

## PROVISIONAL ANSWER KEY

Question 51/2025/OL

Paper Code:

Category 423/2024

Code:

Exam: Draftsman Grade I/Sub Engineer

Date of Test 17-06-2025

Department Kerala Water Authority

Question1:-What is the size of a A3 sheet in mm as per Indian Standard Institution (I.S.I.)?

A:-1189 x 841

B:-420 x 297

C:-841 x 594

D:-297 x 210

Correct Answer:- Option-B

Question2:-In first angle orthographic projection

A:-Object is below the horizontal plane and behind the vertical plane

B:-Object is below the horizontal plane and in front of the vertical plane

C:-Object is above the horizontal plane and behind the vertical plane

D:-Elevation is drawn above the plan

Correct Answer:- Option-D

Question3:-In an orthographic projection, if a line is parallel to the vertical plane (VP) and inclined to the horizontal plane (HP), its top view will be

A:-A line of smaller dimension

B:-A line of larger dimension

C:-Same size

D:-Front view shows the true length

Correct Answer:- Option-A

Question4:-Which of the following conics has an eccentricity of unity?

A:-Circle

B:-Parabola

C:-Hyperbola

D:-Ellipse

Correct Answer:- Option-B

Question5:-What is the shape of the development of the lateral surface of a cone?

A:-Square

B:-Rectangle

C:-Sector of a circle

D:-Semi-circle

Correct Answer:- Option-C

Question6:-The isometric projection of a circle is

A:-Circle

B:-Semi-circle

C:-Ellipse

D:-Sphere

Correct Answer:- Option-C

Question7:-Which of the following is the SI unit of force?

A:-Kg/m

B:-N m

C:-Kg/ $m^2s$

D:-Kg m/ $s^2$

Correct Answer:- Option-D

Question8:-A body remains/continue in its state of rest or motion until it is disturbed by an external Force. This statement describes

A:-Newton's third law of motion

B:-Newton's First law of motion

C:-Bernoulli's law

D:-Pascal's law

Correct Answer:- Option-B

Question9:-When there is no relative motion between touching surfaces, which of the following frictional force is developed?

A:-Static friction

B:-Dynamic friction

C:-Fluid friction

D:-All of the above

Correct Answer:- Option-A

Question10:-Which part of the truss section is made to employ the method of joints in the free body diagram?

A:-The whole structure

B:-Combinations of whole structure and truss

C:-Joints

D:-None of the above

Correct Answer:- Option-C

Question11:-The forces, which meet at one point, but their lines of action do not lie in a plane, are called

A:-Intersecting forces

B:-Non coplanar non concurrent forces

C:-Coplanar non concurrent forces

D:-Non coplanar concurrent forces

Correct Answer:- Option-D

Question12:-The center of gravity of a uniform lamina lies at its geometrical center, which is also called

A:-Radius of gyration

B:-Centroid

C:-Moment of Inertia

D:-Metacenter

Correct Answer:- Option-B

Question13:-The possible loading in various members of framed structures is

A:-Compression or tension

B:-Shear or tension

C:-Shear or buckling

D:-Compression or buckling

Correct Answer:- Option-A

Question14:-Moment of Inertia of a thin circular ring of radius  $r$  and mass  $M$  about an axis perpendicular to plane of ring is

A:- $\frac{Mr^2}{2}$

B:- $\frac{Mr^2}{3}$

C:- $Mr$

D:- $Mr^2$

Correct Answer:- Option-D

Question15:-For a perfect frame, where 'n' is the number of members and 'j' is the number of joints, the relationship is given by

A:- $n = 2j - 3$

B:- $n = 2j - 2$

C:- $n = 3j - 2$

D:- $n = 3j - 3$

Correct Answer:- Option-A

Question16:-For a linearly elastic, isotropic and homogeneous material, which of the following statements is true regarding the elastic constants  $E$  (Young's modulus),  $G$  (Shear modulus),  $\nu$  (Poisson's ratio), and  $K$  (Bulk modulus)?

A:-All four constants are independent and must be determined separately

through experiments

B:-Bulk modulus and shear modulus cannot be used together to determine Poisson's ratio

C:-The relationship between these constants is valid only for perfectly incompressible materials

D:-Knowing any two of these constants is sufficient to compute the other two

Correct Answer:- Option-D

Question17:-A steel bar of length L is rigidly fixed between two unyielding supports. When the temperature of the bar is increased by  $\Delta T$ , which of the following statements is true?

A:-The bar expands freely without any stress

B:-A compressive stress develops due to thermal expansion being restrained

C:-A tensile stress develops because the bar wants to expand

D:-No stress develops because temperature change affects strain, not stress

Correct Answer:- Option-B

Question18:-In a beam subjected to transverse loading, analyzed under standard beam theory assumptions, the point where the shear force changes sign corresponds to :

A:-A point where bending moment is zero

B:-A location of maximum or minimum bending moment

C:-A point of contraflexure

D:-A point of inflection in the shear force diagram

Correct Answer:- Option-B

Question19:-Consider a long slender column made of an isotropic and homogeneous material, with both ends pinned (hinged). According to Euler's column theory, which of the following statements is correct?

A:-Euler's formula applies regardless of the load eccentricity or initial curvature of the column.

B:-Euler's formula predicts higher critical load for a column with higher slenderness ratio.

C:-Euler's formula assumes buckling occurs without any material yielding.

D:-Euler's formula is applicable even when the column is short, provided the ends are hinged.

Correct Answer:- Option-C

Question20:-A composite bar is formed by rigidly joining a steel rod and an aluminium rod side by side (i.e. parallel configuration), both of equal length and cross-sectional area. The composite is subjected to an axial load P. The Young's moduli of steel and aluminium are  $E_s$  and  $E_a$  respectively. What is the ratio of the load carried by the steel rod to that carried by the aluminium rod?

A:- $\frac{E_s}{E_a}$

B:- $\frac{E_a}{E_s}$

C:-1

D:- $\frac{E_s + E_a}{E_s - E_a}$

Correct Answer:- Option-A

Question21:-Two identical steel columns, Column A and Column B, have the same material, length, and cross-sectional dimensions, but different end conditions :

Column A is hinged at both ends

Column B is fixed at one end and free at the other

Which of the following statements is correct?

A:-Column A has lower slenderness ratio and higher critical load than Column B

B:-Column B has lower slenderness ratio and higher critical load than Column A

C:-Column A and Column B have the same slenderness ratio, but different critical loads

D:-Column B has higher slenderness ratio and lower critical load than Column A

Correct Answer:- Option-D

Question22:-A simply supported beam of length L carries a uniformly distributed load w (force per unit length) over its entire length. What is the maximum bending moment in the beam?

A:- $\frac{wL^2}{8}$

B:- $\frac{wL^2}{12}$

C:- $\frac{wL^3}{12}$

D:- $\frac{wL^3}{8}$

Correct Answer:- Option-A

Question23:-Which of the following factors contributes most to the higher efficiency of welded joints compared to riveted joints?

A:-Welded joints do not require overlap of plates

B:-Riveted joints reduce stress concentration at the joint

C:-Riveted joints use ductile materials to improve fatigue resistance

D:-Welded joints avoid material removal during fabrication

Correct Answer:- Option-D

Question24:-A cantilever beam of span 6 m carries a point of load of 12 kN at a distance of 2 m from the free end. What is the maximum bending moment in the beam?

A:-24 kNm

B:-36 kNm

C:-48 kNm

D:-72 kNm

Correct Answer:- Option-C

Question25:-A gravity dam with a vertical upstream face has a height of 20 m and a base width of 30m. The dam retains water up to the top. Assume the water is static and the density of water is  $1000 \text{ kg/m}^3$  with gravitational acceleration  $g=9.8\text{m/s}^2$ . What is the total horizontal hydrostatic force exerted by the water on the dam per meter length?

- A:-980 kN
- B:-1960 kN
- C:-2940 kN
- D:-3920 kN

Correct Answer:- Option-B

Question26:-How does viscosity of fluids vary with increase in temperature?

- A:-Increases for both liquids and gases
- B:-Increases for liquids, decreases for gases
- C:-Increases for gases, decreases for liquids
- D:-Decreases for both liquids and gases

Correct Answer:- Option-C

Question27:-For a completely submerged body with centre of gravity 'G' and centre of buoyancy 'B', the condition of stability will be

- A:-G is located below B
- B:-G is located above B
- C:-G and B are coincident
- D:-Independent of the locations of G and B

Correct Answer:- Option-A

Question28:-If there are m physical quantities and n fundamental dimensions in a physical process, the number of non-dimensional parameters is

- A:-m+n
- B:-m x n
- C:-m-n
- D:-m/n

Correct Answer:- Option-C

Question29:-Bernoulli's equation is applied to

- A:-Venturimeter
- B:-Orifice meter
- C:-Pitot tube
- D:-All of these

Correct Answer:- Option-D

Question30:-Euler's dimensionless number relates to the following

- A:-inertial force and gravitational force

- B:-viscous force and inertial force
- C:-pressure force and inertial force
- D:-viscous force and pressure force

Correct Answer:- Option-C

Question31:-Which of the following is used for the measurement of rate of flow in a river?

- A:-Notches
- B:-Weir
- C:-Orifices
- D:-Mouthpieces

Correct Answer:- Option-B

Question32:-Gauge pressure is equal to

- A:-Absolute pressure - atmospheric pressure
- B:-Atmospheric pressure-absolute pressure
- C:-Atmospheric pressure + absolute pressure
- D:-Atmospheric pressure + vaccum

Correct Answer:- Option-A

Question33:-An ideal fluid is defined as the fluid which

- A:-is incompressible and viscous
- B:-is compressible and viscous
- C:-is incompressible and inviscid
- D:-is compressible and inviscid

Correct Answer:- Option-C

Question34:-When is Bernoulli's equation applicable between any two points in a flow field?

- A:-The flow is steady, compressible and irrotational
- B:-The flow is unsteady, incompressible and irrotational
- C:-The flow is steady, incompressible and rotational
- D:-The flow is steady, incompressible and irrotational

Correct Answer:- Option-D

Question35:-In order to have maximum power from a Pelton turbine, the bucket speed must be

- A:-Equal to the jet speed
- B:-Equal to half of the jet speed
- C:-Equal to twice the jet speed
- D:-Independent of the jet speed

Correct Answer:- Option-B

Question36:-Cavitation in a hydraulic reaction turbine is most likely to occur at the turbine

A:-Entry

B:-Draft tube Exit

C:-Stator Exit

D:-Rotor Exit

Correct Answer:- Option-D

Question37:-Which one of the following statements is TRUE?

A:-Both Pelton and Francis turbines are impulse turbines

B:-Francis turbine is a reaction turbine but Kaplan turbine is an impulse turbine

C:-Francis turbine is an axial-flow reaction turbine

D:-Kaplan turbine is an axial - flow reaction turbine

Correct Answer:- Option-D

Question38:-The extent of pressure produced due to water hammer depends on

A:-Velocity of flow of fluid in the pipe

B:-Length of the pipe

C:-Time taken to close the valve; gradual or quick closure of the valve

D:-All the above

Correct Answer:- Option-D

Question39:-In centrifugal pumps, maximum efficiency is obtained when the blades are

A:-Straight

B:-Bent forward

C:-Bent backward

D:-Radial

Correct Answer:- Option-C

Question40:-Low specific speed of the turbine implies it is

A:-Propeller turbine

B:-Francis turbine

C:-Impulse turbine

D:-Kaplan turbine

Correct Answer:- Option-C

Question41:-In a centrifugal pump the sum of suction head and delivery head is known as

A:-Static head

B:-Dynamic head

C:-Total head



D:-Manometric head

Correct Answer:- Option-A

Question42:-During the delivery stroke of a reciprocating pump, separation may take place

A:-At the beginning of the stroke

B:-At the middle of the stroke

C:-At the end of the stroke

D:-None of these

Correct Answer:- Option-C

Question43:-Specific speed of a turbine is defined as a speed of turbine which

A:-Produces unit power at unit head

B:-Produces unit power at unit discharge

C:-Delivers unit discharge at unit head

D:-Delivers unit discharge at unit power

Correct Answer:- Option-A

Question44:-Select the largest unit of energy

A:-Electron volt

B:-Joule

C:-Calorie

D:-Evg

Correct Answer:- Option-C

Question45:-Entropy is a

A:-Path function, intensive property

B:-Path function, extensive property

C:-Point function, intensive property

D:-Point function, extensive property

Correct Answer:- Option-D

Question46:-Consider a Steady state, Steady flow process, in a control volume. If the mass flow rate entering the control volume is 5 kg/s. What is the mass flow exiting the control volume

A:-0 kg/s

B:-5 kg/s

C:-10 kg/s

D:--10 kg/s

Correct Answer:- Option-B

Question47:-What is the air standard cycle for a gas turbine called?

A:-Reheat cycle

B:-Rankine cycle

C:-Brayton cycle

D:-Diesel cycle

Correct Answer:- Option-C

Question48:-A diesel power station has a fuel consumption of 0.43 kg per kwh, the calorific value of fuel being 10,000 kcal/kg. The overall station efficiency of the station is (1kwh=860 kcal)

A:-65 %

B:-20 %

C:-25 %

D:-40 %

Correct Answer:- Option-B

Question49:-The order of values of thermal efficiency of Otto, Diesel and Dual cycle, when they have equal compression ratio and heat rejection

A:- $\eta_{\text{otto}} > \eta_{\text{diesel}} > \eta_{\text{dual}}$

B:- $\eta_{\text{diesel}} > \eta_{\text{dual}} > \eta_{\text{otto}}$

C:- $\eta_{\text{dual}} > \eta_{\text{diesel}} > \eta_{\text{otto}}$

D:- $\eta_{\text{otto}} > \eta_{\text{dual}} > \eta_{\text{diesel}}$

Correct Answer:- Option-D

Question50:-Efficiency of practically used solar cell is approximately

A:-25 %

B:-15 %

C:-40 %

D:-60 %

Correct Answer:- Option-B

Question51:-The major parts of a dumpy level are

A:-A telescope and a bubble tube

B:-A vertical spindle

C:-A levelling head

D:-All of the above

Correct Answer:- Option-D

Question52:-Pick the correct equation

A:-Elevation of line of collimation = Known elevation + Back sight

B:-Elevation of line of collimation = Known elevation - Back sight

C:-Elevation of line of collimation = Known elevation - Back sight + datum

D:-Elevation of line of collimation = Known elevation + foresight

Correct Answer:- Option-A

Question53:-Pick the correct statement regarding the adjustment of dumpy level

A:-The axis of the bubble tube should be perpendicular to the vertical axis of the instrument

B:-The horizontal cross hair should lie in a plane perpendicular to the vertical axis

C:-The line of sight should be parallel to the axis of bubble tube

D:-All of the above

Correct Answer:- Option-D

Question54:-A \_\_\_\_\_ Curve is a curve of various radius introduced between a straight and a circular curve or between two circular curve facilitate change over from straight to curve or from one curve to another

A:-Combined curve

B:-Transition curve

C:-Reverse curve

D:-All of the above

Correct Answer:- Option-B

Question55:-Which data is not required for computation of various quantities for setting out the transition curve

A:-Deflection angle between the original tangents

B:-Radius of circular curve

C:-Chainage of the point of intersection

D:-None of the above

Correct Answer:- Option-D

Question56:-The part of theodolite carrying the leveling screws as called

A:-Tribrach

B:-Limb

C:-Trivet

D:-Alidade

Correct Answer:- Option-A

Question57:-Pick the modern surveying equipment to collect and process field data much more easily to a higher precision

A:-Total station survey

B:-Global positioning system

C:-Geographic Information System

D:-All of the above

Correct Answer:- Option-D

Question58:-A line lying on the ground surface throughout and maintaining a constant inclination to the horizontal is called

A:-Horizontal equivalent line

B:-Contour gradient

C:-Contour interval

D:-None of the above

Correct Answer:- Option-B

Question59:-A small quantity of \_\_\_\_\_ in brick earth imparts yellow tint to bricks and decreases the shrinkage.

A:-Oxide of lime

B:-Magnesia

C:-Pyrites

D:-Potash

Correct Answer:- Option-B

Question60:-A brick moulded with a double bullnose on end is called

A:-Coping brick

B:-Cownose brick

C:-Outnose brick

D:-Kannose brick

Correct Answer:- Option-B

Question61:-\_\_\_\_\_ are caused by the rupture of tissue in a circular direction

A:-Ring shakes

B:-Heart shakes

C:-Cup shakes

D:-Radial shakes

Correct Answer:- Option-C

Question62:-Pick the reason for difficult in slaking of lime and increases the hydraulic property

A:-Increase in percentage of clay

B:-Decrease in percentage of clay

C:-Increase in percentage of air

D:-Decrease in percentage of sand

Correct Answer:- Option-A

Question63:-Pick the base material of an oil borne paint

A:-White lead

B:-Lithophone

C:-Titanium white

D:-All of the above

Correct Answer:- Option-D

Question64:-The common field test adopted for finding bearing capacity of soil

A:-Standard Penetration test

B:-Pile load test

C:-Proctor test

D:-CBR test

Correct Answer:- Option-A

Question65:-The piles rest on hard strata under surface soil and transmit load to it is called

A:-Compaction piles

B:-End bearing piles

C:-Fender piles

D:-Anchor piles

Correct Answer:- Option-B

Question66:-In \_\_\_\_\_ bond each course is comprised of alternate headers and stretchers

A:-English bond

B:-Flemish bond

C:-Raking bond

D:-Garden wall bond

Correct Answer:- Option-B

Question67:-Pick the tool used for brick masonry

A:-Trowel

B:-Bolster

C:-Scutch

D:-All of the above

Correct Answer:- Option-D

Question68:-The lower edge of the inclined roof surface is called

A:-Pitch

B:-Hip

C:-Eaves

D:-Valley

Correct Answer:- Option-C

Question69:-The area enclosed between the boundaries of the plot

A:-Floor area

B:-Plinth area

C:-Carpet area

D:-None of the above

Correct Answer:- Option-D

Question70:-Pick the correct expression

A:-Floor area ratio = Total floor area on all floors/plot area

B:-Floor area ratio=Total floor area on all floors/Plinth area

C:-Floor area ratio = Total floor area on all floors / Carpet area

D:-Floor area ratio = Total floor area on all floors / Floor area

Correct Answer:- Option-A

Question71:-The permitted maximum coverage (in percentage) for a residential building

A:-65 %

B:-75 %

C:-35 %

D:-55 %

Correct Answer:- Option-A

Question72:-The maximum permitted floor area ratio for Educational B type building

A:-1.5

B:-1.75

C:-2.0

D:-None of the above

Correct Answer:- Option-D

Question73:-The area of the habitable room shall be not less than

A:-6 square meters

B:-7 square meters

C:-9.5 square meters

D:-8.5 square meters

Correct Answer:- Option-C

Question74:-Rapid hardening Portland cement having quick rate of gain of strength due to higher content of

A:-Tricalcium Silicate

B:-Dicalcium Silicate

C:-Tricalcium Aluminates

D:-Tetracalcium Aluminates

Correct Answer:- Option-A

Question75:-Which cement is used in sewage and water treatment plants?

A:-Ordinary Portland cement

B:-Rapid hardening cement

C:-Sulphate resisting cement

D:-Low heat cement

Correct Answer:- Option-C

Question76:-Which is the IS code for specification of Portland Pozzolana Cement?

A:-IS 1489 : 1991

B:-IS 269 : 1989

C:-IS 8112 : 1976

D:-IS 456 : 2000

Correct Answer:- Option-A

Question77:-Slump height of concrete for canal lining is

A:-20 to 40 mm

B:-70 to 80 mm

C:-25 to 50 mm

D:-No slump

Correct Answer:- Option-B

Question78:-Nominal cover provided for concrete exposed to moderate exposure should not be less than

A:-75 mm

B:-40 mm

C:-45 mm

D:-30 mm

Correct Answer:- Option-D

Question79:-The maximum diameter of reinforcing bars used in slab should not be greater than :

A:-1/4th of the thickness of slab

B:-1/8th of the thickness of slab

C:-1/5th of the thickness of slab

D:-1/6th of the thickness of slab

Correct Answer:- Option-B

Question80:-The minimum eccentricity as per IS 456 : 2000 for the design of column is :

A:- $\frac{l}{500} + \frac{D}{30}$

B:- $\frac{l}{300} + \frac{D}{50}$

C:- $\frac{l}{300} + \frac{D}{500}$

D:- $\frac{l}{500} + \frac{D}{200}$

Correct Answer:- Option-A

Question81:-Choose the correct statement from the following :

- I. Bleeding indicates the deficiency of coarse material in the mix.
- II. Segregation indicates poor aggregate grading
- III. As the slump increases, the compaction factor increases
- IV. The slump value of concrete used for trench filling should be 100 to 150 mm

A:-I, II and III only

B:-II, IV only

C:-II, III and IV only

D:-I, II and IV only

Correct Answer:- Option-C

Question82:-What is the minimum horizontal spacing between bars in a beam?

A:- $3\phi$

B:- $2\phi$

C:-5 mm + aggregate size

D:-Aggregate size

Correct Answer:- Option-C

Question83:-The stripping time for removal of props of beams of OPC concrete spanning over 6 m is

A:-3 days

B:-7 days

C:-14 days

D:-21 days

Correct Answer:- Option-D

Question84:-The tensile strength of concrete is normally :

A:-10 - 15 % of its compressive strength

B:-15 - 20 % of its compressive strength

C:-20 - 25 % of its compressive strength

D:-25 - 30 % of its compressive strength

Correct Answer:- Option-A

Question85:-Trial mix test specimen after moulding are placed at a temperature of

A:- $10\pm 2^{\circ}\text{C}$

B:- $15\pm 2^{\circ}\text{C}$

C:- $23\pm 2^{\circ}\text{C}$

D:- $27\pm 2^{\circ}\text{C}$

Correct Answer:- Option-D

Question86:-Coefficient of thermal expansion of steel is :



A:-0.12/°C

B:-0.0012/°C

C:-0.000012/°C

D:-0.000010/°C

Correct Answer:- Option-C

Question87:-What is the unit of measurement of the following item as per CPWD Analysis of rates :

Centering and shuttering, including strutting, propping, removal, etc., of form for : Edges of slabs and breaks in floors and walls under 20 cm wide

A:-Square metre

B:-Metre

C:-Cubic feet

D:-None of the above

Correct Answer:- Option-B

Question88:-As per CPWD data analysis, water charges accounts for

A:-1.5 % of the sum of total cost and contractor's profit and overhead charges

B:-1 % of the total cost before adding GST and contractor's profit and overhead charges

C:-1 % of the total cost after adding the contractor's profit and overhead charges

D:-1 % of the total cost after adding GST and contractor's profit and overhead charges

Correct Answer:- Option-B

Question89:-Which among the following does not come under outgoings while calculating income?

A:-Taxes

B:-Repairs

C:-Year's purchase

D:-Sinking fund

Correct Answer:- Option-C

Question90:-What is the quantity of cement, coarse sand and graded stone aggregate required for  $1m^3$  of concrete of ratio 1:1:5:3?

A:-0.4 ton of cement,  $0.425m^3$  of coarse sand and  $0.85m^3$  of graded stone aggregate

B:-0.17 ton of cement,  $0.47m^3$  of coarse sand and  $0.89m^3$  of graded stone aggregate

C:-0.22 ton of cement,  $0.47m^3$  of coarse sand and  $0.94m^3$  of graded stone aggregate

D:-0.32 ton of cement,  $0.445m^3$  of coarse sand and  $0.89m^3$  of graded stone aggregate

Correct Answer:- Option-A

Question91:-What is the weight of reinforcement bar of 10 mm diameter having a

length of 5 m?

A:-4.43 kg

B:-3.08 kg

C:-0.61 kg

D:-1.95 kg

Correct Answer:- Option-B

Question92:-What will be the total length of a bar of length L and diameter d if cranking is done at  $30^\circ$  on two sides?

A:- $L+2 \times 0.42d$

B:- $L+2 \times 0.56d$

C:- $L+0.42d$

D:- $L+2 \times 0.27d$

Correct Answer:- Option-D

Question93:-When a sanctioned estimate is likely to be exceeded by more than 5% either from the rates being found insufficient due to change of price level or from any cause whatever, except important structural alternations, the estimate prepared is called

A:-Supplementary estimate

B:-Approximate estimate

C:-Detailed estimate

D:-Revised estimate

Correct Answer:- Option-D

Question94:-In belting method of valuation for open land, what is the value of the second belt, if V1 is the value of the first belt?

A:- $V1/3$

B:- $2V1/3$

C:- $V1/2$

D:- $3V1/4$

Correct Answer:- Option-B

Question95:-Find the expected time when optimistic time = 4, most likely time = 8 and pessimistic time = 12.

A:-8

B:-12

C:-5.33

D:-None of the above

Correct Answer:- Option-A

Question96:-If  $T_{Ei} = 10$  days,  $T_{Li} = 18$  days,  $T_{Ej} = 28$  days,  $T_{Lj} = 46$  days and activity duration equal 12 days, calculate the free float

A:-12 days

B:-6 days

C:-16 days

D:-18 days

Correct Answer:- Option-B

Question97:-In ABC analysis, A type items are those in which :

A:-An approximate forecast of quantities is needed

B:-Ordering is done on EOQ basis

C:-Bulk ordering is preferred

D:-Accurate forecast of quantities is needed

Correct Answer:- Option-D

Question98:-Calculate the cost slope when normal time = 5 days, crash time = 3 days, normal cost = 5000 and crash cost = 2000:

A:-1500

B:-3500

C:-1000

D:-500

Correct Answer:- Option-A

Question99:-The type of contract in which the contractor undertakes the execution of a specific work with all its contingencies, to complete it in all respects within a specified time for a fixed amount is known as

A:-Turnkey contract

B:-Measurement contract

C:-Item rate contract

D:-Lumpsum contract

Correct Answer:- Option-D

Question100:-A scaled drawing of the proposal construction site showing all the relevant features like site entry and exit points, storage areas for materials, contractor's offices, areas for keeping equipment and washing facilities, labour housing, toilets, medical facility etc.

A:-Site plan

B:-Key plan

C:-Job layout

D:-Index plan

Correct Answer:- Option-C