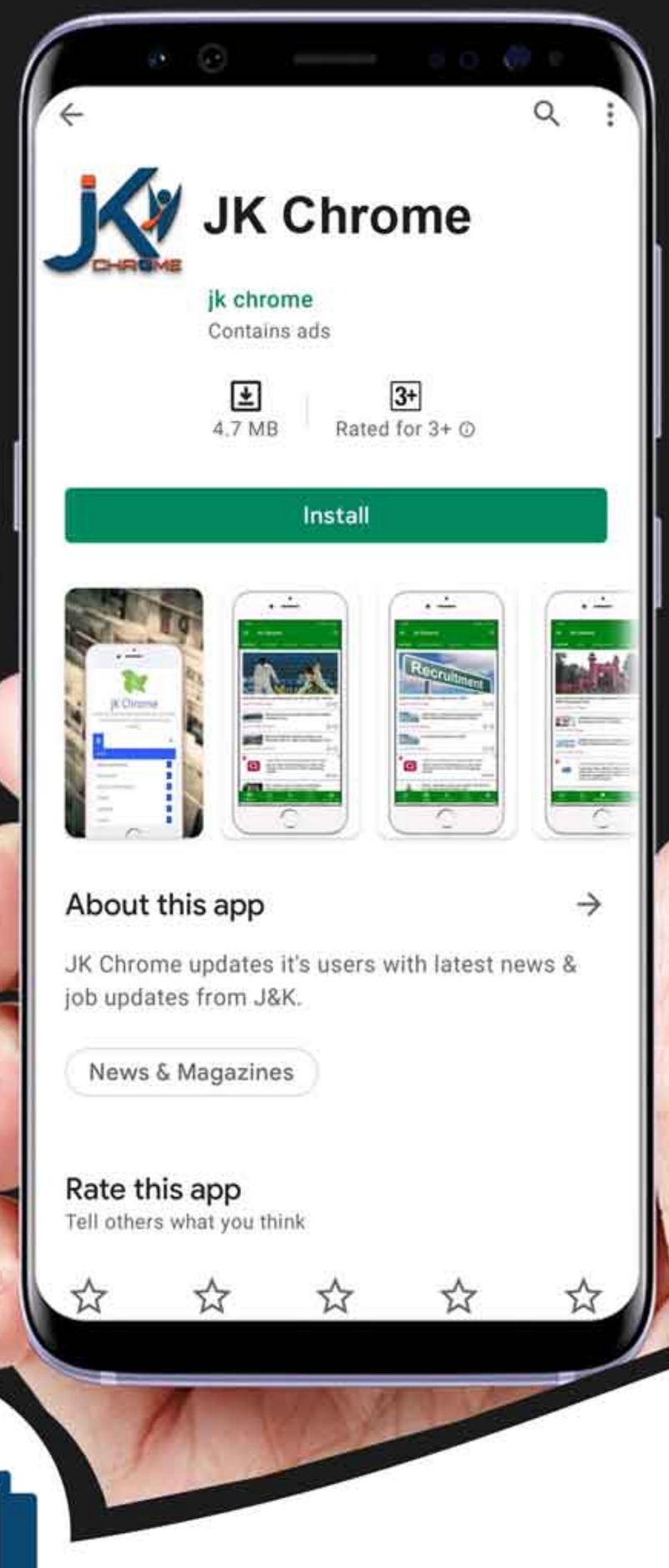
# JK Chrome

## JK Chrome | Employment Portal




## Rated No.1 Job Application of India

Sarkari Naukri
Private Jobs
Employment News
Study Material
Notifications

JOBS

NOTIFICATIONS

G.K

STUDY MATERIAL

GET IT ON Google play

JK Chrome
jk chrome
Contains ads

Click here to DOWNLOAD

www.jkchrome.com | Email : contact@jkchrome.com

**Question No.1** Marks: 1.00

**Bookmark**

Which of the following activities is NOT included in cash flow?

(A) ○ Financial activity

(B) ○ **Estimating and costi g activities (Correc Ans er)**

(C) ○ Investment activity

(D) ○ Operating activity (Chosen option)

**Question No.2** Marks: 1.00

**Bookmark**

The maximum torque that can be safely applied to a shaft of 100 mm diameter if the permissible angle of twist is 1 degree in a length of 3 m and the permissible shear stress is 30 $N/mm^2$. Take N = 0.8 x $10^5$ $N/mm^2$.

(A) ○ 5.5 kNm

(B) ○ **5.89 kNm (Correct Ans. er)**

(C) ○ 4.82 kNm

(D) ○ 4.57 kNm

**Question No.3** Marks: 1.00

**Bookmark**

Which one of the following is NOT a material property?

(A) ○ **Stress (Correct Answer)**

(B) ○ Creep

(C) ○ Fatigue (Chosen option)

(D) ○ Toughness

**Question No.4** Marks: 1.00

**Bookmark**

Volume of voids to total volume of soil expressed in percentage is called:

(A) ○ Void ratio

(B) ○ Air Content

(C) ○ Water Content

(D) ○ **Porosi y (Correct Ans er** (C osen option)

**Question No.5** Marks: 1.00

**Bookmark**

Select the expenses which do not affect the cash book.

(A) ○ Cash receipts

(B) ○ **Depreciation (Correct Answer)** (Chosen option)

(C) ○ Telephone expenses

(D) ○ Cash payments

**Question No.6** Marks: 1.00

**Bookmark**

Find the quantity of cement for 1 $m^3$ of concrete. The void ratio in cement is 55%, fine aggregate 40%, in coarse aggregate 45%.The material properties of mix is 1 : 1.5 : 3 by weight with water cement ratio 0.50. One bag of cement weigh 50 kg and density of cement is 1440 $kg/m^3$, of fine aggregate is 1780 $kg/m^3$ and coarse aggregate is 1650 $kg/m^3$. Volume of one bag of cement is 34.7 L. Assume volume of air in concrete as 4% per $m^3$ of concrete.

(A) ○ 1029 kg

(B) ○ **343 kg (Correct Answer)**

(C) ○ 514 kg

(D) ○ 170 kg

**Question No.7** Marks: 1.00

**Bookmark**

Which of the following structures is temporary for bridge construction?

(A) ○ Cables

(B) ○ **Cofferdam (Correct Answer)** (Chosen option)

(C) ○ Deck

(D) ○ Soffit

**Question No.8** Marks: 1.00

**Bookmark**

Effect of both bucking and crushing is considered in:

(A) ○ Bernoulli's Equation

(B) ○ Darcy's formula

(C) ○ Euler's theory (Chosen option)

(D) ○ **Rankine's Formula (Correct Answer)**

**Question No.9** Marks: 1.00

**Bookmark**

As per IS 2131-1981, the drive weight used in standard penetration test (SPT) is _____ KG

(A) ○ 50 (Chosen option)

(B) ○ **63.5 (Correct Answer)**

(C) ○ 42.5

(D) ○ 75

**Question No.10** Marks: 1.00

**Bookmark**

In India, Metros use:

(A) ○ **Standard gauge (Correct Answer)**

(B) ○ Broad gauge

(C) ○ Narrow gauge (Chosen option)

(D) ○ Metre gauge

**Question No.11** Marks: 1.00

**Bookmark**

For what value of Froude number, the jump is steady jump?

(A) ○ $F_1$ = 1.7 to 4.5

(B) ○ **$F_1$ = 4.5 to 9 (Correct Answer)**

(C) ○ $F_1$ = 9

(D) ○ $F_1$ = 1 to 4

**Question No.12** Marks: 1.00

**Bookmark**

For a standing crop, the consumptive use of water is equal to the depth of water:

(A) ○ **Used by the crop in transpiration, evaporation and also the quantity of water evaporated from adjacent soil (Correct Answer)** (Chosen option)

(B) ○ Transpired and evaporated by the crop

(C) ○ Evaporated by the crop

(D) ○ Transpired by the crop

**Question No.13** Marks: 1.00

**Bookmark**

When the section is subjected to an axial load and a moment, the ratio of the moment to the load is called:

(A) ○ Direct Stress

(B) ○ **Eccentricity (Correct Answer)**

(C) ○ Combined stress

(D) ○ Bending stress (Chosen option)

**Question No.14** Marks: 1.00

**Bookmark**

From the below given, identify the softest grade and hardest grade of bitumen.

(A) ○ VG40 and VG20

(B) ○ VG30 and VG20

(C) ○ **VG10 and VG40 (Correct Answer)** (Chosen option)

(D) ○ VG40 and VG30

**Question No.15** Marks: 1.00

**Bookmark**

In India, the standard chord length used in curves is:

(A) ○ 45 m (Chosen option)

(B) ○ 60 m

(C) ○ **30 m (Correct Answer)**

○

(D) 90 m

**Question No.16** Marks: 1.00

**Bookmark**

Slack time is related to:

(A) ○ Cost

(B) ○ Event and activity both (Chosen option)

(C) ○ **An event (Correct Answer)**

(D) ○ An activity

**Question No.17** Marks: 1.00

**Bookmark**

If the dilution factor is above 500, what is the standard of purification required?

(A) ○ Complete through treatment should be given to sewage.

(B) ○ Treatment such as chemical precipitation are required

(C) ○ **No treatment is required. (Correct Answer)**

(D) ○ Primary treatment such as plain sedimentation should be given to the sewage (Chosen option)

**Question No.18** Marks: 1.00

**Bookmark**

The centre of pressure for a plane vertical surface lies at a depth of _____ of the immersed surface.

(A) ○ **two-third the height (Correct Answer)**

(B) ○ one-third the height

(C) ○ one- half the height (Chosen option)

(D) ○ double the height

**Question No.19** Marks: 1.00

**Bookmark**

A continuous slab of clear span 5 m and effective depth is 150 mm and supported on 300 mm. What is the value of effective span?

(A) ○ 5000 mm

(B) ○ 5075 mm

(C) ○ 5300 mm

(D) ○ **5150 mm (Correct Answer)** (Chosen option)

**Question No.20** Marks: 1.00

**Bookmark**

The dimensions of storage coefficients is:

(A) ○ $M^0 L^1 T^{-1}$

(B) ○ $M^0 L^3 T^{-2}$

(C) ○ **Dimensionless (Correct Answer)**

(D) ○ $M^0 L^2 T^{-1}$

**Question No.21** Marks: 1.00

Bookmark

For a culvert, the most suitable foundation is:

(A) ○ Caisson foundation

(B) ○ Pile foundation (Chosen option)

(C) ○ **Spread foundation (Correct Answer)**

(D) ○ Well foundation

**Question No.22** Marks: 1.00

Bookmark

If the coefficient of uniformity and coefficient of curvature of a sand is found to be 7.5 and 2.5 respectively. As per IS, the sand is classified as:

(A) ○ GP

(B) ○ SP

(C) ○ **SW (Correct Answer)**

(D) ○ GW (Chosen option)

**Question No.23** Marks: 1.00

Bookmark

Which types of aggregates are best suitable for concrete strength and durability?

(A) ○ Poorly graded aggregates

(B) ○ Uniformly graded aggregates (Chosen option)

(C) ○ **Well graded aggregates (Correct Answer)**

(D) ○ Gap graded aggregates

**Question No.24** Marks: 1.00

Bookmark

The time estimate of activities and probability of their occurrence follows:

(A) ○ Poisson's distribution curve

(B) ○ Binomial distribution curve

(C) ○ Normal distribution curve

(D) ○ **Beta distribution curve (Correct Answer)**

**Question No.25** Marks: 1.00

Bookmark

Maximum shear stress by Mohr's circle method, is _____to the radius of the Mohr's circle.

(A) ○ unequal

(B) ○ **equal (Correct Answer)**

(C) ○ lesser than (Chosen option)

(D) ○ greater than

**Question No.26** Marks: 1.00

Bookmark

In general, the percentage amount of security money is _____ of the total project cost.

(A) ○ **10% (Correct Answer)** (Chosen option)

(B) ○ 1%

(C) ○ 0.5%

(D) ○ 2%

**Question No.27** Marks: 1.00

**Bookmark**

A water filled manometer connected on one side to a duct through which pressurized air is flowing and is open to the atmosphere on the other side. If the height H is found to be 18 cm, determine the air pressure in duct.

(A) ○ $P_1$ = 104162 N/ $m^2$

(B) ○ **$P_1$ = 13162 N/ $m^2$ (Correct Answer)**

(C) ○ $P_1$ = 103162 N/ $m^2$

(D) ○ $P_1$ = 3162 N/ $m^2$

**Question No.28** Marks: 1.00

**Bookmark**

Wet Mix Macadam (WMM) base course consist of:

(A) ○ Well graded hard crushed aggregates and adequate proportion of bitumen mixed thoroughly in a mixing plant (Chosen option)

(B) ○ Well graded hard crushed aggregates and adequate proportion of emulsion mixed thoroughly in a mixing plant

(C) ○ Well graded hard crushed aggregates and adequate proportion of cutback mixed thoroughly in a mixing plant

(D) ○ **Well graded hard crushed aggregates and adequate proportion of water mixed thoroughly in a mixing plant (Correct Answer)**

**Question No.29** Marks: 1.00

**Bookmark**

Which of the following options is NOT a representation of an activity?

(A) ○ **Site located (Correct Answer)**

(B) ○ Foundation is being laid

(C) ○ The office area is being cleaned

(D) ○ The Invitations are being sent (Chosen option)

**Question No.30** Marks: 1.00

**Bookmark**

When is the neutral axis critical according to the limit state method?

(A) ○ **Both steel and concrete strains reach their maximum value at the same time. (Correct Answer)**

(B) ○ Steel strain reaches its maximum value earlier than concrete strain. (Chosen option)

(C) ○ Concrete strain reaches its maximum value earlier than steel strain.

(D) ○ Both steel and concrete strains reach their minimum value at the same time.

**Question No.31** Marks: 1.00

**Bookmark**

The sight distance visible to a driver during night under the illumination of vehicle headlights is called:

(A) ○ Intermediate Sight Distance

(B) ○ Safe overtaking Sight distance (Chosen option)

(C) ○ Passing Sight Distance

(D) ○ **Head-light sight distance (Correct Answer)**

**Question No.32** Marks: 1.00

**Bookmark**

Which of the following IRC codes is used for Composite Structure?

(A) ○ IRC 75 (Chosen option)

(B) ○ IRC 21

(C) ○ IRC 78

(D) ○ **IRC 22 (Correct Answer)**

**Question No.33** Marks: 1.00

**Bookmark**

The Nagpur Road plan formula were prepared assuming:

(A) ○ Star and Circular Pattern

(B) ○ Star and Block Pattern

(C) ○ **Star and Grid Pattern (Correct Answer)** (Chosen option)

(D) ○ Rectangular or Block Pattern

**Question No.34** Marks: 1.00

**Bookmark**

What is the testing time for color of sample water?

(A) ○ **Within 24 hours (Correct Answer)** (Chosen option)

(B) ○ Within 7 days

(C) ○ Within 72 hours

(D) ○ Within 12 hours

**Question No.35** Marks: 1.00

**Bookmark**

The pipes which are NOT suitable for water carrying but quite suitable for sewage and drain or sewage disposal is:

(A) ○ R.C.C pipes

(B) ○ **Vitrified Clay pipes (Correct Answer)**

(C) ○ Cost Iron pipes (Chosen option)

(D) ○ Hume Steel pipes

**Question No.36** Marks: 1.00

**Bookmark**

Which of the following population forecasting methods is used to calculate the population forecasting for old city?

(A) ○ Decreasing growth rate method

(B) ○ **Arithmetic increase method (Correct Answer)**

(C) ○ Geometric increase method (Chosen option)

(D) ○ Incremental increase method

**Question No.37** Marks: 1.00

**Bookmark**

Time required by pressure wave to travel from tank to valve is _____.

(A) ○ t = 5L/C

(B) ○ t = 3L/C

(C) ○ **t = 2L/C (Correct Answer)** (Chosen option)

(D) ○ t = 6L/C

**Question No.38** Marks: 1.00

**Bookmark**

A jet of water having a cross section area of $2cm^2$ strikes a surface at speed 50m/s. Estimate force applied to the surface by jet. Also calculate force applied by jet of air.

(A) ○ $F = 250, F_{air} = 30$ **(Correct Answer)**

(B) ○ $F = 250\ , F_{ai}\ = 0.306N$

(C) ○ $F = 260, F_{air} = 0.768N$

(D) ○ $F = 0.25kN, F_{air} = 0.3Gpa$

**Question No.39** Marks: 1.00

**Bookmark**

Which of the following shapes are NOT used in R.C.C. piers?

(A) ○ **T shapes (Correct Answer)**

(B) ○ Trestle bent

(C) ○ Rectangular

(D) ○ Dumb bell type (Chosen option)

**Question No.40** Marks: 1.00

**Bookmark**

A 20 m length chain got out of the correct line by a perpendicular distance of 1 m, then the associated error in meters is:

(A) ○ 1/30

(B) ○ 1/10

(C) ○ 1/20 (Chosen option)

(D) ○ **1/40 (Correct Answer)**

**Question No.41** Marks: 1.00

**Bookmark**

In which state, the temperature inversion represents a highly stable environment?

(A) ○ Descending parcel of heavier air cooler than the surrounding air

(B) ○ **Warmer air lies over the colder air (Correct Answer)**

(C) ○ Rising parcel of air warmer than the surrounding environment

(D) ○ Warmer air lies below the colder air

**Question No.42** Marks: 1.00

**Bookmark**

What is the formula for specific energy at critical depth?

(A) ○ $E_{min}=\frac{3h_c}{4}$

(B) ○ $E_{min}=\frac{3h_c}{2}$

(C) ○ $E_{min}=\frac{3h_c}{2}$ **(Correct Answer)**

(D) ○ $E_{min}=\frac{3h_c}{2}$

**Question No.43** Marks: 1.00

**Bookmark**

The permanent railway track is regarded to be:

(A) ○ Rigid in nature (Chosen option)

(B) ○ **Semi elastic in nature (Correct Answer)**

(C) ○ Elastic in nature

(D) ○ Semi-rigid in nature

**Question No.44** Marks: 1.00

**Bookmark**

_____ is a method of surface drainage which makes use of dead furrows.

(A) ○ Outlet drains (Chosen option)

(B) ○ Surface outlet

(C) ○ **Bedding (Correct Answer)**

(D) ○ French drain

**Question No.45** Marks: 1.00

**Bookmark**

What is the permissible limit of chlorides in water used in plain concrete work?

(A) ○ 500 mg/l

(B) ○ 200 mg/l (Chosen option)

(C) ○ 1000 mg/l

(D) ○ **2000 mg/l (Correct Answer)**

**Question No.46** Marks: 1.00

**Bookmark**

If the inside diameters of the cutting edge and sample tube are 68 mm & 70 mm respectively and 76 mm &74 mm are the outside diameters of the cutting edge and sample tube respectively, then outside clearance of the sampler is .

(A) ○ 1.08%

(B) ○ **2.7% (Correct Answer)**

(C) ○ 4.9%

(D) ○ 1.98%

**Question No.47** Marks: 1.00

Bookmark

Which size (diameter) of theodolite is generally preferred for triangulation work?

(A) ○ **14 to 25 cm (Correct Answer)** (Chosen option)

(B) ○ 8 to 12 cm

(C) ○ < 8 cm but > 4cm

(D) ○ > 25 cm but < 30 cm

**Question No.48** Marks: 1.00

Bookmark

One cubic metre of marble chips weights about:

(A) ○ 4 tonnes

(B) ○ 3.3 tonnes

(C) ○ **2.711 tonnes (Correct Answer)** (Chosen option)

(D) ○ 1 tonnes

**Question No.49** Marks: 1.00

Bookmark

A vehicle is moving on a two-lane highway with design speed of 65 kmph on a horizontal curve of radius 250 m. What is the required length of transition curve based on rate of change of centrifugal acceleration?

(A) ○ 61.4 m

(B) ○ 51.4 m

(C) ○ 31.4 m

(D) ○ **41.4 m (Correct Answer)** (Chosen option)

**Question No.50** Marks: 1.00

Bookmark

For a given water-cement ratio, how the size of aggregate affects workability of concrete?

(A) ○ Larger size of aggregate lower will be workability

(B) ○ **Larger size of aggregate higher will be workability (Correct Answer)**

(C) ○ May or may not depend (Chosen option)

(D) ○ Does not depend

**Question No.51** Marks: 1.00

Bookmark

Which of the following methods is NOT adopted to remove silt from canals?

(A) ○ Flushing

(B) ○ Excavation

(C) ○ Iron rakes (Chosen option)

(D) ○ **Improved agonic practice (Correct Answer)**

**Question No.52** Marks: 1.00

Bookmark

If a curve is designated as a $3^{o}$ curve on a 40 m arc, the radius of the curve is:

(A) ○ 190.90 m

○

(B) **763.63 m (Correct Answer)**

(C) ○ 76.363 m (Chosen option)

(D) ○ 381.81 m

**Question No.53** Marks: 1.00

**Bookmark**

In RCC beam, the actual shear stress distribution above the neutral axis is _____, however, it is considered as _____ for design purpose.

(A) ○ parabolic, parabolic

(B) ○ rectangular, parabolic

(C) ○ rectangular, rectangular

(D) ○ **parabolic, rectangular (Correct Answer)** (Chosen option)

**Question No.54** Marks: 1.00

**Bookmark**

Engineering survey in which Centre line of the road is transferred on the ground in:

(A) ○ Preliminary survey

(B) ○ Map survey

(C) ○ Reconnaissance Survey

(D) ○ **Final location and detailed surveys (Correct Answer)** (Chosen option)

**Question No.55** Marks: 1.00

**Bookmark**

Total domestic daily demand for water in India according to IS code 1172 is:

(A) ○ 220 l/h/d

(B) ○ **135 l/h/d (Correct Answer)**

(C) ○ 260 l/h/d

(D) ○ 240 l/h/d (Chosen option)

**Question No.56** Marks: 1.00

**Bookmark**

If speed of the vehicle, v = 60 kmph, design friction coefficient = 0.36 and driver reaction time is 2.5 second, then the stopping distance is:

(A) ○ 78 m (Chosen option)

(B) ○ **81 m (Correct Answer)**

(C) ○ 91 m

(D) ○ 98 m

**Question No.57** Marks: 1.00

**Bookmark**

The bending moment on a section is maximum where shear force is _____.

(A) ○ zero

(B) ○ minimum

(C) ○ maximum (Chosen option)

(D) ○ **changing sign (Correct Answer)**

**Question No.58** Marks: 1.00

**Bookmark**

A sphere of 4cm diameter made of a aluminum specific gra ity = 2.8) is attached to a string and suspended from roof of a wind tunnel test section. If an air stream of 80m s flows past the sphere find inclination of the string and tension in the string

$\rho_a=1.2kg/m^3, V_a=1.5\times10^{-5}m^2/s, C_D=0.5, 10^4<R_e\leq 3\times10^5, 0.2, R_e>3\times10^5$

(A) ○ $\Theta=69.10^0, T=2.57N$

(B) ○ $\Theta=78.20^1, T=1.87$

(C) ○ $\Theta=97.50^0, T=3$

(D) ○ $\Theta=8\ .50^0, T=\_N$ **(Correct Answer)**

**Question No.59** Marks: 1.00

**Bookmark**

Which one of the following is NOT a project management technique?

(A) ○ Bar Chart

(B) ○ **ABC analysis (Correct Answer)** (Chosen option)

(C) ○ PERT

(D) ○ CPM

**Question No.60** Marks: 1.00

**Bookmark**

Which of the following is NOT the error due to manipulation and sighting in plane table survey?

(A) ○ Inaccurate centering

(B) ○ Defective sighting

(C) ○ Defective orientation

(D) ○ **Error of plotting (Correct Answer)** (Chosen option)

**Question No.61** Marks: 1.00

**Bookmark**

For factories and workshops, storage capacity request for Wc and urinal are:

(A) ○ 1200 lt. per Wc and 200 lt. per urinal seat (Chosen option)

(B) ○ **900 lt. per Wc and 180 lt. per urinal seat (Correct Answer)**

(C) ○ 900 lt. per Wc and 120 lt. per urinal seat

(D) ○ 800 lt. per Wc and 150 lt. per urinal seat

**Question No.62** Marks: 1.00

**Bookmark**

The longest chain line used in making a survey is called _____ line.

(A) ○ check

(B) ○ **base (Correct Answer)** (Chosen option)

○

(C) proof

(D) ○ tie

**Question No.63** Marks: 1.00

**Bookmark**

Castigliano's theorem 2 falls under _____ method.

(A) ○ stiffness

(B) ○ **force (Correct Answer)**

(C) ○ moment of distribution (Chosen option)

(D) ○ displacement

**Question No.64** Marks: 1.00

**Bookmark**

For pure bending, identify the WRONG statement.

(A) ○ **Bending moment along the length of the member is zero (Correct Answer)**

(B) ○ The beam is subjected to pure moments or couple

(C) ○ Shear force along the length of the member is zero

(D) ○ The beam is bent into a circular arc of radius R (Chosen option)

**Question No.65** Marks: 1.00

**Bookmark**

Which of the following is wrong about the CPM method?

(A) ○ **Event oriented approach (Correct Answer)**

(B) ○ Deterministic in nature (Chosen option)

(C) ○ One time estimate is made in CPM

(D) ○ Used for the repetitive type of project

**Question No.66** Marks: 1.00

**Bookmark**

Dummy activity is used to:

(A) ○ Determine Optimum time

(B) ○ Determine the critical path

(C) ○ Determine the project completion time (Chosen option)

(D) ○ **Maintain the required network (Correct Answer)**

**Question No.67** Marks: 1.00

**Bookmark**

The typical co-efficient of permeability value of clay is _____ cm/sec.

(A) ○ $1 \times 10^{-2}$ to $5 \times 10^{-2}$

(B) ○ **$1 \times 10^{-6}$ and smaller (Correct Answer)**

(C) ○ 1.0 and greater

(D) ○ $2 \times 10^{-3}$ to $1 \times 10^{-4}$

**Question No.68** Marks: 1.00

**Bookmark**

The saturated unit weight of the soil sample having specific gravity = 2.66, void ratio

=0.63 and unit weight of water=9.81 $kN/m^3$ is:

(A) ○ **19.8 $kN/m^3$ (Correct Answer)**

(B) ○ 21.6 $kN/m^3$

(C) ○ 15.6 $kN/m^3$

(D) ○ 17.8 kN/m

**Question No.69** Marks: 1.00

**Bookmark**

The internal water pressure develops circumferential tensile stress called:

(A) ○ **Hoop stress in the pipe wall (Correct Answer)** (Chosen option)

(B) ○ The compressive stress of the pipe material

(C) ○ Water hammer pressure

(D) ○ Longitudinal stress

**Question No.70** Marks: 1.00

**Bookmark**

Which one has the world's longest railway platform in India?

(A) ○ Kharagpur railway station (Chosen option)

(B) ○ Kollam railway station

(C) ○ Delhi railway station

(D) ○ **Gorakhpur railway station (Correct Answer)**

**Question No.71** Marks: 1.00

**Bookmark**

Which of the following does NOT come under the non-destructive testing techniques?

(A) ○ Ultrasonic testing

(B) ○ **Compression Testing (Correct Answer)** (Chosen option)

(C) ○ Eddy current testing

(D) ○ Visual testing

**Question No.72** Marks: 1.00

**Bookmark**

_____ may be used for all discharge when drop is more than 1.5 meters.

(A) ○ Well type (Chosen option)

(B) ○ Vertical drop

(C) ○ Non meter fall

(D) ○ **Inglis fall (Correct Answer)**

**Question No.73** Marks: 1.00

**Bookmark**

Statistical quality control (SQC) techniques are based on the theory of:

(A) ○ Statistics

(B) ○ Quality

(C) ○ **Probability (Correct Answer)** (Chosen option)

(D) ○ Set theory

**Question No.74** Marks: 1.00

**Bookmark**

Estimate the speed of sound in water and methanol.

(A) ○ Speed of sound in water = 1480 m/s, speed sound methanol = 1023 m/s

(B) ○ Speed of sound in water = 1450 m/s, speed sound methanol = 1340 m/s (Chosen option)

(C) ○ Speed of sound in water = 1800 m/s, speed sound methanol = 1000 m/s

(D) ○ **Speed of sound in water = 1500 m/s, speed sound methanol = 1700 m/s (Correct Answer)**

**Question No.75** Marks: 1.00

**Bookmark**

Which of the following pre-stressing systems employs high tensile bars with thread at ends?

(A) ○ **Lee-McCall system (Correct Answer)**

(B) ○ Gifford-Udall system

(C) ○ Magnel-Blaton System

(D) ○ Freyssinet system

**Question No.76** Marks: 1.00

**Bookmark**

What is the maximum area of compression reinforcement in beams?

(A) ○ 6% of gross area of beam (Chosen option)

(B) ○ **4% of gross area of beam (Correct Answer)**

(C) ○ 6% of effective area of beam

(D) ○ 4% of effective area of beam

**Question No.77** Marks: 1.00

**Bookmark**

The cube compressive strength of concrete in compressive testing machine is more than cylindrical compressive strength by ____ times.

(A) ○ 1.5

(B) ○ 1.1

(C) ○ **1.25 (Correct Answer)** (Chosen option)

(D) ○ 0.8

**Question No.78** Marks: 1.00

**Bookmark**

Low lift centrifugal pump is used for:

(A) ○ Work against up to 100 m

(B) ○ **Work against up to 15 m (Correct Answer)** (Chosen option)

(C) ○ Work against up to 200 m

(D) ○ Work against up to 40 m

**Question No.79** Marks: 1.00

**Bookmark**

Which of the following options shows the component of the Adjoining structure only?

(A) ○ Parapet Walls, Foundations, Hand Rails (Chosen option)

(B) ○ Piers, Abutments, Wingwalls

(C) ○ **Approaches, Guard Stones, Bearings (Correct Answer)**

(D) ○ Beams, Girders, Arches

**Question No.80** Marks: 1.00

**Bookmark**

Identify the CORRECT statement.

(A) ○ Statics and dynamics are not the branches of rigid body mechanics

(B) ○ **Forces causing the motion are not considered in kinematics (Correct Answer)** (Chosen option)

(C) ○ Kinetics and kinematics are not the branches of dynamics

(D) ○ Forces causing the motion are considered in kinematics

**Question No.81** Marks: 1.00

**Bookmark**

As per the Indian standards the standard temperature for reporting specific gravity is _____.

(A) ○ 23°C

(B) ○ 21°C

(C) ○ **27°C (Correct Answer)**

(D) ○ 25°C (Chosen option)

**Question No.82** Marks: 1.00

**Bookmark**

Terzaghi's ultimate bearing capacity equation for continuous footing is given by:

(A) ○ $q_{ult} = CN_C - \gamma DN_q - 0.5\,\gamma B\,{}_{\gamma}$ **(Correct Answer)**

(B) ○ q = . C˙ C + γD q .. γB ν

(C) ○ $q_{ult} - 1.3CN_C + \gamma DN_q + 0.4\,\gamma BN_\gamma$

(D) ○ q = 1. ′C D q 0. νB′ ν

**Question No.83** Marks: 1.00

**Bookmark**

The relative positions of the points to be surveyed should be located by measurement from at least:

(A) ○ 1 point of reference

(B) ○ 3 points of reference (Chosen option)

(C) ○ 4 points of reference

(D) ○ **2 points of reference (Correct Answer)**

**Question No.84** Marks: 1.00

**Bookmark**

Given that the width of the sleepers=w, the sleeper spacing=s, then the depth of ballast

'd' is:

(A) ○ **(s – w)/2 (Correct Answer)**

(B) ○ s – w

(C) ○ (w - s)/2

(D) ○ w – s

**Question No.85** Marks: 1.00

**Bookmark**

In roads, Stopping Sight Distance at slopes is given by:

(A) ○ $SSD = \ t + v\text{^}2/2gf$ **(Correct Answer)**

(B) ○ $SSD = \_t$

(C) ○ $SSD = v\text{^}2/2gf$

(D) ○ $SSD = vt + v\text{^}2/(2g(f \pm 0.01n))$

**Question No.86** Marks: 1.00

**Bookmark**

Better drag coefficient will be achieved when aspect ratio becomes:

(A) ○ L/D < 4

(B) ○ L/D > 4

(C) ○ L/D = 4

(D) ○ **L/D > 6 (Correct Answer)** (Chosen option)

**Question No.87** Marks: 1.00

**Bookmark**

Coefficient of drag value for sphere is:

(A) ○ $26.0/R_e$

(B) ○ $28.0/R_e$

(C) ○ **$24.0/R_e$ (Correct Answer)**

(D) ○ $30.0/R_e$

**Question No.88** Marks: 1.00

**Bookmark**

For soils with poor internal drainage and high water table, drainage required is:

(A) ○ **Outlet drain (Correct Answer)** (Chosen option)

(B) ○ Bedding

(C) ○ Envelope filters

(D) ○ French drain

**Question No.89** Marks: 1.00

**Bookmark**

The hoop stress in case of thick cylinders is reduced by _____ one cylinder over another cylinder.

○

(A) wire winding (Chosen option)
(B) ○ **shrinking (Correct Answer)**
(C) ○ adding
(D) ○ compressing

**Question No.90** Marks: 1.00

**Bookmark**

ABC analysis is related to:
(A) ○ **Controlling the inventory costs money (Correct Answer)** (Chosen option)
(B) ○ Analysis of process chart
(C) ○ Ordering schedule of job
(D) ○ Flow of Metals

**Question No.91** Marks: 1.00

**Bookmark**

Velocity Potential Ø is a constant along _____.
(A) ○ non Stream Function
(B) ○ stream line (Chosen option)
(C) ○ non equipotential line
(D) ○ **equipotential line (Correct Answer)**

**Question No.92** Marks: 1.00

**Bookmark**

_____ are sometimes used in river training work to close a particular flow , so that river flow may be directed in some other desired direction.
(A) ○ Attracting groynes
(B) ○ Submerged dykes (Chosen option)
(C) ○ Pitched islands
(D) ○ **Closing dykes (Correct Answer)**

**Question No.93** Marks: 1.00

**Bookmark**

Drag force on an object is given by:
(A) ○ $F_D = \int_s^1 (p_n - \tau$

(B) ○ $F_D = \int_s^1 (-p_n + \tau)\, n_\infty d_s$

(C) ○ $F_D = \int_s^1 -p\ \tau)$ **(Correct Answer)**

(D) ○ $F_D = \int_s^1 (p_n + \tau)$

**Question No.94** Marks: 1.00

**Bookmark**

Which location absorbs the least radiation and transmits the most during a radiography test?

(A) ○ Extremely high-density region (Chosen option)

(B) ○ High-density region

(C) ○ **Low-density region (Correct Answer)**

(D) ○ The same quantity of radiation is absorbed and transmitted in low and high-density areas

**Question No.95** Marks: 1.00

**Bookmark**

Dense Bituminous Macadam (DBM) is laid over a well compacted:

(A) ○ Granular Base

(B) ○ Embankment

(C) ○ Sub grade

(D) ○ **Wet Mix Macadam Course (Correct Answer)** (Chosen option)

**Question No.96** Marks: 1.00

**Bookmark**

During plate load test, the settlement of a 35 cm plate is found to be 2 cm in a cohesive soil, then the settlement of a square footing of 85 cm side under same loading conditions is _____.

(A) ○ 3.75 cm

(B) ○ 3.89 cm

(C) ○ **4.85 cm (Correct Answer)** (Chosen option)

(D) ○ 2.00 cm

**Question No.97** Marks: 1.00

**Bookmark**

Which of the following are the total linear errors of closure in the compass traverse?

(A) ○ **1 in 600 (Correct Answer)** (Chosen option)

(B) ○ 1 in 5000

(C) ○ 1 in 10000

(D) ○ 1 in 25000

**Question No.98** Marks: 1.00

**Bookmark**

Lag is an activity that cannot start until a certain time _____of its predecessor.

(A) ○ **after the end (Correct Answer)** (Chosen option)

(B) ○ before the start

(C) ○ before the end

(D) ○ after the start

**Question No.99** Marks: 1.00

**Bookmark**

Identify he type o russ.


(A) ○ **a - Perfect truss,**
**b – Deficient truss,**
**c - Redundant truss (Correct Answer)**

(B) ○ a - Redundant truss,
b – Deficient truss,
c - Perfect truss (Chosen option)

(C) ○ a - Deficient truss,
b – Perfect truss,
c - Redundant truss

(D) ○ a - Redundant truss,
b – Perfect truss,
c - Deficient truss

**Question No.100** Marks: 1.00

**Bookmark**

Shallow tube wells up to 70 meter depth in alluvial soils are usually not drilled by:

(A) ○ Cable tool drills

(B) ○ **Light rigs (Correct Answer)**

(C) ○ Air pressure drills (Chosen option)

(D) ○ Water jet methods

**Question No.101** Marks: 1.00

**Bookmark**

Cost of production equals prime costs and:

(A) ○ Factory Overheads

(B) ○ Factory, administration and sales overheads

(C) ○ Factory, administration, sales, overheads and profits

(D) ○ **Factory and administration overheads (Correct Answer)** (Chosen option)

**Question No.102** Marks: 1.00

**Bookmark**

The essential requirements of soil properties considered suitable for the construction of subgrade are:

(A) ○ Liquid Limit to less than 80% and Plasticity Index to be less than 10.

(B) ○ Liquid Limit to less than 60% and Plasticity Index to be less than 2%.

(C) ○ Liquid Limit to less than 70% and Plasticity Index to be less than 15%.

(D) ○ **Liquid Limit to less than 50% and Plasticity Index to be less than 25. (Correct Answer)** (Chosen option)

**Question No.103** Marks: 1.00

**Bookmark**

Which one of the given statements is WRONG about torsion?

(A) ○ Force required for torsion is normal to the longitudinal axis and exactly at the centroid.

(B) ○ It causes rotation of all the fibres about longitudinal axis

(C) ○ Torsion is the twisting of a structural member subjected to a couple that produces rotation about longitudinal axis

(D) ○ **Radii remain straight after rotation (Correct Answer)** (Chosen option)

**Question No.104** Marks: 1.00

**Bookmark**

Dimension analysis is a method to find _____.

(A) ○ quantity

(B) ○ acceleration (Chosen option)

(C) ○ **dimensions (Correct Answer)**

(D) ○ properties

**Question No.105** Marks: 1.00

**Bookmark**

What is the limit to the spacing of longitudinal bars on the column perimeter?

(A) ○ 200 mm (Chosen option)

(B) ○ **300 mm (Correct Answer)**

(C) ○ 450 mm

(D) ○ 16 × diameter of main bar

**Question No.106** Marks: 1.00

**Bookmark**

$O_3$ is formed due to the photochemical reaction between _____.

(A) ○ Oxidation of Hydrocarbons

(B) ○ $SO_2$ and $H_2O$

(C) ○ Nitrogen oxide combine with atmospheric Oxygen (Chosen option)

(D) ○ **Hydrocarbon(HC) and NItrogen Oxide(NO) (Correct Answer)**

**Question No.107** Marks: 1.00

**Bookmark**

Which one of the formula is correct for estimation of RL of intermediate point?

(A) ○ RL of BM+BS+IS

(B) ○ RL of BM-BS-IS

(C) ○ **RL of BM+BS-IS (Correct Answer)**

(D) ○ RL of BM -BS+IS

**Question No.108** Marks: 1.00

**Bookmark**

A well 3 meters in diameter has its normal water level 3 meters below the ground level. By pumping water level in the well is depressed to 10 meters below the ground level. In 4 hours the water rises by 5 meters. Calculate the specific yield of the well.

(A) ○ 3.224 $m^3$/hr

(B) ○ 5 $m^3$/hr

(C) ○ 1.242 $m^3$/hr

(D) ○ **2.213 $m^3$/hr (Correct Answer)**

**Question No.109** Marks: 1.00

**Bookmark**

Path line works on:

(A) ○ **Logorangian approach (Correct Answer)**

(B) ○ Eulerian approach

(C) ○ 1D flow (Chosen option)

(D) ○ 3D flow

**Question No.110** Marks: 1.00

**Bookmark**

The ratio of direct stress to the volumetric strain is known as:

(A) ○ **Bulk modulus (Correct Answer)** (Chosen option)

(B) ○ Modulus of rigidity

(C) ○ Young's modulus

(D) ○ Modulus of elasticity

**Question No.111** Marks: 1.00

**Bookmark**

What is the most common shape of the transition curve?

(A) ○ Elliptical

(B) ○ Parabola (Chosen option)

(C) ○ **Cubic parabola (Correct Answer)**

(D) ○ Square

**Question No.112** Marks: 1.00

**Bookmark**

Which one of the following is CORRECT statement about Simple machines?

(A) ○ It reduces the force required (Chosen option)

(B) ○ It increases the amount of work required

(C) ○ **It increases the force required (Correct Answer)**

(D) ○ It reduces the amount of work required

**Question No.113** Marks: 1.00

**Bookmark**

Cone is having angle of $75^o$. Drag coefficient value becomes:

(A) ○ 1.40

(B) ○ 1.05

(C) ○ 1.15

(D) ○ **0.55 (Correct Answer)**

**Question No.114** Marks: 1.00

**Bookmark**

As shown in the following table, a project consists of seven activities. Find out project duration:

| Activity | Time required (in weeks) | Immediate Predecessor |
|---|---|---|
| P | 7 | - |
| Q | 4 | - |
| R | 2 | Q |
| S | 11 | P |
| T | 9 | P, R |
| U | 9 | Q |
| V | 4 | T, U |

(A) ○ 19 weeks

(B) ○ 18 weeks (Chosen option)

(C) ○ 17 weeks

(D) ○ **20 weeks (Correct Answer)**

**Question No.115** Marks: 1.00

**Bookmark**

Analytical and graphical methods are used for finding the _____ on an oblique section.

(A) ○ **stresses (Correct Answer)**

(B) ○ torsion

(C) ○ strains

(D) ○ moments (Chosen option)

**Question No.116** Marks: 1.00

**Bookmark**

For normal RCC work, the recommended slump should be _____.

(A) ○ 20 to 40 mm

(B) ○ **80 to 150 mm (Correct Answer)**

(C) ○ 10 to 15 mm

(D) ○ 50 to 70 mm (Chosen option)

**Question No.117** Marks: 1.00

**Bookmark**

The nomogram of Hazen–Williams formula is valid for a value of roughness coefficient $C_H$ equal to 100. For any other value of roughness coefficient $C_H$, the head loss obtained from the nomogram is multiplied by the factor:

(A) ○ $C_H/30$

(B) ○ **$C_H/100$ (Correct Answer)**

(C) ○ $C_H/25$

(D) ○ $C_H*100$

**Question No.118** Marks: 1.00

**Bookmark**

The magnetic bearing of a line is $44^o35'$. If the magnetic declination is $4^o14'$ East, the true bearing is:

(A) ○ $131^o11'$

(B) ○ $139^o39'$

(C) ○ **$48^{o}49'$ (Correct Answer)**

(D) ○ $40^{o}21'$ (Chosen option)

**Question No.119** Marks: 1.00

**Bookmark**

The age factor for a 6 month of a member full load or stress is ____.

(A) ○ 1.0 (Chosen option)

(B) ○ 1.15

(C) ○ **1.20 (Correct Answer)**

(D) ○ 1.10

**Question No.120** Marks: 1.00

**Bookmark**

In a constant head permeability test, the quantity of water collected is 380 ml in 12 minutes under an effective constant head of 45 cm. If the length and area of cross section of the sample are 6.5 cm and 50 $cm^2$ respectively, then coefficient of permeability is _____.

(A) ○ **$1.52 \times 10^{-3}$ cm/sec (Correct Answer)**

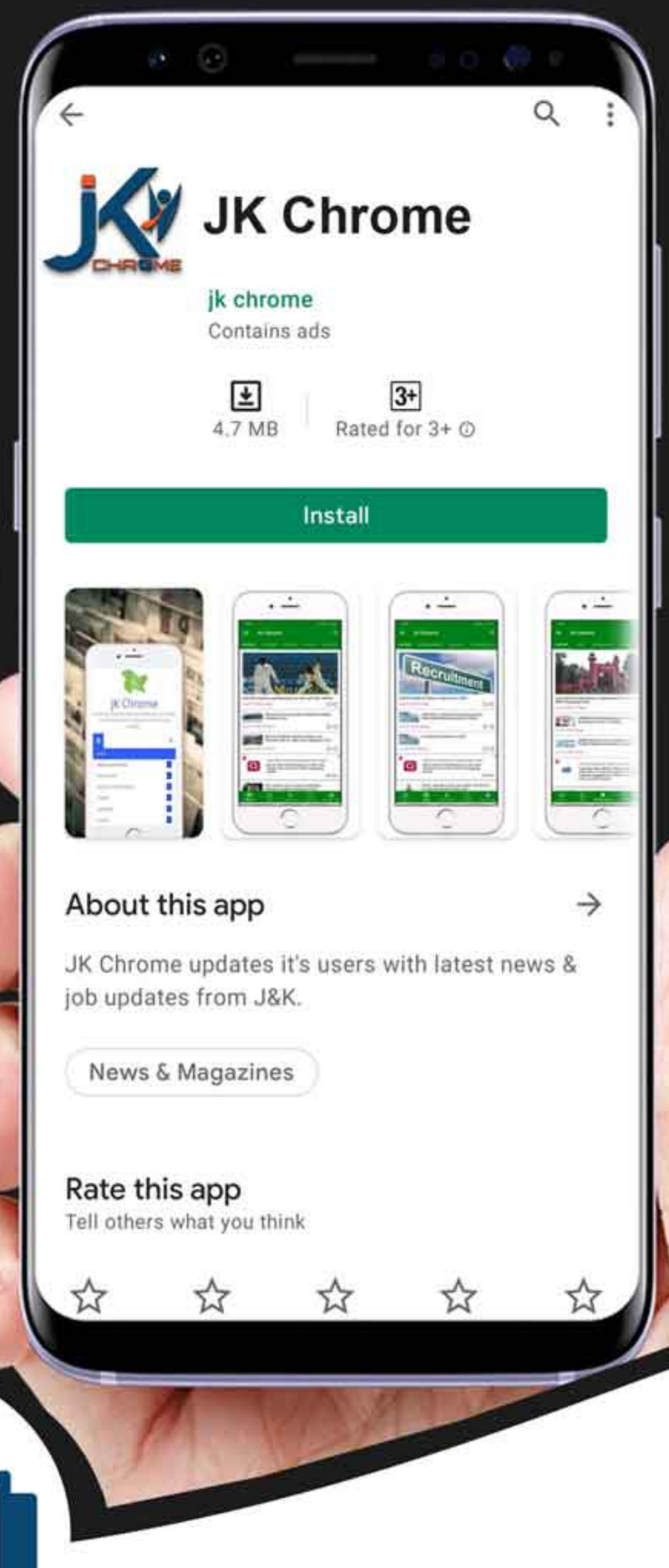
(B) ○ $1.84 \times 10^{-5}$ cm/sec

(C) ○ $1.10 \times 10^{-2}$ cm/sec

(D) ○ $1.24 \times 10^{-4}$ cm/sec

# JK Chrome

## JK Chrome | Employment Portal




## Rated No.1 Job Application of India

Sarkari Naukri
Private Jobs
Employment News
Study Material
Notifications

JOBS

NOTIFICATIONS

G.K

STUDY MATERIAL

GET IT ON Google play

JK Chrome
jk chrome
Contains ads

Click here to DOWNLOAD

www.jkchrome.com | Email : contact@jkchrome.com