

# CHHATTISGARH STATE POWER HOLDING COMPANY LTD.

(A Successor Company of CSEB)



Participant ID:	
Participant Name:	
Test Center Name:	ION Digital Zone iDZ SARONA
Test Date:	27/09/2018
Test Time:	12:30 PM - 2:30 PM
Subject:	Junior Engineer Trainee CIVIL

## Section : General Awareness and Reasoning

Q.1 \_\_\_\_\_ do NOT participate in the election of the Vice-President of India.

- Ans
- 1. The members of the Lok Sabha
  - 2. The elected members of the Rajya Sabha
  - 3. The members of the Legislative Assembly
  - 4. The nominated members of the Rajya Sabha

Question ID : 157319688  
Status : Answered  
Chosen Option : 3

Q.2 What was the theme for World Humanitarian Day 2018?

- Ans
- 1. #StopCivilWar
  - 2. #NotATarget
  - 3. #NoMoreExploitation
  - 4. #NotYourEnemy

Question ID : 157319683  
Status : Answered  
Chosen Option : 1

Q.3 For which sport did Bajrang Punia win a gold medal for India at the Asian Games 2018?

- Ans
- 1. Boxing
  - 2. Badminton
  - 3. Shooting
  - 4. Wrestling

Question ID : 157319684  
Status : Answered  
Chosen Option : 4

Q.4 Stainless steel pans and utensils are usually provided with copper bottoms. What is the reason for this?

- Ans
- 1. Copper is a better conductor of heat than stainless steel.
  - 2. Such pans appear colourful.
  - 3. A copper bottom makes the pan more durable.
  - 4. Copper is easier to clean than stainless steel.

Question ID : 157319690  
Status : Answered  
Chosen Option : 1

Q.5 भारत के संविधान का अनुच्छेद 44 किससे संबंधित है?

- Ans
- 1. नागरिकों के लिए एक समान नागरिक संहिता
  - 2. सहकारी समितियों का संवर्धन
  - 3. राष्ट्रपति का चुनाव
  - 4. ग्राम पंचायतों का संगठन

Question ID : 157319687  
Status : Answered  
Chosen Option : 4

Q.6 युवाओं के बीच हिंदी पढ़ने और लिखने को बढ़ावा देने के लिए अगस्त 2018 में किस देश में पाणिनी भाषा प्रयोगशाला का उद्घाटन किया गया था?

- Ans
- 1. मॉरीशस
  - 2. भूटान
  - 3. नेपाल
  - 4. इंडोनेशिया

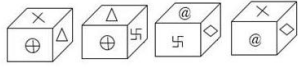
Question ID : 157319681  
Status : Answered  
Chosen Option : 1

Q.7

<p>Ans <input checked="" type="checkbox"/> 1. बी. सेसिकरण  <input checked="" type="checkbox"/> 2. प्रशांत मोहन  <input checked="" type="checkbox"/> 3. एम. लोगनाथन  <input checked="" type="checkbox"/> 4. रमन वर्मा</p>	<p>Status : Answered  Chosen Option : 3</p>
<p>Q.8 सितंबर 2018 यथास्थिति, भारतीय रिजर्व बैंक द्वारा घोषित सांविधिक चलनिधि अनुपात (SLR) कितना है?  Ans <input checked="" type="checkbox"/> 1. 18.50%  <input checked="" type="checkbox"/> 2. 18.00%  <input checked="" type="checkbox"/> 3. 19.00%  <input checked="" type="checkbox"/> 4. 19.50%</p>	<p>Question ID : 157319686  Status : Not Answered  Chosen Option : --</p>
<p>Q.9 जब आइसक्रीम के एक कप में एक लकड़ी का चम्मच डुबोया जाता है, तो इसका दूसरा सिरा _____।  Ans <input checked="" type="checkbox"/> 1. ठंडा नहीं होता है  <input checked="" type="checkbox"/> 2. चालन (conduction) की प्रक्रिया से ठंडा हो जाता है  <input checked="" type="checkbox"/> 3. विकिरण (radiation) की प्रक्रिया से ठंडा हो जाता है  <input checked="" type="checkbox"/> 4. संवहन (convection) की प्रक्रिया से ठंडा हो जाता है</p>	<p>Question ID : 157319689  Status : Answered  Chosen Option : 2</p>
<p>Q.10 सरहुल महोत्सव किस राज्य में मनाया जाता है?  Ans <input checked="" type="checkbox"/> 1. असम  <input checked="" type="checkbox"/> 2. गुजरात  <input checked="" type="checkbox"/> 3. छत्तीसगढ़  <input checked="" type="checkbox"/> 4. झारखंड</p>	<p>Question ID : 157319685  Status : Answered  Chosen Option : 3</p>
<p>Q.11 Choose the correct alternative from the given ones that will complete the series:  511, 342, 215, 124, 63, 26, ?  Ans <input checked="" type="checkbox"/> 1. 14  <input checked="" type="checkbox"/> 2. 15  <input checked="" type="checkbox"/> 3. 7  <input checked="" type="checkbox"/> 4. 9</p>	<p>Question ID : 157319693  Status : Answered  Chosen Option : 3</p>
<p>Q.12 श्रुति एक बिंदु 'X' से 'Y' तक सीधे 5 m चली। वह 'Y' पर दाएं मुड़ गई और 'Z' की ओर लगभग 7 m चली। वह 'Z' पर बाएं मुड़ गई और 'A' की तरफ 5 m चली। 'A' पर, वह फिर से बाएं मुड़ गई और 7 m चलकर 'B' तक गई। श्रुति 'X' से कितनी दूरी पर है?  Ans <input checked="" type="checkbox"/> 1. 8 m  <input checked="" type="checkbox"/> 2. 14 m  <input checked="" type="checkbox"/> 3. 10 m  <input checked="" type="checkbox"/> 4. 15 m</p>	<p>Question ID : 157319697  Status : Answered  Chosen Option : 3</p>
<p>Q.13 'ट्रेसपास' उसी प्रकार से 'एंटर' से संबंधित है जिस प्रकार 'चोरी' _____ से संबंधित है।  Ans <input checked="" type="checkbox"/> 1. भीख  <input checked="" type="checkbox"/> 2. आलोकन  <input checked="" type="checkbox"/> 3. हत्या  <input checked="" type="checkbox"/> 4. उधार</p>	<p>Question ID : 157319691  Status : Answered  Chosen Option : 1</p>
<p>Q.14 जय, जॉन, ज्योति और जगबीर चार दोस्त हैं। जॉन का वजन जगबीर से कम लेकिन ज्योति से ज्यादा है। जगबीर न तो जय से भारी है और न ही ज्योति से हल्का है। उनमें से सबसे भारी कौन है?  Ans <input checked="" type="checkbox"/> 1. जय  <input checked="" type="checkbox"/> 2. जगबीर  <input checked="" type="checkbox"/> 3. ज्योति  <input checked="" type="checkbox"/> 4. जॉन</p>	<p>Question ID : 157319695  Status : Answered  Chosen Option : 1</p>
<p>Q.15 Select the one which is different from the other three alternatives.  Ans <input checked="" type="checkbox"/> 1. FGILP  <input checked="" type="checkbox"/> 2. DFGJN  <input checked="" type="checkbox"/> 3. GHJMQ</p>	<p>Question ID : 157319692  Status : Answered  Chosen Option : 2</p>

4. EFHKO

Q.16 If a cube is made using the given arrangements, which symbol will be opposite to '@'?



- Ans
- 1.
  - 2.
  - 3.
  - 4.

Question ID : 157319699  
Status : Answered  
Chosen Option : 3

Q.17 Choose the alternative which most closely resembles the mirror-image of the given combination.

AN5CG4K6H

- Ans
- 1. H6K4G2NA
  - 2. AN2CG4K6H
  - 3. H6K4G2NA
  - 4. H6K4G2NA

Question ID : 157319698  
Status : Answered  
Chosen Option : 1

Q.18  $x \cdot y$  का अर्थ है ' $x, y$  की माता है';  $x \wedge y$  का अर्थ है ' $x, y$  का पिता है';  $x \# y$  का अर्थ है ' $x, y$  का पति है' और  $x \mathcal{S} y$  का अर्थ है ' $x, y$  की बेटी है'.

निम्न में से कौन सी अभिव्यक्ति यह दर्शाती है कि 'M, S का भाई है'?

- Ans
- 1.  $M\mathcal{S}P\#Q * M \wedge R$
  - 2.  $S\mathcal{S}P\#Q * R * M$
  - 3.  $S\mathcal{S}P\#Q * M \wedge R$
  - 4.  $S\#P\mathcal{S}M \wedge Q * R$

Question ID : 157319694  
Status : Answered  
Chosen Option : 3

Q.19 उस शब्द का चयन करें जो मध्य में आएगा यदि निम्नलिखित शब्द अंग्रेजी शब्दकोष में उनके क्रम के अनुसार व्यवस्थित किए जाते हैं:

Knave, Kinetic, Kinematic, Knack, Kincob

- Ans
- 1. Knave
  - 2. Kincob
  - 3. Kinetic
  - 4. Kinematic

Question ID : 157319696  
Status : Answered  
Chosen Option : 3

Q.20 एक निश्चित कोड में 'COME AT ONCE' को XLNVZGLMXV लिखा जाता है। उसी कोड में 'ALRIGHT' का कोड क्या होगा?

- Ans
- 1. GSTRLOZ
  - 2. ZOIRTSG
  - 3. ZOHRTSG
  - 4. ZPIRTSG

Question ID : 157319700  
Status : Answered  
Chosen Option : 4

Section : Discipline

Q.1 The instrument that is used for preliminary survey, taking short cross-sections and locate contours without high accuracy, is called:

- Ans
- 1. Planimeter
  - 2. Clinometer
  - 3. Sextant
  - 4. Pentagraph

Question ID : 157319734  
Status : Answered  
Chosen Option : 4

Q.2 Geostationary satellites are usually at an altitude of:

- Ans
- 1. 12,000 km
  - 2. 36,000 km
  - 3. 3,000 km
  - 4. 4,40,000 km

Question ID : 157319738  
Status : Answered  
Chosen Option : 2

Q.3 In theodolite, on clamping the lower clamp and unlocking the upper clamp:

- Ans
- 1. The instrument cannot rotate
  - 2.
  - 3.
  - 4.
- Upper plate and instrument can rotate on inner axis with relative motion between vernier and scale
- Both upper and lower plates rotate with relative motion
- Instrument can rotate without any motion between two plates

Question ID : 157319727  
Status : Answered  
Chosen Option : 2

Q.4 Estimate total quantity of timber ceiling rebated with  $40 \times 20$  mm beading over joints to cover an area of  $25.2 \text{ m}^2$ . Take 20 mm thick planks of panel size  $60 \text{ cm} \times 60 \text{ cm}$  and assume 10% wastage.

- Ans
- 1.  $0.96 \text{ m}^3$
  - 2.  $0.789 \text{ m}^3$
  - 3.  $0.357 \text{ m}^3$
  - 4.  $0.637 \text{ m}^3$

Question ID : 157319760

Status : Answered

Chosen Option : 3

Q.5 In general, on a plan, relative altitudes of a point can be represented by:

- (i) Shading
- (ii) Hachures
- (iii) Form lines
- (iv) Contour lines

- Ans
- 1. (ii) and (iv)
  - 2. (i), (ii), (iii) and (iv)
  - 3. (i), (ii) and (iv)
  - 4. (i) and (iv)

Question ID : 157319712

Status : Answered

Chosen Option : 2

Q.6 With 'd' being distance, correction for curvature (C) in levelling is given by:

- Ans
- 1.  $C = 0.7879 \text{ d}^2$  metre
  - 2.  $C = 0.06728 \text{ d}^2$  metre
  - 3.  $C = 0.07849 \text{ d}^2$  metre
  - 4.  $C = 0.667 \text{ d}^2$  metre

Question ID : 157319708

Status : Answered

Chosen Option : 3

Q.7 The inverted staff reading at the soffit of a cantilever beam point A is 1.55m (BS). Foresight reading at point B, with normally held staff, is 1.05 m. The RL of point B is (take reduced level at point A as 100 m):

- Ans
- 1. 98.450 m
  - 2. 102.600 m
  - 3. 97.400 m
  - 4. 95.550 m

Question ID : 157319742

Status : Answered

Chosen Option : 2

Q.8 The sum values of back sight and fore sight in a levelling work were found to be 2.565 m and 6.425 m respectively. If the reduced level of starting station is 100.000 m, the reduced level of last station is:

- Ans
- 1. 97.435 m
  - 2. 96.140 m
  - 3. 93.575 m
  - 4. 91.010 m

Question ID : 157319716

Status : Answered

Chosen Option : 2

Q.9 Spatial analysis in GIS is done by:

- Ans
- 1. Concurrent method
  - 2. 3-point method
  - 3. Network analysis
  - 4. Euclidean method

Question ID : 157319737

Status : Answered

Chosen Option : 4

Q.10 Calculate the number of standard modular bricks required for flat brick soling for a road of 0.5 km length and that is 4 m wide.

- Ans
- 1. 1.25 lakh
  - 2. 85000
  - 3. 1.5 lakh
  - 4. 1.1 lakh

Question ID : 157319771

Status : Answered

Chosen Option : 4

Q.11 The biggest of the main survey line where various survey stations are plotted with reference to this is referred to as:

- Ans
- 1. Pond line
  - 2. Tie line
  - 3. Check line
  - 4. Base line

Question ID : 157319701

Status : Answered

Chosen Option : 4

Q.12 The correct formula of arithmetic checking in Height of Instrument method is given by:

- Ans
- 1.  $\Sigma BS - \Sigma FS = \text{Last RL} - \text{First RL}$
  - 2.  $\Sigma FS - \Sigma BS = \text{Last RL} - \text{First RL}$
  - 3.  $\Sigma BS - \Sigma IS = \text{First RL} - \text{Last RL}$
  - 4.  $\Sigma IS - \Sigma BS = \text{First RL} - \text{Last RL}$

Question ID : 157319714

Status : Answered

Chosen Option : 2

Q.13 Calculate the quantity of earthwork by mid-sectional area method for an embankment of length 130 metre for a portion of road in a uniform ground. The heights of banks at the two ends are 1 m and 1.6 m. The formation width is 10 metre and side slopes are in the ratio 2H : 1V. There is no transverse slope.

Question ID : 157319751

Ans  1. 2455.24 m<sup>3</sup>  
 2. 2129.40 m<sup>3</sup>  
 3. 1690.00 m<sup>3</sup>  
 4. 2350.50 m<sup>3</sup>

Status : **Answered**  
Chosen Option : 2

Q.14 Bill of quantities book provides:

a. Description of various items of work.  
 b. Quantities and unit of rates.

Identify the correct statement(s).

Ans  1. Both the statements are false  
 2. Statement b is true but a is false  
 3. Both the statements are true  
 4. Statement a is true but b is false

Question ID : 157319775  
Status : **Answered**  
Chosen Option : 3

Q.15 Swaying of vehicles outwards due to centrifugal force can be avoided by:

Ans  1. Transition curve  
 2. Reverse curve  
 3. Vertical curve  
 4. Compound curve

Question ID : 157319732  
Status : **Answered**  
Chosen Option : 1

Q.16 In the sedimentation process of sewage for Indian conditions, at a temperature of 25 °C, the surface area required will be \_\_\_\_\_ for every 10 L/min peak flow rate:

Ans  1. 1.18 m<sup>2</sup>  
 2. 0.92 m<sup>2</sup>  
 3. 1.25 m<sup>2</sup>  
 4. 0.67 m<sup>2</sup>

Question ID : 157319765  
Status : **Answered**  
Chosen Option : 3

Q.17 In magnetic declination, the line drawn through points having zero declination is known as:

Ans  1. Agonic line  
 2. Diurnal line  
 3. Aniogetic line  
 4. Isogonic line

Question ID : 157319710  
Status : **Answered**  
Chosen Option : 1

Q.18 The term cost is used to indicate:

Ans  1. The actual amount incurred in producing a commodity that possesses some value plus profit of the manufacturer  
 2. The actual amount incurred in producing a commodity that possesses some value  
 3. The corresponding exchange of one commodity into any other commodity  
 4. The thing that can be owned or held

Question ID : 157319761  
Status : **Answered**  
Chosen Option : 1

Q.19 For an RCC column construction, the reinforcing steel to be provided = 1.7 percentage of concrete volume. Calculate the weight of steel required in kg. Take concrete volume as 1.5 m<sup>3</sup>.

Ans  1. 236.1 kg  
 2. 200.2 kg  
 3. 185.3 kg  
 4. 228.5 kg

Question ID : 157319748  
Status : **Answered**  
Chosen Option : 3

Q.20 Regarding conditions to be fulfilled by survey lines or survey stations, choose the correct option as to which conditions must be fulfilled:

(i) Survey stations need not be mutually visible.  
 (ii) Survey lines must be as few as possible so that the framework can be plotted conveniently.  
 (iii) All the lines from which offsets are taken should be placed close to corresponding surface features so as to get short offsets.  
 (iv) As far as possible, main survey lines should not pass through obstacles.

Ans  1. (ii) and (iii)  
 2. (i) and (iii)  
 3. (i), (ii) and (iv)  
 4. (ii), (iii) and (iv)

Question ID : 157319706  
Status : **Answered**  
Chosen Option : 3

Q.21 An area of agricultural land measured by a surveyor is 2.35 acre. The converted area in terms of square metre = \_\_\_\_\_

Ans

Question ID : 157319763

- 1. 10486.51
- 2. 7501.35
- 3. 12587.31
- 4. 9510.12

Status : **Answered**  
Chosen Option : 4

**Q.22** Which of the below statements is true about the Height of Instrument method of levelling when compared to the Rise and Fall method?

- I. It is tedious and complex as compared to the Rise and Fall method
- II. It is rapid and simple
- III. It provides check in calculation for all sights
- IV. It doesn't provide check for intermediate sight

- Ans**
- 1. II, IV
  - 2. I, II
  - 3. II, III
  - 4. I, IV

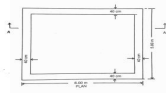
Question ID : **157319722**  
Status : **Answered**  
Chosen Option : 4

**Q.23** The maximum sewage flow into septic tank is based on:

- Ans**
- 1. Suspended solids
  - 2. Number of plumbing fixtures discharging simultaneously
  - 3. Per capita waste water expected to reach tank
  - 4. Number of users

Question ID : **157319764**  
Status : **Answered**  
Chosen Option : 2

**Q.24** Estimate the quantity of earthwork in excavation for a masonry platform, 6 m × 5 m, shown in the below figure. Consider width of excavation = 0.8 m and depth of excavation = 0.7 m.



- Ans**
- 1. 10.12 m<sup>3</sup>
  - 2. 11.42 m<sup>3</sup>
  - 3. 10.96 m<sup>3</sup>
  - 4. 5.71 m<sup>3</sup>

Question ID : **157319780**  
Status : **Answered**  
Chosen Option : 2

**Q.25** Who is authorised to decide, to increase or decrease the rates of works, materials, labours, etc. in order to arrive at the workable rates in different areas mentioned in schedule of rates?

- Ans**
- 1. Superintending engineers
  - 2. Contractors
  - 3. Ministry of PWD
  - 4. Project management consultants

Question ID : **157319757**  
Status : **Answered**  
Chosen Option : 1

**Q.26** Consider the below statements and identify the correct answer.

In a detailed estimate, the abstract of estimate provides:

- i. The total estimated cost of the project
- ii. The various items of work to be carried out to complete the project

- Ans**
- 1. Statement ii is true and i is false
  - 2. Both statements are true
  - 3. Both statements are false
  - 4. Statement i is true and ii is false

Question ID : **157319754**  
Status : **Answered**  
Chosen Option : 2

**Q.27** Under which type of an estimate are structures such as wall foundations measured in linear measurements and fairly accurate price per running metre is multiplied to get approximate cost of the building?

- Ans**
- 1. Typical bay method
  - 2. Service unit method
  - 3. Approximate quantities method
  - 4. Empirical equations method

Question ID : **157319776**  
Status : **Answered**  
Chosen Option : 3

**Q.28** If one side surface area of panelled, framed and braced, ledged and battened door is 2.52 m<sup>2</sup>, the total painting work quantity is = \_\_\_\_ m<sup>2</sup>

- Ans**
- 1. 5.04
  - 2. 2.52
  - 3. 5.67
  - 4. 7.56

Question ID : **157319746**  
Status : **Answered**  
Chosen Option : 1

**Q.29** The unit of measurement used for bending and binding of steel reinforcement is:

- Ans**
- 1. Quintals

Question ID : **157319747**  
Status : **Answered**

<p><input checked="" type="checkbox"/> 2. Running metre</p> <p><input checked="" type="checkbox"/> 3. Numbers</p> <p><input checked="" type="checkbox"/> 4. Cubic metre</p>	<p>Chosen Option : 1</p>
<p><b>Q.30</b> 10 decametre is equal to:</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 1 hectometre</p> <p><input checked="" type="checkbox"/> 2. 1 nautical metre</p> <p><input checked="" type="checkbox"/> 3. 1 decimetre</p> <p><input checked="" type="checkbox"/> 4. 1 kilometre</p>	<p>Question ID : 157319705</p> <p>Status : Answered</p> <p>Chosen Option : 1</p>
<p><b>Q.31</b> Hand signal during observations, i.e., extension of arms and placement of hand on top of head, indicates:</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Raise the staff or height peg</p> <p><input checked="" type="checkbox"/> 2. Return to me</p> <p><input checked="" type="checkbox"/> 3. None of the other options</p> <p><input checked="" type="checkbox"/> 4. Establish the position</p>	<p>Question ID : 157319721</p> <p>Status : Answered</p> <p>Chosen Option : 2</p>
<p><b>Q.32</b> सजावटी या बड़ी कॉलिस को पूर्ण कार्य के लिए _____ में मापा जाता है, जिसमें चिनाई, प्लास्टरिंग, मोल्डिंग इत्यादि शामिल हैं।</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. रनिंग मीटर</p> <p><input checked="" type="checkbox"/> 2. नंबर</p> <p><input checked="" type="checkbox"/> 3. वर्ग मीटर</p> <p><input checked="" type="checkbox"/> 4. घन मीटर</p>	<p>Question ID : 157319745</p> <p>Status : Answered</p> <p>Chosen Option : 3</p>
<p><b>Q.33</b> If the combined correction due to curvature and refraction is 0.85 metre, what is the distance to the visible horizon?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 4.21 km</p> <p><input checked="" type="checkbox"/> 2. 2.11 km</p> <p><input checked="" type="checkbox"/> 3. 3.55 km</p> <p><input checked="" type="checkbox"/> 4. 3.82 km</p>	<p>Question ID : 157319723</p> <p>Status : Answered</p> <p>Chosen Option : 3</p>
<p><b>Q.34</b> In earthwork estimate, whenever there is a vertical drop in the ground at any point, there will be _____ reduced level(s).</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. one</p> <p><input checked="" type="checkbox"/> 2. two</p> <p><input checked="" type="checkbox"/> 3. zero</p> <p><input checked="" type="checkbox"/> 4. three</p>	<p>Question ID : 157319768</p> <p>Status : Answered</p> <p>Chosen Option : 4</p>
<p><b>Q.35</b> In an estimate, a certain amount in the form of contingencies of _____% estimated cost is provided to allow for the expenses for miscellaneous petty items that do not fall under any sub-head items of work.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 5 to 8</p> <p><input checked="" type="checkbox"/> 2. 1 to 3</p> <p><input checked="" type="checkbox"/> 3. 10 to 12</p> <p><input checked="" type="checkbox"/> 4. 3 to 5</p>	<p>Question ID : 157319773</p> <p>Status : Answered</p> <p>Chosen Option : 4</p>
<p><b>Q.36</b> What is the relation between the radius and degree of curve, when the angle at the centre is subtended by an arc of 20m?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. <math>573/D</math> m</p> <p><input checked="" type="checkbox"/> 2. <math>1146/D</math> m</p> <p><input checked="" type="checkbox"/> 3. <math>\pi R\Delta/180</math></p> <p><input checked="" type="checkbox"/> 4. <math>2R\sin(\Delta/2)</math></p>	<p>Question ID : 157319731</p> <p>Status : Answered</p> <p>Chosen Option : 4</p>
<p><b>Q.37</b> The instrument that is used for reproducing enlarging or reducing maps is called:</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Ghats tracer</p> <p><input checked="" type="checkbox"/> 2. Pentagraph</p> <p><input checked="" type="checkbox"/> 3. Planimeter</p> <p><input checked="" type="checkbox"/> 4. Sextant</p>	<p>Question ID : 157319735</p> <p>Status : Answered</p> <p>Chosen Option : 1</p>
<p><b>Q.38</b> For the construction of an RCC slab, 25 HYSD bars of 12 m length and 8 mm diameter are required. Estimated weight of steel is:</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 145.35 kg</p> <p><input checked="" type="checkbox"/> 2. 118.38 kg</p> <p><input checked="" type="checkbox"/> 3. 95.41 kg</p> <p><input checked="" type="checkbox"/> 4. 133.42 kg</p>	<p>Question ID : 157319753</p> <p>Status : Answered</p> <p>Chosen Option : 4</p>

<p><b>Q.39</b> In dealing with desirable optical characteristics of surveying telescope, the absence of spherical aberration is known as:</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Aplanation  <input checked="" type="checkbox"/> 2. Achromatism  <input checked="" type="checkbox"/> 3. Magnification  <input checked="" type="checkbox"/> 4. Chromatic aberration</p>	<p>Question ID : 157319707  Status : Answered  Chosen Option : 2</p>
<p><b>Q.40</b> The wavelength at which maximum amount of energy is reflected from the Earth is:</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 0.9 <math>\mu\text{m}</math>  <input checked="" type="checkbox"/> 2. 5 <math>\mu\text{m}</math>  <input checked="" type="checkbox"/> 3. 9.7 <math>\mu\text{m}</math>  <input checked="" type="checkbox"/> 4. 0.5 <math>\mu\text{m}</math></p>	<p>Question ID : 157319739  Status : Answered  Chosen Option : 1</p>
<p><b>Q.41</b> A reverse curve consists of:</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Two or more arcs turning into the same direction  <input checked="" type="checkbox"/> 2. Two or more arcs with the centre of radii on different sides  <input checked="" type="checkbox"/> 3. A single arc  <input checked="" type="checkbox"/> 4. All of the other options</p>	<p>Question ID : 157319733  Status : Answered  Chosen Option : 4</p>
<p><b>Q.42</b> The term used to denote a procedure of valuing an item on the basis of the materials used, the actual time taken by the labourers and the equipment employed is:</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Provisional sums  <input checked="" type="checkbox"/> 2. Day work  <input checked="" type="checkbox"/> 3. Prime cost  <input checked="" type="checkbox"/> 4. Detailed description</p>	<p>Question ID : 157319777  Status : Answered  Chosen Option : 1</p>
<p><b>Q.43</b> The expected out-turn of a mason for the item of work "coursed rubble stone masonry in lime or cement mortar including dressing" is:</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 3 <math>\text{m}^3</math>  <input checked="" type="checkbox"/> 2. 0.8 <math>\text{m}^3</math>  <input checked="" type="checkbox"/> 3. 5 <math>\text{m}^3</math>  <input checked="" type="checkbox"/> 4. 0.55 <math>\text{m}^3</math></p>	<p>Question ID : 157319778  Status : Answered  Chosen Option : 1</p>
<p><b>Q.44</b> In differential levelling, which of the following errors can be eliminated by reciprocal measurements:</p> <p>I. Error due to Earth's curvature  II. Error due to atmospheric refraction</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. I only  <input checked="" type="checkbox"/> 2. No error can be eliminated  <input checked="" type="checkbox"/> 3. Both I and II  <input checked="" type="checkbox"/> 4. II only</p>	<p>Question ID : 157319741  Status : Answered  Chosen Option : 1</p>
<p><b>Q.45</b> Which term is used to represent the fancy price demanded by owner as the property possesses certain advantages with respect to the adjoining properties due to its size, shape, frontage, location etc.?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Distress value  <input checked="" type="checkbox"/> 2. Market value  <input checked="" type="checkbox"/> 3. Sentimental value  <input checked="" type="checkbox"/> 4. Monopoly value</p>	<p>Question ID : 157319762  Status : Answered  Chosen Option : 4</p>
<p><b>Q.46</b> Additive constant of a tachometer in stadia method is:</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. <math>c = (f + d)</math>  <input checked="" type="checkbox"/> 2. <math>c = f * d</math>  <input checked="" type="checkbox"/> 3. <math>c = f/d</math>  <input checked="" type="checkbox"/> 4. <math>c = 1/f1 + 1/f2</math></p>	<p>Question ID : 157319730  Status : Answered  Chosen Option : 1</p>
<p><b>Q.47</b> Find the area of temporary land required for 1.5 km length of a road from the following data:  Formation width of road : 10 m. Average height of bank : 1.5 m. Side slope: -2H:1V. Depth of barrow pit: 30 cm</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 11.65 hectare  <input checked="" type="checkbox"/> 2. 6.81 hectare  <input checked="" type="checkbox"/> 3. 9.75 hectare  <input checked="" type="checkbox"/> 4. 10.21 hectare</p>	<p>Question ID : 157319772  Status : Answered  Chosen Option : 3</p>
<p><b>Q.48</b> The size of coarse aggregates used for damp proof course must be:</p>	<p>Question ID : 157319756</p>



<p>Ans <input checked="" type="checkbox"/> 1. 6 to 12 mm  <input checked="" type="checkbox"/> 2. 20 to 25 mm  <input checked="" type="checkbox"/> 3. 25 to 40 mm  <input checked="" type="checkbox"/> 4. 12 to 20 mm</p>	<p>Status : <b>Answered</b>  Chosen Option : 4</p>
<p>Q.49 The actual cost of the work is known:  Ans <input checked="" type="checkbox"/> 1. After the detailed estimate of the project  <input checked="" type="checkbox"/> 2. At the beginning of work  <input checked="" type="checkbox"/> 3. Post the completion of the work  <input checked="" type="checkbox"/> 4. The actual cost cannot be determined</p>	<p>Question ID : 157319743  Status : <b>Answered</b>  Chosen Option : 1</p>
<p>Q.50 Dry brick or stone soling is provided:  Ans <input checked="" type="checkbox"/> 1. In between plinth beam and wall  <input checked="" type="checkbox"/> 2. Below the foundation concrete  <input checked="" type="checkbox"/> 3. Above the terrace slab  <input checked="" type="checkbox"/> 4. At beam column junction</p>	<p>Question ID : 157319744  Status : <b>Answered</b>  Chosen Option : 2</p>
<p>Q.51 In levelling, the objective of back sighting is to:  Ans <input checked="" type="checkbox"/> 1. Ascertain elevation of point  <input checked="" type="checkbox"/> 2. Do temporary adjustments  <input checked="" type="checkbox"/> 3. Fix the instrument station  <input checked="" type="checkbox"/> 4. Ascertain height of plane of sight</p>	<p>Question ID : 157319703  Status : <b>Answered</b>  Chosen Option : 4</p>
<p>Q.52 The actual size of a standard modular brick tile is:  Ans <input checked="" type="checkbox"/> 1. 19 cm × 9 cm × 4 cm  <input checked="" type="checkbox"/> 2. 20 cm × 10 cm × 10 cm  <input checked="" type="checkbox"/> 3. 19 cm × 9 cm × 9 cm  <input checked="" type="checkbox"/> 4. 10 cm × 10 cm × 3 cm</p>	<p>Question ID : 157319749  Status : <b>Answered</b>  Chosen Option : 3</p>
<p>Q.53 Which of the following is NOT a type of variation in declination?  Ans <input checked="" type="checkbox"/> 1. Biurnal declination  <input checked="" type="checkbox"/> 2. Irregular declination  <input checked="" type="checkbox"/> 3. Secular declination  <input checked="" type="checkbox"/> 4. Annual declination</p>	<p>Question ID : 157319709  Status : <b>Answered</b>  Chosen Option : 3</p>
<p>Q.54 The wavelengths at which EM radiation are wholly or partially transmitted through atmosphere are known as:  Ans <input checked="" type="checkbox"/> 1. Absorption wavelengths  <input checked="" type="checkbox"/> 2. Scattering wavelengths  <input checked="" type="checkbox"/> 3. Non-selective wavelengths  <input checked="" type="checkbox"/> 4. Atmospheric window wavelengths</p>	<p>Question ID : 157319740  Status : <b>Answered</b>  Chosen Option : 2</p>
<p>Q.55 A small-sized, curved, flexible connection between the water main and the service pipe provided in house water connection is called:  Ans <input checked="" type="checkbox"/> 1. Ferrule  <input checked="" type="checkbox"/> 2. Elbows  <input checked="" type="checkbox"/> 3. Goose neck  <input checked="" type="checkbox"/> 4. Stop cock</p>	<p>Question ID : 157319766  Status : <b>Answered</b>  Chosen Option : 4</p>
<p>Q.56 In the process of checking for errors involved in traversing, the sum of measured interior angles of a closed traverse should be equal to:  Ans <input checked="" type="checkbox"/> 1. (2N+5) right angles  <input checked="" type="checkbox"/> 2. (2N-5) right angles  <input checked="" type="checkbox"/> 3. (2N-4) right angles  <input checked="" type="checkbox"/> 4. (2N+4) right angles</p>	<p>Question ID : 157319719  Status : <b>Answered</b>  Chosen Option : 3</p>
<p>Q.57 Which of these is a method of plane tabling?  Ans <input checked="" type="checkbox"/> 1. Intersection  <input checked="" type="checkbox"/> 2. All of the other options</p>	<p>Question ID : 157319704  Status : <b>Answered</b>  Chosen Option : 2</p>

- 3. Resection
- 4. Traversing

Q.58 The expected out-turn of a beldar mazdoor for the item of work "earthwork in excavation in ordinary soil" is:

- Ans
- 1. 1.5 m<sup>3</sup> per day
  - 2. 6 m<sup>3</sup> per day
  - 3. 3 m<sup>3</sup> per day
  - 4. 4.5 m<sup>3</sup> per day

Question ID : 157319750  
Status : Answered  
Chosen Option : 3

Q.59 The converted whole circle bearing of 283°57' can be expressed in the form of quadrantal bearing system as:

- Ans
- 1. N86°03'E
  - 2. N86°03'W
  - 3. N76°03'W
  - 4. N76°03'E

Question ID : 157319702  
Status : Answered  
Chosen Option : 3

Q.60 The equivalent length of a pipe fitting for a 90° elbow curve is:

- Ans
- 1. 30 times the pipe diameter
  - 2. 40 times the pipe diameter
  - 3. 20 times the pipe diameter
  - 4. 300 times the pipe diameter

Question ID : 157319767  
Status : Answered  
Chosen Option : 3

Q.61 The branch of surveying in which the horizontal and vertical distance of points are obtained by optical means compared to other conventional methods is termed as:

- Ans
- 1. Levelling
  - 2. Compass surveying
  - 3. Tachometric surveying
  - 4. Contouring

Question ID : 157319728  
Status : Answered  
Chosen Option : 3

Q.62 The quantity of cement required for making concrete of nominal mix 1 : 5 : 10 for construction of foundation with 10 m<sup>3</sup> volume is:

- Ans
- 1. 32.5 bags
  - 2. 15.5 bags
  - 3. 28.5 bags
  - 4. 22.5 bags

Question ID : 157319758  
Status : Answered  
Chosen Option : 2

Q.63 The contour interval is:

- Ans
- 1. directly proportional to time
  - 2. directly proportional to the scale of the map
  - 3. inversely proportional to the scale of the map
  - 4. inversely proportional to the extent of survey

Question ID : 157319715  
Status : Answered  
Chosen Option : 2

Q.64 In earthwork estimate of hill roads, if transverse slope of ground (r) varies from station to station, then the mean harmonic slope can be calculated by:

- Ans
- 1.  $r_{\text{mean}} = (r_1 * r_2) / (r_1 + r_2)$
  - 2.  $r_{\text{mean}} = (2 * r_1 * r_2) / (r_1 + r_2)$
  - 3.  $r_{\text{mean}} = (2 * r_1 * r_2) * (r_1 + r_2)$
  - 4.  $r_{\text{mean}} = (r_1 + r_2) / (2r_1 * r_2)$

Question ID : 157319769  
Status : Answered  
Chosen Option : 3

Q.65 The values of normal lead and lift considered for earthwork are respectively:

- Ans
- 1. 30 m lead and 1.5 m lift
  - 2. 1.5 m lead and 45 m lift
  - 3. 1.5 m lead and 30 m lift
  - 4. 45 m lead and 1.5 m lift

Question ID : 157319779  
Status : Answered  
Chosen Option : 1

Q.66 Which of the below statements is/are INCORRECT with respect to theodolite?

- I. Axis of plate must lie in a plane perpendicular to vertical axis
- II. Axis of altitude level must be parallel to the line of collimation
- III. Errors due to eccentricity of inner and outer axis are due to personnel errors

Question ID : 157319726  
Status : Answered  
Chosen Option : 1

- Ans
- 1. III
  - 2. II
  - 3. I, II, III
  - 4. I

Q.67 Find the area of permanent land required for a state highway for 1 kilometre length, the width of permanent land being 30 metre.

- Ans
- 1. 30 gunters
  - 2. 3000 sq m
  - 3. 3 hectare
  - 4. 3 sq kilometre

Question ID : 157319770  
Status : Answered  
Chosen Option : 3

Q.68 The process of turning telescope of theodolite through vertical plane through  $180^\circ$  about the trunnion axis is termed as:

- Ans
- 1. Transiting
  - 2. Centring
  - 3. Swinging
  - 4. Changing face

Question ID : 157319724  
Status : Answered  
Chosen Option : 1

Q.69 In a telescopic alidade, to facilitate the observer to obtain true horizontal distance from plane table to a levelling staff placed at a point and the difference in elevation between them, \_\_\_\_\_ may be used.

- Ans
- 1. Spirit level
  - 2. Hammer-Fennel stadia arc
  - 3. Ewing Stadi stadia arc
  - 4. Beaman stadia arc

Question ID : 157319713  
Status : Answered  
Chosen Option : 4

Q.70 The various temporary adjustments to a theodolite are:

- I. Centring
- II. Transiting
- III. Plunging
- IV. Levelling up
- V. Elimination of parallax

Which of these are correct?

- Ans
- 1. I, II, V
  - 2. II, III, IV
  - 3. II, IV, V
  - 4. I, IV, V

Question ID : 157319725  
Status : Answered  
Chosen Option : 4

Q.71 If the observed quadrantal bearing of a line AB is  $S 12^\circ 30' W$ , the converted whole circle bearing is:

- Ans
- 1.  $12^\circ 30'$
  - 2.  $192^\circ 30'$
  - 3.  $102^\circ 30'$
  - 4.  $282^\circ 30'$

Question ID : 157319717  
Status : Answered  
Chosen Option : 2

Q.72 Estimate the quantity of sand required for  $100 \text{ m}^2$  area with 12 mm thick plastering work using 1 : 6 cement mortar.

- Ans
- 1.  $1.92 \text{ m}^3$
  - 2.  $1.80 \text{ m}^3$
  - 3.  $2.13 \text{ m}^3$
  - 4.  $1.30 \text{ m}^3$

Question ID : 157319759  
Status : Answered  
Chosen Option : 4

Q.73 A simple instrument used for setting gradients on field is called:

- Ans
- 1. Ceylon Ghats tracer
  - 2. Wiens meter
  - 3. Clinometer
  - 4. Barometer

Question ID : 157319736  
Status : Answered  
Chosen Option : 1

Q.74 The instrument "optical square" is used for:

- Ans
- 1. Setting out a line in acute angle with the base line
  - 2. Setting out point of required elevation
  - 3.

Question ID : 157319718  
Status : Answered  
Chosen Option : 3

Setting out a line at right angle to another line

4. Ranging

Q.75 If the estimated cost of a project is ₹ 20 million, how much work charged establishment should be added to the estimate?

- Ans
- 1. ₹ 90,000
  - 2. ₹ 2,45,000
  - 3. ₹ 40,000
  - 4. ₹ 1,50,000

Question ID : 157319774  
Status : Answered  
Chosen Option : 4

Q.76 In plane table surveying, the working edge of an alidade is known as:

- Ans
- 1. Beaman edge
  - 2. Piange
  - 3. Tangent edge
  - 4. Fiducial edge

Question ID : 157319711  
Status : Answered  
Chosen Option : 3

Q.77 The construction cost index ( $I_n$ ) for  $n^{\text{th}}$  year is represented by the equation:

- Ans
- 1.  $I_n = \frac{\sum(\text{Current year price}) \cdot 100}{\sum(\text{Base year price} \cdot \text{Base year weights})}$
  - 2.  $I_n = \frac{\sum(\text{Current year price}) \cdot 100}{\sum(\text{Base year weights})}$
  - 3.  $I_n = \frac{\sum(\text{Current year price} \cdot \text{Base year weights}) \cdot 100}{\sum(\text{Base year price} \cdot \text{Base year weights})}$
  - 4.  $I_n = \frac{\sum(\text{Base year price} \cdot \text{Base year weights}) \cdot 100}{\sum(\text{Current year price})}$

Question ID : 157319755  
Status : Answered  
Chosen Option : 4

Q.78 A sub tense bar is used for:

- Ans
- 1. Measuring horizontal distances
  - 2. Levelling
  - 3. Contouring
  - 4. Inverting

Question ID : 157319729  
Status : Answered  
Chosen Option : 4

Q.79 To make a certain quantity of concrete, 0.283 m<sup>3</sup> of cement is required. How many 50 kg bags of cement are required for this?

- Ans
- 1. 3.54 bags
  - 2. 8.16 bags
  - 3. 10.21 bags
  - 4. 5.82 bags

Question ID : 157319752  
Status : Answered  
Chosen Option : 2

Q.80 Which of the following indirect methods of contouring is most suitable for hilly terrain?

- Ans
- 1. Method of cross sections
  - 2. Tacheometric method
  - 3. Method of squares
  - 4. Vertical control method

Question ID : 157319720  
Status : Answered  
Chosen Option : 2