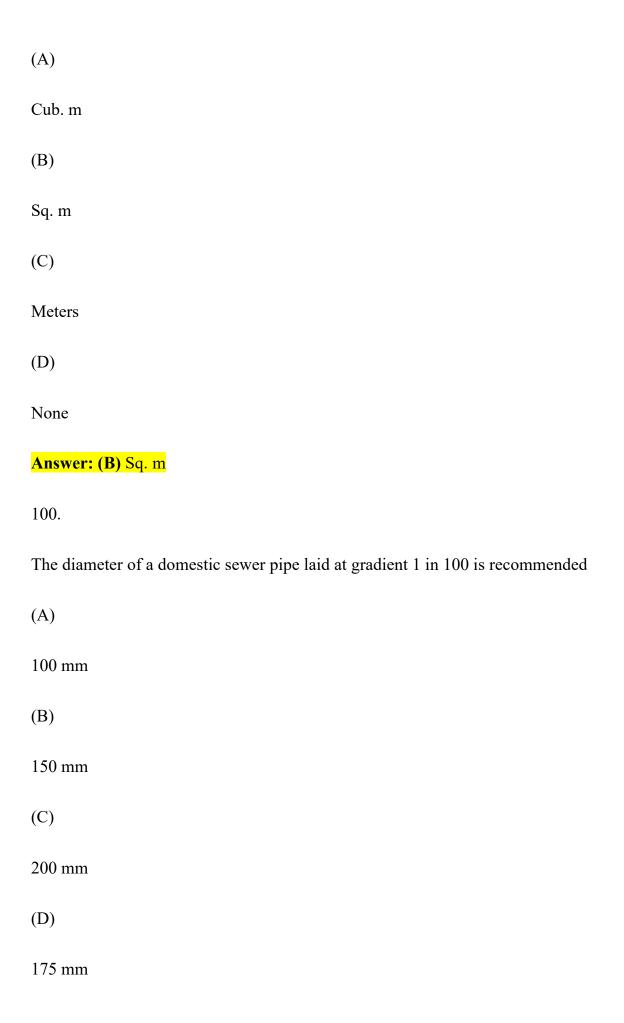
(B)
Cross section
(C)
Level of service
(D)
Sight distance
Answer: (A) Settlement
92.
Which of the following is the process of removing and controlling excess surface and
sub soil water within the roadway?
(A)
Highway finance
(B)
Highway drainage
(C)
Highway Engineering
(D)
Highway maintenance

Answer: (B) Highway drainage
93.
The expected out turn of 12 mm plastering with cement mortar is
(A)
2.5 sq m
(B)
4.0 sq m
(C)
6.0 sq m
(D)
8.0 sq m
Answer: (D) 8.0 sq m
94.
The excavation exceeding 1.5 m in width and 10 sq.m in plan area with a depth not
exceeding 30 cm, is termed as
(A)
Excavation
(B)

Surface dressing
(C)
Cutting
(D)
Surface excavation
Answer: (D) Surface excavation
95.
The rate of payment is made for 100 cu m (per % cu m) in case of
(A)
Earth work in excavation
(B)
Rock cutting
(C)
Excavation in trenches for foundation
(D)
All of these
Answer: (D) All of these
96.

Due to change in price level, a revised estimate is prepared if the sanctioned estimate
exceeds
(A)
0.02
(B)
0.025
(C)
0.04
(D)
0.05
Answer: (D) 0.05
97.
The concrete work for the following part of the building of specified thickness is
measured in square meters
(A)
Root slabs
(B)





Answer: (B) 150 mm