

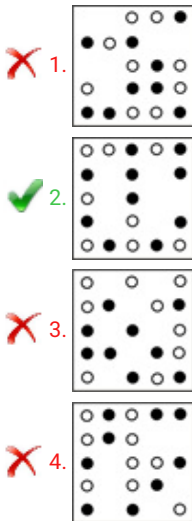


Participant ID	12370500045
Participant Name	[REDACTED]
Test Center Name	iON Digital Zone iDZ 1 Sector 62
Test Date	23/10/2019
Test Time	8:30 AM - 10:30 AM
Subject	JUNIOR ENGINEER CIVIL

Section : Mental Ability

Q.1 Out of the given options, three are similar in a certain manner. However, one option is NOT like the other three. Select the option which is different from the rest.

Ans



Question ID : 54592767486

Q.2 इस प्रश्न में एक कथन है जिसके बाद एक निष्कर्ष है। दिए गए कथन के संदर्भ में निष्कर्ष की जांच करें और निर्धारित करें कि क्या निष्कर्ष सही है या गलत।

कथन: प्रयोगशाला की रिपोर्टों के बाद, ओलंपिक समिति ने एथलीट के प्रतिबंधित पदार्थों के उपयोग पर प्रतिबंध लगा दिया है।

निष्कर्ष: संबंधित एथलीट का प्रतिबंधित पदार्थों के लिए किये गये परीक्षण का परिणाम नकारात्मक आया है।

- Ans
1. यह निष्कर्ष शायद झूठा है।
2. यह निष्कर्ष निश्चित रूप से गलत है।
3. यह निष्कर्ष निश्चित रूप से सच है।
4. यह निष्कर्ष शायद सच है।

Question ID : 54592767478

Q.3 Which option will replace the blanks and complete the given series correctly?

A C F J O _

- Ans
1. T
2. U

✗ 3. S

✗ 4. V

Question ID : 54592767469

Q.4 नीचे दिए गए शब्द के अक्षरों का उपयोग करके कौन सा शब्द नहीं बनाया जा सकता, जिसमें उपयोग किये गये अक्षरों की संख्या दिए गए शब्द में दिखाई देने वाले प्रत्येक अक्षर की संख्या से अधिक न हो?

TRAINING

Ans ✓ 1. Grind

✗ 2. Grain

✗ 3. Grant

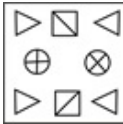
✗ 4. Giant

Question ID : 54592767470

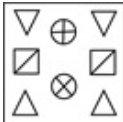
Q.5 Out of the given options, three are similar in a certain manner. However, one option is NOT like the other three. Select the option which is different from the rest.

Ans

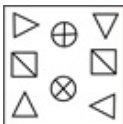
✓ 1.



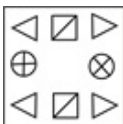
✗ 2.



✗ 3.



✗ 4.



Question ID : 54592767485

Q.6 अपनी डेयरी से शुरू होकर, भिक्कू शहर में दूध देने गया। पहले वह 3 km पूर्व की ओर गया। फिर, वह दाएं मुड़ा और सीधे 4 km चला गया। फिर, वह दाएं मुड़ा और सीधे 3 km चला गया। अंत में, वह दाहिने मुड़ा, आगे 2 km गया और रुक गया। भिक्कू उसकी डेयरी से कितनी दूर है?

Ans ✗ 1. 7.5 km

✗ 2. 3 km

✗ 3. 6 km

✓ 4. 2 km

Question ID : 54592767484

Q.7 P, Q, R और S एक बेंच पर बैठे हैं और एक ही दिशा में देख रहे हैं। P, Q के बगल में बैठा है, लेकिन R के बगल में नहीं है। S, जो एकदम दाईं ओर बैठा है, वह Q या R के बगल में नहीं बैठा है। उनमें से कितनों के प्रत्येक के दो पड़ोसी हैं?

Ans ✗ 1. निश्चित नहीं किया जा सकता है

✗ 2. R और P

✓ 3. P और Q

Question ID : 54592767475

Q.8 A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened.

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

Question ID : 54592767488

Q.9 इस प्रश्न में, दो कथन दिए गए हैं - एक को क्रमशः अभिकथन (A) और दूसरे को कारण (R) कहा गया है। यह मानते हुए कि अभिकथन में दी गई सभी जानकारी सत्य है, इसके साथ दोनों कारणों का विश्लेषण करें और निर्धारित करें कि उनमें से कौन सा सही है/हैं और क्या R, A का सही विवरण है।

अभिकथन: 5 वर्ष से कम आयु के सभी बच्चों को मौखिक पोलियो वैकसीन दिया जाना चाहिए; लेकिन 5 वर्ष से अधिक उम्र के बच्चों को खुराक लेने की आवश्यकता नहीं है।

कारण: भारत में, पोलियोमाइलाइटिस के लगभग सभी समस्या 5 वर्ष से कम उम्र के बच्चों में पाए जाते हैं।

- Ans
1. A और R दोनों सत्य हैं लेकिन R, A की सही व्याख्या नहीं है।
 2. A और R दोनों सत्य हैं और R, A की सही व्याख्या है।
 3. A गलत है लेकिन R सत्य है।
 4. A सत्य है लेकिन R असत्य है।

Question ID : 54592767479

Q.10 उस विकल्प का चयन करें जो तीसरे पद से उसी प्रकार से संबंधित है जिस प्रकार से पहला पद दूसरे पद से संबंधित है।

नेत्र विज्ञान : आंखें :: नेफ्रोलॉजी :

- Ans
1. मृत
 2. कान
 3. कैंसर
 4. गुर्दा

Question ID : 54592767473

Q.11 निम्नलिखित में से कौन-सा वेन आरेख भारतीयों, मुंबई वासियों और महाराष्ट्रीयनों के बीच के संबंध को सबसे अच्छा दर्शाता है?

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

Question ID : 54592767482

Q.12 एक कूट-भाषा में, चाँद को सूरज, सूरज को मंगल, मंगल को बृहस्पति और बृहस्पति को शुक्र कहा जाता है। फिर, उस कूट-भाषा में उपयोग किए गए शब्दों के अनुसार, पृथ्वी पर किसके कारण दिन होगा?

- Ans
1. सूर्य
 2. बृहस्पति

3. मंगल

4. चाँद

Question ID : 54592767474

Q.13 Which number will replace the blanks and complete the given series correctly?

1, 2, 5, 10, 17, 26, ___

Ans 1. 39

2. 35

3. 41

4. 37

Question ID : 54592767480

Q.14 Out of the given options, three are similar in a certain manner. However, one option is NOT like the other three. Select the option which is different from the rest.

Ans 1. Triangle

2. Quadrilateral

3. Circle

4. Square

Question ID : 54592767471

Q.15 Which number will replace the blanks and complete the given series correctly?

4, 16, 36, 64, 100, ___

Ans 1. 169

2. 144

3. 196

4. 125

Question ID : 54592767481

Q.16 From the given answer figures, select the one in which the question figure is hidden/embedded.

Ans 1.

2.

3.

4.

Question ID : 54592767487

Q.17 अपनी डेयरी से शुरू होकर, भिकू शहर में दूध देने गया। पहले वह 3 किमी पूर्व की ओर गया। फिर, वह दाएं मुड़ा और सीधे 4 किमी गया। फिर, वह दाएं मुड़ा और सीधे 3 किमी गया। अंत में, वह दाहिने मुड़ा, 2 किमी चला और रेलवे स्टेशन पर रुक गया। भिकू की डेयरी के संबंध में रेलवे स्टेशन किस दिशा में स्थित है?

Ans 1. उत्तर

2. पूर्व

3. दक्षिण

4. पश्चिम

Question ID : 54592767483

Q.18 Select the option that is related to the third term on the same basis as the second term is related to the first term.

Ambulance : Patient :: Hearse : ?

- Ans
1. Funeral
 2. Doctor
 3. Minister
 4. Corpse

Question ID : 54592767472

Q.19 अमन दीया का पति है। लिली और माइक एक विवाहित जोड़ा है। विक्की अमन का इकलौता बेटा है। लिली दीया की इकलौती बेटी हैं। अमन माइक से कैसे संबंधित है?

- Ans
1. भाई
 2. ससुर
 3. बहनोई
 4. चचेरा भाई

Question ID : 54592767477

Q.20 5 लड़के A, B, C, D और E एक पंक्ति में बैठे हैं। E, D और A के बीच बैठा है, B, A के दाईं ओर है, C एक छोर पर है और C और D एक दूसरे के बगल में बैठे हैं। निम्नलिखित में से कौन सा कथन सत्य है?

- Ans
1. A, E और B के बीच है।
 2. E, A के दाईं ओर है।
 3. C और B सिरे पर हैं।
 4. D, C के दाईं ओर है।

Question ID : 54592767476

Section : General Awareness

Q.1 यूनानियों ने किसे "अमृताघाट" कहा था जिसका अर्थ है दुश्मनों का कातिल?

- Ans
1. अकबर
 2. बिन्दुसार
 3. अशोक
 4. चंद्रगुप्त

Question ID : 54592767501

Q.2 बंगाल विभाजन की घोषणा किसने की?

- Ans
1. लॉर्ड कॉर्नवालिस
 2. लॉर्ड हेस्टिंग्स
 3. लार्ड साइमन
 4. लॉर्ड कर्जन

Question ID : 54592767499

Q.3 निम्नलिखित में से कौन सा एक असैनिक काल सैन्य पदक नहीं है?

- Ans
1. अशोक चक्र
 2. शौर्य चक्र
 3. परमवीर चक्र
 4. कीर्ति चक्र

Question ID : 54592767502

Q.4 जयंतिया पहाड़ियाँ _____ में स्थित है।

- Ans
1. तमिल नाडु
 2. कर्नाटक
 3. मिज़ोरम
 4. मेघालय

Question ID : 54592767498

Q.5 पक्षियों की गति _____ का एक उदाहरण है।

- Ans
1. घूर्णी गति
 2. कंपन गति
 3. रूपांतरित गति
 4. वृत्तीय गति

Question ID : 54592767493

Q.6 The _____ Amendment decreased the voting age from 21 to 18.

- Ans
1. 61st
 2. 25th
 3. 42nd
 4. 44th

Question ID : 54592767506

Q.7 _____ फ़ायलम को फ्लैटवर्म भी कहा जाता है।

- Ans
1. प्लैटीहेल्मिन्थेस
 2. पोरीफेरा
 3. सीलेन्टरेटा
 4. टेनोफोरा

Question ID : 54592767495

Q.8 Who was the first person to be awarded the Nobel Prize for Physics?

- Ans
1. Rudyard Kipling
 2. Rabindranath Tagore
 3. Wangari Maathai
 4. Wilhelm Conrad Rontgen

Question ID : 54592767503

Q.9 Which among the following taxes is NOT imposed on goods and services?

- Ans
1. Sales tax
 2. Gift tax
 3. Luxury tax
 4. Sin tax

Question ID : 54592767492

Q.10 कजरी को महिलाओं द्वारा _____ के लंबे समय के दौरान गाया जाने वाला विक्षिप्त, उदासीन के रूप में जाना जाता है, जब उनके पति बहुत तक घर से दूर रहते हैं।

- Ans
1. ग्रीष्म
 2. शीत
 3. वसंत
 4. वर्षा-ऋतु

Question ID : 54592767490

Q.11 The chemical used in the manufacture of matches is _____.

- Ans
1. Magnesium
 2. Phosphorus
 3. Calcium
 4. Sodium

Question ID : 54592767494

Q.12 Which city will hold the 8th edition of Asian Youth Women Handball Championship 2019?

- Ans
1. Delhi
 2. Bangalore
 3. Jaipur
 4. Hyderabad

Question ID : 54592767507

Q.13 Federation of Indian Chambers of Commerce and Industry was established in _____.

- Ans
1. 1936
 2. 1927
 3. 1945
 4. 1925

Question ID : 54592767504

Q.14 Edwin Montagu, the Secretary of State and Lord Chelmsford, the Viceroy, produced their scheme of constitutional reforms which led to the enactment of the Government of India Act of _____.

- Ans
1. 1915
 2. 1925
 3. 1919
 4. 1923

Q.15 _____ ने वित्त मंत्री के रूप में सेवा कर की अवधारणा पेश की।

- Ans
1. एच. एम. पटेल
 2. मनमोहन सिंह
 3. इंदिरा गांधी
 4. राजीव गांधी

Q.16 2019 इंडियन प्रीमियर लीग (IPL) _____ सीजन था।

- Ans
1. छठा
 2. दसवां
 3. आठवाँ
 4. बारहवां

Q.17 चनाब _____ नदी की प्रमुख सहायक नदी है।

- Ans
1. भागीरथी
 2. अलकनंदा
 3. सिंधु
 4. झेलम

Q.18 Dumhal is a classical folk dance, which is performed by the men only and this is originated by the _____ tribe in Kashmir region.

- Ans
1. Brokpa
 2. Dogra
 3. Wattal
 4. Changpa

Q.19 Which language was added in the Indian Constitution by the 21st Amendment Act?

- Ans
1. Bodo
 2. Bengali
 3. Sindhi
 4. Ghasi

Q.20 The Pabbar River is a tributary of the _____ River.

- Ans
1. Sindh
 2. Tapti
 3. Tons
 4. Barak

Section : Arithmetic Ability

Q.1 यदि लागत मूल्य विक्रय मूल्य का 40% है तो लाभ प्रतिशत क्या है?

- Ans
1. 38%
 2. 90%
 3. 150%
 4. 210%

Question ID : 54592767517

Q.2 आयतचित्र एक चिड़ियाघर में 30 जिराफ़ की लंबाई को दर्शाता है, जिसे 10 इंच के समूहों में बांटा गया है। कितने जिराफ़ की लंबाई 200 इंच से अधिक या उसके बराबर थी?

- Ans
1. 19
 2. 17
 3. 20
 4. 18

Question ID : 54592767528

Q.3 तीन संख्याओं का योग 552 है। यदि पहली और दूसरी संख्या का अनुपात 5 : 7 है और दूसरी और तीसरी संख्या का अनुपात 3 : 8 है, तो दूसरी संख्या क्या है?

- Ans
1. 142
 2. 126
 3. 134
 4. 110

Question ID : 54592767519

Q.4 P के केंद्र वाले एक वृत्त की त्रिज्या 8 cm है। यदि वृत्त की जीवा AB, P पर एक समकोण बनाता है, तो लघु खंड का क्षेत्रफल ज्ञात करें।

- Ans
1. 57.18
 2. 18.28
 3. 18.57
 4. 28.18

Question ID : 54592767524

Q.5 The product of 0.24×0.008 is equal to?

- Ans
1. 0.0192
 2. 0.00192
 3. 0.000192
 4. 0.192

Question ID : 54592767509

Q.6 एक रेलगाड़ी में बैठे एक आदमी ने ध्यान दिया की वह एक मिनट में 31 टेलीफोन के खंभे गिन सकता है। यदि

खंभे 40 m दूर होना माना जाता है, तो रेलगाड़ी किस गति से यात्रा कर रही है?

- Ans
1. 59 km/h
 2. 72 km/h
 3. 127 km/h
 4. 40 km/h

Question ID : 54592767522

Q.7 A sum of money at simple interest amounts to be Rs. 1,285 in 4 years and to Rs. 1,330 in 5 years. The sum is _____.

- Ans
1. Rs. 1105
 2. Rs. 1108
 3. Rs. 1109
 4. Rs. 1110

Question ID : 54592767520

Q.8 दो संख्याएँ a और b गुणा करने पर 3072 देती हैं और उनका लघुत्तम समापवर्तक 192 है तो उनका महत्तम समापवर्तक ज्ञात करें?

- Ans
1. 18
 2. 16
 3. 14
 4. 12

Question ID : 54592767510

Q.9 What is the ratio of the total surface area to lateral surface area of a cylinder, whose radius is 60 cm and height is 20 cm?

- Ans
1. 5 : 1
 2. 4 : 1
 3. 6 : 1
 4. 3 : 1

Question ID : 54592767525

Q.10 नीचे दिया गया आवृत्ति बहुभुज, पेशेवर बास्केटबॉल खिलाड़ियों के एक समूह का इंच में, ऊंचाइयों को दर्शाता है। कितने खिलाड़ियों की ऊंचाई नापी गई?

- Ans
1. 80
 2. 100
 3. 120
 4. 90

Question ID : 54592767527

Q.11 750 लड़कों के एक विद्यालय में, 34% मुसलमान, 42% हिंदू, 12% सिख और बाकी अन्य समुदाय के हैं। कितने लड़के अन्य समुदाय के हैं?

- Ans
1. 90
 2. 130
 3. 110

4.108

Question ID : 54592767515

Q.12 Simplify: $92 - 18 (9 + 36 \div 3 \times 12 - 27 \times 3) + 51$

- Ans
1. -1459
 2. -1153
 3. -1051
 4. -1333

Question ID : 54592767513

Q.13 मनीष एक काम के एक भाग को 36 दिनों में कर सकता है और अजीत उसी काम को विमल की मदद से 48 दिनों में कर सकता है। दोनों ने उस काम को 12 दिनों में खत्म कर दिया। विमल अकेला कितने दिनों में वही काम कर सकता है?

- Ans
1. $25\frac{9}{2}$ दिन
 2. $21\frac{6}{7}$ दिन
 3. $16\frac{2}{3}$ दिन
 4. $28\frac{4}{5}$ दिन

Question ID : 54592767523

Q.14 यदि अंक 43256ab 4 और 5 से विभाज्य है, तो a और b के स्थान पर कौन सा अंक आना चाहिए?

- Ans
1. 2 और 8
 2. 2 और 4
 3. 5 और 0
 4. 2 और 0

Question ID : 54592767511

Q.15 एक ट्रेन 48 kmph की रफ्तार से चल रही है और दूसरी 20 m/s की रफ्तार से चल रही है। दोनों ट्रेनों की गति का अनुपात क्या है?

- Ans
1. 3 : 4
 2. 4 : 5
 3. 2 : 3
 4. 1 : 2

Question ID : 54592767521

Q.16 निम्नलिखित पाई-चार्ट एक पुस्तक को प्रकाशित करने में हुए व्यय का प्रतिशत वितरण दर्शाता है। यदि पुस्तकों की एक निश्चित संख्या के लिए, प्रकाशक को मुद्रण लागत के रूप में 40,000 रुपए का भुगतान करना पड़ा हो, तो इन पुस्तकों के लिए रॉयल्टी की कितनी राशि अदा करनी होगी?

- Ans
1. 20000
 2. 50000
 3. 40000
 4. 30000

Question ID : 54592767526

Q.17 Find the average of the first 21 odd numbers.

- Ans
1. 12
 2. 21
 3. 14
 4. 19

Question ID : 54592767514

Q.18 49 और 91 का तीसरा आनुपातिक कितना है?

- Ans
1. 225
 2. 196
 3. 169
 4. 144

Question ID : 54592767518

Q.19 वह सबसे छोटी 6-अंकीय संख्या निर्धारित करें जो 96, 120 और 180 से विभाज्य हो।

- Ans
1. 100678
 2. 100900
 3. 124080
 4. 100800

Question ID : 54592767512

Q.20 टीवी सेट की कीमत 25% कम करने पर इसकी बिक्री में 20% की वृद्धि हुई है। दुकानदार को मिलने वाले राजस्व पर क्या प्रभाव पड़ता है?

- Ans
1. 9%
 2. 8%
 3. 11%
 4. 10%

Question ID : 54592767516

Section : General English

Q.1 Select the most appropriate word that fills in the blank correctly and completes the sentence meaningfully.

Men don't _____ enjoy shopping for clothes.

- Ans
1. usually
 2. final
 3. usual
 4. usuals

Question ID : 54592767533

Q.2 Select the word that is spelled correctly.

- Ans
1. Byeased
 2. Biased

3. Biasced

4. Byast

Question ID : 54592767539

Q.3 Select the word that is opposite in meaning (ANTONYM) to the word given below.

SPURIOUS

Ans 1. Align

2. Authentic

3. Allure

4. Arise

Question ID : 54592767538

Q.4 Select the word segment that substitutes (replaces) the bracketed word segment correctly and completes the sentence meaningfully. Select the option 'no correction required' if the sentence is correct as given.

Some (animal activist are horrified at the suffering of) innocent animals.

Ans 1. animal activist are horrified at the suffering to

2. animal activist are horrified at the suffering in

3. No correction required

4. animal activists are horrified at the suffering of

Question ID : 54592767532

Q.5 Select the most appropriate 'one word' for the expressions given below.

An artful or simulated semblance

Ans 1. Lethargic

2. Guise

3. Lucid

4. Jurisdiction

Question ID : 54592767543

Q.6 Select the word that is spelled correctly.

Ans 1. Acknowledgment

2. Aknowledgment

3. Acknowledgement

4. Acnowledgment

Question ID : 54592767540

Q.7 Some parts of a sentence have been jumbled up, and labelled P, Q, R and S. Select the option that gives the correct sequence in which these parts can be rearranged to form a meaningful and grammatically correct sentence.

P:his mother thought to herself

Q:on offering to help the blind man

R:what a loving boy she has raised

S:and felt proud

Ans 1. RQSP

- 2. QPRS
- 3. SRQP
- 4. QSRP

Question ID : 54592767535

Q.8 Select the word that is closest in meaning (SYNONYM) to the word given below.

FLURRY

- Ans**
- 1. Alluring
 - 2. Soft
 - 3. Fluster
 - 4. Ignorance

Question ID : 54592767537

Q.9 Select the option that best expresses the meaning of the idiom or phrase given below.

'Hold your horses'

- Ans**
- 1. To flatter someone
 - 2. To be patient
 - 3. To go on a hunt
 - 4. To talk sweetly to get your work done

Question ID : 54592767541

Q.10 Some parts of a sentence have been jumbled up, and labelled P, Q, R and S. Select the option that gives the correct sequence in which these parts can be rearranged to form a meaningful and grammatically correct sentence.

P: cats have big padded
Q: which help them to maintain their balance
R: they also have long tails
S: paws which help them to jump

- Ans**
- 1. SRQP
 - 2. RPQS
 - 3. PQRS
 - 4. PSRQ

Question ID : 54592767536

Q.11 The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.

The hen / has / lain six eggs.

- Ans**
- 1. has
 - 2. The hen
 - 3. lain six eggs.
 - 4. No Error

Question ID : 54592767529

Q.12 Select the option that best expresses the meaning of the idiom or phrase given below.

'Neck of the woods'

- Ans**
1. To fight with someone
 2. To be right and wrong at the same time
 3. To be from a specific neighbourhood or area
 4. To be wise or cunning

Question ID : 54592767542

Q.13 The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.

Gunjan had spoke / to them about / her holiday.

- Ans**
1. No Error
 2. Gunjan had spoke
 3. her holiday.
 4. to them about

Question ID : 54592767530

Q.14 Select the most appropriate word that fills in the blank correctly and completes the sentence meaningfully.

Many of the houses in _____ neighbourhood don't have gardens.

- Ans**
1. this
 2. these
 3. their
 4. there

Question ID : 54592767534

Q.15 Select the word segment that substitutes (replaces) the bracketed word segment correctly and completes the sentence meaningfully. Select the option 'no correction required' if the sentence is correct as given.

A student (is expect to be neat) and clean.

- Ans**
1. is expecting to be neat
 2. is not expect to be neat
 3. No correction required
 4. is expected to be neat

Question ID : 54592767531

Comprehension:

Read the passage below and answer the questions that follow.

The First Battle of Panipat, on 21 April 1526, was fought between the invading forces of Babur and the Lodi Kingdom. It took place in north India and marked the beginning of the Mughal Empire and the end of the Delhi Sultanate. After losing Samarkand for the second time, Babur gave attention to conquer India as he reached the banks of the Chenab in 1519. Until 1524, his aim was to only expand his rule to Punjab, mainly to fulfil his ancestor Timur's legacy, since it used to be part of his empire. At that time, parts of north India were under the rule of Ibrahim Lodi of the Lodi dynasty, but the empire was crumbling and there were many defectors. Babur started for Lahore, Punjab, in 1524 but found that Daulat Khan Lodi had been driven out by forces sent by Ibrahim Lodi. When Babur arrived at Lahore, the Lodi army marched out and was routed. In response, Babur burned and punished the people of Lahore for two days, then marched onto Dipalpur.

Hearing of the size of Ibrahim's army, Babur secured his right flank against the city of Panipat, while digging a trench covered with tree branches to secure his left flanks. In the center, he placed 700 carts tied together with ropes. Between every two carts there were breastworks

for his matchlockmen. This was one of the earliest battles involving gunpowder firearms and field artillery in the Indian subcontinent which were introduced by Mughals in this battle. Babur's guns proved decisive in battle, firstly because Ibrahim lacked any field artillery, but also should come after not only because the sound of the cannon frightened Ibrahim's elephants, causing them to trample his own men. Ibrahim Lodi died on the field of battle along with 20,000 of his troops. The battle of Panipat was militarily a decisive victory for Timurids. Politically it gained Babur new lands and initiated a new phase of his establishment of the long lasting Mughal Empire in the heart of the Indian Subcontinent.

SubQuestion No : 16

Q.16 The first Battle of Panipat was the cause of the death of which of these people?

- Ans**
1. Akbar
 2. Ibrahim
 3. Babur
 4. Timur

Question ID : 54592767549

Comprehension:

Read the passage below and answer the questions that follow.

The First Battle of Panipat, on 21 April 1526, was fought between the invading forces of Babur and the Lodi Kingdom. It took place in north India and marked the beginning of the Mughal Empire and the end of the Delhi Sultanate. After losing Samarkand for the second time, Babur gave attention to conquer India as he reached the banks of the Chenab in 1519. Until 1524, his aim was to only expand his rule to Punjab, mainly to fulfil his ancestor Timur's legacy, since it used to be part of his empire. At that time, parts of north India were under the rule of Ibrahim Lodi of the Lodi dynasty, but the empire was crumbling and there were many defectors. Babur started for Lahore, Punjab, in 1524 but found that Daulat Khan Lodi had been driven out by forces sent by Ibrahim Lodi. When Babur arrived at Lahore, the Lodi army marched out and was routed. In response, Babur burned and punished the people of Lahore for two days, then marched onto Dipalpur.

Hearing of the size of Ibrahim's army, Babur secured his right flank against the city of Panipat, while digging a trench covered with tree branches to secure his left flanks. In the center, he placed 700 carts tied together with ropes. Between every two carts there were breastworks for his matchlockmen. This was one of the earliest battles involving gunpowder firearms and field artillery in the Indian subcontinent which were introduced by Mughals in this battle. Babur's guns proved decisive in battle, firstly because Ibrahim lacked any field artillery, but also should come after not only because the sound of the cannon frightened Ibrahim's elephants, causing them to trample his own men.

Ibrahim Lodi died on the field of battle along with 20,000 of his troops. The battle of Panipat was militarily a decisive victory for Timurids. Politically it gained Babur new lands and initiated a new phase of his establishment of the long lasting Mughal Empire in the heart of the Indian Subcontinent.

SubQuestion No : 17

Q.17 Babur burned and punished the people of which of these places?

- Ans**
1. Delhi
 2. Lahore
 3. Dipalpur
 4. Panipat

Question ID : 54592767546

Comprehension:

Read the passage below and answer the questions that follow.

The First Battle of Panipat, on 21 April 1526, was fought between the invading forces of Babur and the Lodi Kingdom. It took place in north India and marked the beginning of the Mughal Empire and the end of the Delhi Sultanate. After losing Samarkand for the second time, Babur gave attention to conquer India as he reached the banks of the Chenab in 1519. Until 1524, his aim was to only expand his rule to Punjab, mainly to fulfil his ancestor Timur's legacy, since it used to be part of his empire. At that time, parts of north India were under the rule of Ibrahim

Lodi of the Lodi dynasty, but the empire was crumbling and there were many defectors. Babur started for Lahore, Punjab, in 1524 but found that Daulat Khan Lodi had been driven out by forces sent by Ibrahim Lodi. When Babur arrived at Lahore, the Lodi army marched out and was routed. In response, Babur burned and punished the people of Lahore for two days, then marched onto Dipalpur.

Hearing of the size of Ibrahim's army, Babur secured his right flank against the city of Panipat, while digging a trench covered with tree branches to secure his left flanks. In the center, he placed 700 carts tied together with ropes. Between every two carts there were breastworks for his matchlockmen. This was one of the earliest battles involving gunpowder firearms and field artillery in the Indian subcontinent which were introduced by Mughals in this battle.

Babur's guns proved decisive in battle, firstly because Ibrahim lacked any field artillery, but also should come after not only because the sound of the cannon frightened Ibrahim's elephants, causing them to trample his own men.

Ibrahim Lodi died on the field of battle along with 20,000 of his troops. The battle of Panipat was militarily a decisive victory for Timurids. Politically it gained Babur new lands and initiated a new phase of his establishment of the long lasting Mughal Empire in the heart of the Indian Subcontinent.

SubQuestion No : 18

Q.18 The first Battle of Panipat marked an end of which of these dynasties?

- Ans**
1. Delhi Sultanate
 2. Maurya Dynasty
 3. Timur Dynasty
 4. Mughal Dynasty

Question ID : 54592767545

Comprehension:

Read the passage below and answer the questions that follow.

The First Battle of Panipat, on 21 April 1526, was fought between the invading forces of Babur and the Lodi Kingdom. It took place in north India and marked the beginning of the Mughal Empire and the end of the Delhi Sultanate. After losing Samarkand for the second time, Babur gave attention to conquer India as he reached the banks of the Chenab in 1519. Until 1524, his aim was to only expand his rule to Punjab, mainly to fulfil his ancestor Timur's legacy, since it used to be part of his empire. At that time, parts of north India were under the rule of Ibrahim Lodi of the Lodi dynasty, but the empire was crumbling and there were many defectors. Babur started for Lahore, Punjab, in 1524 but found that Daulat Khan Lodi had been driven out by forces sent by Ibrahim Lodi. When Babur arrived at Lahore, the Lodi army marched out and was routed. In response, Babur burned and punished the people of Lahore for two days, then marched onto Dipalpur.

Hearing of the size of Ibrahim's army, Babur secured his right flank against the city of Panipat, while digging a trench covered with tree branches to secure his left flanks. In the center, he placed 700 carts tied together with ropes. Between every two carts there were breastworks for his matchlockmen. This was one of the earliest battles involving gunpowder firearms and field artillery in the Indian subcontinent which were introduced by Mughals in this battle.

Babur's guns proved decisive in battle, firstly because Ibrahim lacked any field artillery, but also should come after not only because the sound of the cannon frightened Ibrahim's elephants, causing them to trample his own men.

Ibrahim Lodi died on the field of battle along with 20,000 of his troops. The battle of Panipat was militarily a decisive victory for Timurids. Politically it gained Babur new lands and initiated a new phase of his establishment of the long lasting Mughal Empire in the heart of the Indian Subcontinent.

SubQuestion No : 19

Q.19 The first Battle of Panipat was the first of the battles to involve which of these?

- Ans**
1. Field artillery
 2. Bows and arrows
 3. Spears
 4. Elephants

Question ID : 54592767548

Comprehension:

Read the passage below and answer the questions that follow.

The First Battle of Panipat, on 21 April 1526, was fought between the invading forces of Babur and the Lodi Kingdom. It took place in north India and marked the beginning of the Mughal Empire and the end of the Delhi Sultanate. After losing Samarkand for the second time, Babur gave attention to conquer India as he reached the banks of the Chenab in 1519. Until 1524, his aim was to only expand his rule to Punjab, mainly to fulfil his ancestor Timur's legacy, since it used to be part of his empire. At that time, parts of north India were under the rule of Ibrahim Lodi of the Lodi dynasty, but the empire was crumbling and there were many defectors. Babur started for Lahore, Punjab, in 1524 but found that Daulat Khan Lodi had been driven out by forces sent by Ibrahim Lodi. When Babur arrived at Lahore, the Lodi army marched out and was routed. In response, Babur burned and punished the people of Lahore for two days, then marched onto Dipalpur.

Hearing of the size of Ibrahim's army, Babur secured his right flank against the city of Panipat, while digging a trench covered with tree branches to secure his left flanks. In the center, he placed 700 carts tied together with ropes. Between every two carts there were breastworks for his matchlockmen. This was one of the earliest battles involving gunpowder firearms and field artillery in the Indian subcontinent which were introduced by Mughals in this battle. Babur's guns proved decisive in battle, firstly because Ibrahim lacked any field artillery, but also should come after not only because the sound of the cannon frightened Ibrahim's elephants, causing them to trample his own men.

Ibrahim Lodi died on the field of battle along with 20,000 of his troops. The battle of Panipat was militarily a decisive victory for Timurids. Politically it gained Babur new lands and initiated a new phase of his establishment of the long lasting Mughal Empire in the heart of the Indian Subcontinent.

SubQuestion No : 20

Q.20 What scared Ibrahim Lodhi's elephants?

- Ans**
1. Spears
 2. Cannons
 3. Horses
 4. The large army

Question ID : 54592767547

Section : General Hindi

Q.1 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस विकल्प का चयन करें जो विराम चिह्न युक्त वाक्य का सही विकल्प हो।

- Ans**
1. देवियो, आप हमारे देश की आशाएँ है!
 2. देवियो-आप हमारे देश की आशाएँ है।
 3. देवियो आप हमारे देश की आशाएँ है
 4. देवियो, आप हमारे देश की आशाएँ है।

Question ID : 54592767562

Q.2 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस विकल्प का चयन करें जो कोष्ठक में दिए गए शब्द के अनुसार अन्य पुरुष वाचक सर्वनाम का सबसे अच्छा विकल्प है।

- Ans**
1. (तुम) किसी की भी बात सुनते क्यों नहीं हो?
 2. (उन्होंने) आने की सूचना क्यों नहीं दी।
 3. (मैं) आज शाम को ही दिल्ली जा रहा हूँ।
 4. (तुमने) इतनी बड़ी गलती कैसे कर दी?

Question ID : 54592767560

Q.3 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस विकल्प का चयन करें जो दिए गए शब्द का सही श्रुतिसमभिनार्थक शब्द का विकल्प है।

वात

- Ans
1. बात
 2. हवा
 3. दिन
 4. वचन

Question ID : 54592767555

Q.4 निम्नलिखित प्रश्न में, चार विकल्पों में से, दिए गए शब्द के विपरीत अर्थ वाले विकल्प को चुनिए।

नित्य

- Ans
1. नवीन
 2. हर दम
 3. हमेशा
 4. अनित्य

Question ID : 54592767554

Q.5 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस विकल्प का चयन करें जो दिए गए मुहावरे के लिए सही अर्थ वाला विकल्प है।

एड़ी-चोटी का ज़ोर लगाना

- Ans
1. पूरा प्रयत्न करना
 2. दबा देना
 3. सभी को दबा के रखना
 4. शारीरिक रूप से सक्षम

Question ID : 54592767563

Q.6 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस विकल्प का चयन करें जो दिए गए वाक्य के काल का सही विकल्प हो।

शेर जंगल में शिकार कर रहा है।

- Ans
1. हेतुहेतु मद भूतकाल
 2. अपूर्ण भूतकाल
 3. अपूर्ण वर्तमान काल
 4. सामान्य वर्तमान काल

Question ID : 54592767561

Q.7 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस विकल्प का चयन करें जो दिए गए वाक्यांश के लिए सही लोकोक्ति वाला विकल्प है।

अकेला हँसता भला न रोता भला

- Ans
1. सुख हो या दुःख साथी की ज़रूरत पड़ती है
 2. मानसिक रूप से कमजोर
 3. दिखावा करना
 4. अकेलापन महसूस करना

Question ID : 54592767564

Q.8 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस विकल्प का चयन करें जो उपसर्ग से बना है।

- Ans
1. अधपका
 2. निकास
 3. मिलन
 4. हौनहार

Question ID : 54592767550

Q.9 निम्नलिखित प्रश्न में, चार विकल्पों में से, दिए गए शब्द के समान अर्थ वाले विकल्प को चुनिए।

असुर

- Ans
1. भृत्य
 2. दनुज
 3. दर्प
 4. कर

Question ID : 54592767557

Q.10 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस विकल्प का चयन करें जो दिए गए शब्द के लिए बहुवचन शब्द का सबसे अच्छा विकल्प है।

कर्मचारी

- Ans
1. कर्मचारीगण
 2. कर्मचारियों
 3. कर्मचारी
 4. कर्मचारियाँ

Question ID : 54592767559

Q.11 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस सही विकल्प का चयन करें जो प्रत्यय से बना शब्द है।

- Ans
1. कुरूप
 2. गुराहट
 3. लापता
 4. नकार

Question ID : 54592767551

Q.12 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस विकल्प का चयन करें जो दिए गए शब्द का सही स्त्रीलिंग शब्द का विकल्प है।

आयुष्मान

- Ans
1. आयुष्मानी
 2. आयुष्मत्री
 3. आयुष्मतिनी
 4. आयुष्मती

Question ID : 54592767558

Q.13 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस विकल्प का चयन करें जो दिए गए शब्द से बनी भाववाचक संज्ञा का सही विकल्प हो।

स्तब्ध

- Ans 1. स्तब्धता
2. स्ताब्धित
3. स्ताबधि
4. स्ताबधिता

Question ID : 54592767552

Q.14 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस विकल्प का चयन करें जो कोष्ठक में दिए गए शब्द के अनुसार विशेषण के भेद वाला विकल्प हो।

(यह) कपड़ा बहुत सुंदर है।

- Ans 1. गुणवाचक
2. निश्चित परिमाण वाचक
3. निश्चित संख्यावाचक
4. सार्वनामिक

Question ID : 54592767553

Q.15 निम्नलिखित प्रश्न में, चार विकल्पों में से, उस सही विकल्प का चयन करें जो वाक्यांशों के लिए एक शब्द का विकल्प हो।

बहुत तेज़ चलने वाला -

- Ans 1. शाश्वत
2. द्रुतगामी
3. नवजात
4. कर्मठ

Question ID : 54592767556

Comprehension:

निम्नलिखित प्रश्न में, चार विकल्पों में से दिए गए अनुच्छेद के आधार पर रिक्त स्थान के लिए उचित विकल्प का चयन करें।

एक समय था, जब हमारे देश में वनों की कोई कमी नहीं थी, आबादी कम थी और बड़े-बड़े शहरों का विकास नहीं हुआ था। गाँव और बस्तियाँ अधिकतर जंगलों के किनारे बसे हुए थे। ग्रामीण जीवन में वनों का विशिष्ट स्थान था। वन भारतीय जीवन के स्रोत थे। यह सुखद संस्मरण अब भूतकाल की बात हो गई है। वर्तमान जीवन बड़े-बड़े महानगरों में सीमेंट, लोहे और कंक्रीट के जंगल में कैद है। अब स्वच्छ वायु, प्राकृतिक दृश्य, वनों की छटा स्वप्न बनाकर रह गए हैं। वर्तमान विशेषज्ञों का कहना है कि देश में कम-से-कम ४० प्रतिशत भाग में वन होने आवश्यक हैं, परंतु दुर्भाग्य यह है कि मात्र 23 प्रतिशत भाग में वन शेष रह गए हैं। वनों की घटती संख्या के कारण हैं- बढ़ती हुई जनसंख्या, फैलाते हुए मैदान, बड़े-बड़े उद्योगों की स्थापना और आधुनिक सभ्यता वनों के बिना सभी प्राणियों की जीवित रहना बहुत कठिन है।

SubQuestion No : 16

Q.16 देश में कम-से-कम कितने भाग में वन होने आवश्यक है?

- Ans 1. 14 प्रतिशत
2. 23 प्रतिशत
3. 40 प्रतिशत
4. 80 प्रतिशत

Question ID : 54592767568

Comprehension:

निम्नलिखित प्रश्न में, चार विकल्पों में से दिए गए अनुच्छेद के आधार पर रिक्त स्थान के लिए उचित विकल्प का चयन करें।

एक समय था, जब हमारे देश में वनों की कोई कमी नहीं थी, आबादी कम थी और बड़े-बड़े शहरों का विकास नहीं हुआ था। गाँव और बस्तियाँ अधिकतर जंगलों के किनारे बसे हुए थे। ग्रामीण जीवन में वनों का विशिष्ट स्थान था। वन भारतीय जीवन

के स्रोत थे। यह सुखद संस्मरण अब भूतकाल की बात हो गई है। वर्तमान जीवन बड़े-बड़े महानगरों में सीमेंट, लोहे और कंक्रीट के जंगल में कैद है। अब स्वच्छ वायु, प्राकृतिक दृश्य, वनों की छटा स्वप्न बनाकर रह गए हैं। वर्तमान विशेषज्ञों का कहना है कि देश में कम-से-कम ४० प्रतिशत भाग में वन होने आवश्यक हैं, परंतु दुर्भाग्य यह है कि मात्र 23 प्रतिशत भाग में वन शेष रह गए हैं। वनों की घटती संख्या के कारण हैं- बढ़ती हुई जनसंख्या, फैलाते हुए मैदान, बड़े-बड़े उद्योगों की स्थापना और आधुनिक सभ्यता वनों के बिना सभी प्राणियों की जीवित रहना बहुत कठिन है।

SubQuestion No : 17

Q.17 सभ्यता' शब्द का विलोम शब्द क्या है?

- Ans**
1. शालीनता
 2. तहजीब
 3. शिष्टता
 4. असभ्यता

Question ID : 54592767569

Comprehension:

निम्नलिखित प्रश्न में, चार विकल्पों में से दिए गए अनुच्छेद के आधार पर रिक्त स्थान के लिए उचित विकल्प का चयन करें।

एक समय था, जब हमारे देश में वनों की कोई कमी नहीं थी, आबादी कम थी और बड़े-बड़े शहरों का विकास नहीं हुआ था। गाँव और बस्तियाँ अधिकतर जंगलों के किनारे बसे हुए थे। ग्रामीण जीवन में वनों का विशिष्ट स्थान था। वन भारतीय जीवन के स्रोत थे। यह सुखद संस्मरण अब भूतकाल की बात हो गई है। वर्तमान जीवन बड़े-बड़े महानगरों में सीमेंट, लोहे और कंक्रीट के जंगल में कैद है। अब स्वच्छ वायु, प्राकृतिक दृश्य, वनों की छटा स्वप्न बनाकर रह गए हैं। वर्तमान विशेषज्ञों का कहना है कि देश में कम-से-कम ४० प्रतिशत भाग में वन होने आवश्यक हैं, परंतु दुर्भाग्य यह है कि मात्र 23 प्रतिशत भाग में वन शेष रह गए हैं। वनों की घटती संख्या के कारण हैं- बढ़ती हुई जनसंख्या, फैलाते हुए मैदान, बड़े-बड़े उद्योगों की स्थापना और आधुनिक सभ्यता वनों के बिना सभी प्राणियों की जीवित रहना बहुत कठिन है।

SubQuestion No : 18

Q.18 इस अनुच्छेद का उपयुक्त शीर्षक दीजिए?

- Ans**
1. वर्तमान स्थिति
 2. संस्मरण
 3. वनों की कटाई- एक गंभीर समस्या
 4. प्राणियों की समस्या

Question ID : 54592767570

Comprehension:

निम्नलिखित प्रश्न में, चार विकल्पों में से दिए गए अनुच्छेद के आधार पर रिक्त स्थान के लिए उचित विकल्प का चयन करें।

एक समय था, जब हमारे देश में वनों की कोई कमी नहीं थी, आबादी कम थी और बड़े-बड़े शहरों का विकास नहीं हुआ था। गाँव और बस्तियाँ अधिकतर जंगलों के किनारे बसे हुए थे। ग्रामीण जीवन में वनों का विशिष्ट स्थान था। वन भारतीय जीवन के स्रोत थे। यह सुखद संस्मरण अब भूतकाल की बात हो गई है। वर्तमान जीवन बड़े-बड़े महानगरों में सीमेंट, लोहे और कंक्रीट के जंगल में कैद है। अब स्वच्छ वायु, प्राकृतिक दृश्य, वनों की छटा स्वप्न बनाकर रह गए हैं। वर्तमान विशेषज्ञों का कहना है कि देश में कम-से-कम ४० प्रतिशत भाग में वन होने आवश्यक हैं, परंतु दुर्भाग्य यह है कि मात्र 23 प्रतिशत भाग में वन शेष रह गए हैं। वनों की घटती संख्या के कारण हैं- बढ़ती हुई जनसंख्या, फैलाते हुए मैदान, बड़े-बड़े उद्योगों की स्थापना और आधुनिक सभ्यता वनों के बिना सभी प्राणियों की जीवित रहना बहुत कठिन है।

SubQuestion No : 19

Q.19 भारतीय जीवन के स्रोत क्या है?

- Ans**
1. प्राकृतिक दृश्य
 2. मनुष्य
 3. वन
 4. सागर

Question ID : 54592767567

Comprehension:

निम्नलिखित प्रश्न में, चार विकल्पों में से दिए गए अनुच्छेद के आधार पर रिक्त स्थान के लिए उचित विकल्प का चयन करें।

एक समय था, जब हमारे देश में वनों की कोई कमी नहीं थी, आबादी कम थी और बड़े-बड़े शहरों का विकास नहीं हुआ था। गाँव और बस्तियाँ अधिकतर जंगलों के किनारे बसे हुए थे। ग्रामीण जीवन में वनों का विशिष्ट स्थान था। वन भारतीय जीवन के स्रोत थे। यह सुखद संस्मरण अब भूतकाल की बात हो गई है। वर्तमान जीवन बड़े-बड़े महानगरों में सीमेंट, लोहे और कंक्रीट के जंगल में कैद है। अब स्वच्छ वायु, प्राकृतिक दृश्य, वनों की छटा स्वप्न बनाकर रह गए हैं। वर्तमान विशेषज्ञों का कहना है कि देश में कम-से-कम ४० प्रतिशत भाग में वन होने आवश्यक हैं, परंतु दुर्भाग्य यह है कि मात्र 23 प्रतिशत भाग में वन शेष रह गए हैं। वनों की घटती संख्या के कारण हैं- बढ़ती हुई जनसंख्या, फैलाते हुए मैदान, बड़े-बड़े उद्योगों की स्थापना और आधुनिक सभ्यता वनों के बिना सभी प्राणियों की जीवित रहना बहुत कठिन है।

SubQuestion No : 20

Q.20 गाँव और बस्तियाँ कहाँ बसे हुए थे?

- Ans**
1. जंगलों के किनारे
 2. जंगल के बीच में
 3. शहरों के किनारे
 4. देश में

Question ID : 54592767566

Section : Discipline1

Q.1 As per Indian Standard 8112 : 2013, the fineness (m^2/kg), soundness by Le Chatelier method (mm), and initial setting time (min) of 43 grade ordinary Portland cement should be:

- Ans**
1. 225, 10, and 30 respectively
 2. 225, 0.8, and 30 respectively
 3. 225, 0.8, and 60 respectively
 4. 325, 10, and 10 respectively

Question ID : 54592767577

Q.2 The plan of a building is made in the form of a rectangle with the centerline dimensions of outer walls as 9.7 m × 14.7 m. If the thickness of the wall is 30 cm, what will be its plinth area?

- Ans**
1. 147 m²
 2. 145.5 m²
 3. 150 m²
 4. 142.59 m²

Question ID : 54592767583

Q.3 As per IS:1077-1992, the standard modular size (L × W × H) of common building bricks shall be:

- Ans**
1. 200 mm × 90 mm × 40 mm
 2. 190 mm × 90 mm × 90 mm
 3. 200 mm × 100 mm × 90 mm
 4. 190 mm × 100 mm × 40 mm

Question ID : 54592767572

Q.4 At the end of the useful life period, the value of the property without being dismantled is known as:

- Ans**
1. Salvation value
 2. Scrap value

- 3. Book value
- 4. Junk value

Question ID : 54592767586

Q.5 The unit weight of reinforced cement concrete in Kg/m³ is:

- Ans**
- 1. 3000
 - 2. 1800
 - 3. 2400
 - 4. 1200

Question ID : 54592767585

Q.6 The technique of finding the fair price of an existing building or property is known as:

- Ans**
- 1. Pricing
 - 2. Estimation
 - 3. Valuation
 - 4. Costing

Question ID : 54592767587

Q.7 The Bouge compound responsible for the initial setting and generating maximum heat of hydration of the cement is:

- Ans**
- 1. C₂S (Belite)
 - 2. C₄AF (Felite)
 - 3. C₃A (Celite)
 - 4. C₃S (Alite)

Question ID : 54592767578

Q.8 The rocks formed due to change in the character of pre-existing rocks caused by intense heat or extreme pressure or both are known as:

- Ans**
- 1. Igneous rocks
 - 2. Metamorphic rocks
 - 3. Sedimentary rocks
 - 4. Volcanic rocks

Question ID : 54592767571

Q.9 Which of the following has the maximum compressive strength?

- Ans**
- 1. Granite
 - 2. Limestone
 - 3. Basalt
 - 4. Sandstone

Question ID : 54592767573

Q.10 The quantity of wood required for shutters of doors and windows is calculated in the unit of:

- Ans**
- 1. Lump-sum
 - 2. m²

3. m³

4. m

Question ID : 54592767582

Q.11 Refractory bricks are manufactured specially for the application to:

- Ans**
1. Resist high crushing load
 2. Act as barrier or insulator against sound
 3. Withstand penetration of water
 4. Withstand high temperature

Question ID : 54592767574

Q.12 In steel bars lacking a well-defined yield plateau, yield stress is specified at:

- Ans**
1. 0.2 percent proof stress
 2. 1 percent proof stress
 3. 0.1 percent proof stress
 4. 2 percent proof stress

Question ID : 54592767576

Q.13 The ratio of Young's modulus of high tensile steel to that of mild steel is about:

- Ans**
1. 0.5
 2. 1.0
 3. 1.5
 4. 2.0

Question ID : 54592767575

Q.14 The covered area of the proposed building is 150 m² and it includes a rear courtyard of 5 m × 4 m. If the plinth area rate for similar buildings is Rs. 1,250/m², what is its cost?

- Ans**
1. Rs. 01,87,500
 2. Rs. 02,12,500
 3. Rs. 03,75,000
 4. Rs. 01,62,500

Question ID : 54592767581

Q.15 Indian Standards classifies bitumen into grades such as 65/25, 85/40 etc. The first and second numbers respectively represent:

- Ans**
1. Flash point and Penetration
 2. Penetration and Softening point
 3. Softening point and Penetration
 4. Flash point and Softening point

Question ID : 54592767580

Q.16 In reinforced cement concrete (RCC) work, if details of steel are not specified, the volume of steel may be taken as:

- Ans**
1. 1.1 percent to 1.6 percent of RCC volume

- 2. 0.6 percent to 1.0 percent of RCC volume
- 3. 2.0 percent to 4.0 percent of RCC volume
- 4. 3.0 percent to 6.0 percent of RCC volume

Question ID : 54592767590

Q.17 In the analysis of rates, the profit for the contractor is generally taken as:

- Ans**
- 1. 5 percent
 - 2. 15 percent
 - 3. 10 percent
 - 4. 20 percent

Question ID : 54592767584

Q.18 The quantity of honey-comb wall and partition wall is carried out in the unit of:

- Ans**
- 1. m
 - 2. m²
 - 3. m³
 - 4. Per m

Question ID : 54592767589

Q.19 For 1 : 2 : 4 grade concrete, the volume of the cement required is approximately ____.

- Ans**
- 1. 22 m³
 - 2. 12 m³
 - 3. 15 m³
 - 4. 25 m³

Question ID : 54592767588

Q.20 To produce a high strength concrete, the best suitable aggregate is:

- Ans**
- 1. Rounded aggregate
 - 2. Irregular aggregate
 - 3. Flaky aggregate
 - 4. Angular aggregate

Question ID : 54592767579

Section : Discipline2

Q.1 In the theodolite survey, generally the left swing is NOT preferred much because:

- Ans**
- 1. The vertical scale comes to an inconvenient position to take the reading
 - 2. Of inconvenience to turn the telescope in anti-clockwise
 - 3. Most of the surveyors are habituated to right hand
 - 4. The reading increases clockwise

Question ID : 54592767598

Q.2 Identify the incorrect flow net property?

- Ans**
1. Flow lines and equipotential lines intersect or meet orthogonally
 2. Flow lines and equipotential lines are smooth curves
 3. Quantity of water flowing through each channel is the same
 4. Potential drop between any two successive equipotential lines is different

Question ID : 54592767608

Q.3 In a soil mass if volume of voids is equal to the volume of soil solids, then the values of void ratio and porosity, respectively are:

- Ans**
1. 0.5 and 1.5
 2. 1.0 and 0.5
 3. 0.5 and 0.5
 4. 1.5 and 0.5

Question ID : 54592767602

Q.4 A flow is taking place in soil for which porosity is n . If the discharge velocity is ' v ', then the seepage velocity will be:

- Ans**
1. v/n
 2. n/v
 3. $n.v$
 4. v/n^2

Question ID : 54592767605

Q.5 If scale is taken as 1 cm = 50 m, then what is the representative fraction (R.F)?

- Ans**
1. 0.002
 2. 0.02
 3. 0.0002
 4. 0.00002

Question ID : 54592767592

Q.6 The time for 50 percent consolidation of a sample of ' d ' cm thick with double drainage is ' t ' hours. The time for 50 percent consolidation of another sample of similar soil with ' $3d$ ' cm thick and single drainage is:

- Ans**
1. $6t$
 2. $9t$
 3. $36t$
 4. $t/6$

Question ID : 54592767609

Q.7 The maximum water content at which a reduction in water content does NOT cause a decrease in volume of soil mass is known as:

- Ans**
1. Liquid limit
 2. Ductile limit
 3. Shrinkage limit
 4. Plastic limit

Question ID : 54592767603

Q.8 According to IS classification system, the maximum size of fine-grained soils is:

- Ans
1. 0.75 mm
 2. 0.075 mm
 3. 4.75 mm
 4. 0.002 mm

Question ID : 54592767604

Q.9 The magnetic bearing of a line is $62^{\circ}30'$. What is the true bearing of the line if the magnetic declination is $3^{\circ}45'$ W?

- Ans
1. $65^{\circ}75'$
 2. $66^{\circ}15'$
 3. $58^{\circ}45'$
 4. $58^{\circ}85'$

Question ID : 54592767593

Q.10 Given the bearing of AB = $N10^{\circ}W$ and the bearing of BC = $N80^{\circ}W$. What is the angle of ABC?

- Ans
1. 100°
 2. 70°
 3. 90°
 4. 110°

Question ID : 54592767595

Q.11 Which of the following clay mineral present in black cotton soil is a cause for its large swelling and shrinkage?

- Ans
1. Illite
 2. Montmorillonite
 3. Halloysite
 4. Kaolinite

Question ID : 54592767601

Q.12 What is the effective stress at a depth of 10 m below the ground level, when water table is 3 m below ground level, saturated density is 20 kN/m^3 and bulk density is 18 kN/m^3 ?

- Ans
1. 124 kN/m^2
 2. 116 kN/m^2
 3. 264 kN/m^2
 4. 194 kN/m^2

Question ID : 54592767606

Q.13 In sand, quicksand condition occurs when its:

- Ans
1. Effective pressure is reduced to zero
 2. Effective pressure becomes equal to the pressure due to submerged weight of the soil
 3. Effective pressure is equal to atmospheric pressure

4. Effective pressure equals to seepage pressure

Question ID : 54592767607

Q.14 In a simple curve, external distance is the distance between:

- Ans**
1. Vertex and middle point of the curve
 2. Vertex and point of the curve
 3. Point of the curve and point of tangency
 4. Vertex and the center of the curve

Question ID : 54592767600

Q.15 What is the permissible closing error in a traverse (et) of total length of 2500 m and what is the permissible closing error in levelling (el) in a bench mark at distance of 1600 m.

- Ans**
1. $et = \pm 0.15$ m and $el = \pm 0.12$ m
 2. $et = \pm 1.50$ m and $el = \pm 0.12$ m
 3. $et = \pm 0.015$ m and $el = \pm 0.012$ m
 4. $et = \pm 1.50$ m and $el = \pm 1.20$ m

Question ID : 54592767599

Q.16 Isogonic lines are the lines having the same ____.

- Ans**
1. Declination
 2. Bearing
 3. Dip
 4. Elevation

Question ID : 54592767596

Q.17 The levelling station is a place where ____.

- Ans**
1. The level is setup
 2. Temporary adjustments are done
 3. The level staff is held
 4. Both B.S and F.S are taken

Question ID : 54592767597

Q.18 According to IS 2720 (Part-7): 1980, in Indian standard light compaction test (standard proctor test) for the soil passing 20 mm sieve, the number of soil layers, hammer blows, weight of hammer, and height of free fall are:

- Ans**
1. 03, 55, 2.6 kg, and 310 mm respectively
 2. 05, 25, 4.9 kg, and 450 mm respectively
 3. 05, 55, 4.9 kg, and 450 mm respectively
 4. 03, 25, 2.6 kg, and 310 mm respectively

Question ID : 54592767610

Q.19 The surveying in which the shape of the earth is taken into account is called:

- Ans**
1. Geodetic surveying
 2. Plane table surveying

3. Topographical surveying

4. Plane surveying

Question ID : 54592767591

Q.20 The distance between two points A and B, is measured along the slope as 200 m. The difference in elevation of these points is 10 m. The horizontal distance between A and B is:

Ans 1.

2.

3. 210

4. 190

Question ID : 54592767594

Section : Discipline3

Q.1 In a centrifugal pump, the liquid enters the pump _____.

Ans 1. from the sides

2. at the bottom

3. at the centre

4. at the top

Question ID : 54592767619

Q.2 For no tension to develop in the gravity dam the resultant of all external forces should always lie:

Ans 1. Within the middle third portion of the base

2. With the upstream third portion

3. At the centre of the base

4. Within the downstream third portion

Question ID : 54592767627

Q.3 If w is the specific weight of water and h_w is the height of wave, the total wave pressure is equal to:

Ans 1.

2.

3.

4.

Question ID : 54592767626

Q.4 Crop ratio is defined as the ratio of area irrigated _____.

Ans 1. under perennial crop to total area

2. in kharif season to rabi season

3. under perennial crop to non-perennial crops

4. in rabi season to kharif season

Question ID : 54592767625

Q.5 When the pipes are connected in series, the total rate of the flow?

- Ans**
1. Is zero
 2. Is equal to the reciprocal of the sum of rate of flow in each pipe
 3. Is as similar as flowing through each pipe
 4. Is equal to the sum of the rate of flow in each pipe

Question ID : 54592767618

Q.6 If B is the base period in days, D is the duty in hectares/cumec and Δ is the delta of the crop in m, the relationship between them is given by:

- Ans**
1. $\Delta = 0.864 B/D$
 2. $\Delta = 8.64 B/D$
 3. $\Delta = 8.65 BD$
 4. $D = 8.64 B\Delta$

Question ID : 54592767624

Q.7 Base failure of a finite slope occurs when the soil _____.

- Ans**
1. is purely cohesive
 2. is cohesionless
 3. below the toe is relatively soft and weak
 4. above the toe is relatively soft and weak

Question ID : 54592767613

Q.8 Water-hammer in pipes takes place when:

- Ans**
1. Flowing fluid is suddenly brought to rest by closing the valve
 2. Flowing fluid is gradually brought to rest
 3. Fluid is flowing in high velocity
 4. Fluid is flowing in high pressure

Question ID : 54592767621

Q.9 If water table rises to the ground level of a footing resting on cohesionless soils, the bearing capacity approximately:

- Ans**
1. Doubles
 2. Remains same
 3. Reduced to one third
 4. Reduces to half

Question ID : 54592767612

Q.10 Bernoulli's theorem deals with the law of conservation of:

- Ans**
1. Momentum
 2. Force
 3. Energy
 4. Mass

Q.11 Venturimeter and pitot tube are used to measure:

- Ans**
1. Discharge and Velocity at a point, respectively
 2. Velocity at a point and Pressure at a point, respectively
 3. Pressure at a point and Discharge, respectively
 4. Average velocity and Discharge, respectively

Q.12 Which of the following is NOT a purpose of the drainage gallery?

- Ans**
1. Provides access for inspection
 2. Intercepts the seepage through the dam and drains it off
 3. Reduces the cost of structure
 4. Facilitates the drilling and grouting operations

Q.13 If the cohesion of a pure clay found in an unconfined compression test is 1 kg/cm^2 , then the unconfined compressive strength in kg/cm^2 is:

- Ans**
1. 2
 2. 0.5
 3. 1
 4. 4

Q.14 The suction pressure on an ogee spillway is caused when the head on the spillway is:

- Ans**
1. $<$ the design head
 2. Equal to the design head
 3. \geq the design head
 4. $>$ the design head

Q.15 What is the specific gravity of a liquid having the viscosity 0.006 Ns/m^2 and kinematic viscosity $0.025 \times 10^{-4} \text{ m}^2/\text{s}$.

- Ans**
1. 2.4
 2. 0.5
 3. 2
 4. 1.2

Q.16 The maximum discharge through a circular channel takes place when depth of flow is equal to:

- Ans**
1. 0.3 times the diameter
 2. 0.95 times the diameter
 3. 0.5 times the diameter

4. 0.81 times the diameter

Question ID : 54592767622

Q.17 When a body floating in a liquid is displaced slightly, it oscillates about the:

- Ans**
1. Centre of gravity of the body
 2. Centre of pressure of the body
 3. Metacenter
 4. Centre of buoyancy

Question ID : 54592767614

Q.18 The square root of the ratio of inertia force to gravity force is called:

- Ans**
1. Reynold number
 2. Euler number
 3. Mach number
 4. Froude number

Question ID : 54592767623

Q.19 The water is not suitable for irrigation if the total salt concentration exceeds:

- Ans**
1. 2000 ppm
 2. 3000 ppm
 3. 1000 ppm
 4. 4000 ppm

Question ID : 54592767630

Q.20 An orifice is known as large orifice when the head of liquid from the center of orifice is:

- Ans**
1. More than 15 times the depth of orifice
 2. Less than 5 times the depth of orifice
 3. Less than 10 times the depth of orifice
 4. More than 10 times the depth of orifice

Question ID : 54592767616

Section : Discipline4

Q.1 The outer and inner wheels though cast monolithic, cover different distances on a curve for the same number of revolutions because of:

- Ans**
1. Coning of wheels
 2. Widening of gauge
 3. Tilting of rails
 4. Adzing of sleepers

Question ID : 54592767642

Q.2 A two-lane national highway and a two-lane state highway intersects perpendicularly (right angles). Assuming that both the roads are two-way, the number of conflict points at the

intersection is:

- Ans
1. 17
 2. 24
 3. 11
 4. 32

Question ID : 54592767640

Q.3 In highways, the length of the vehicle controls the design of the:

- Ans
1. Axle and wheel load
 2. Geometrics and cross-sectional characteristics
 3. Vertical profile of the road
 4. Overtaking distance

Question ID : 54592767636

Q.4 A wastewater sample of 2 ml is made up to 300 ml in a BOD bottle with distilled water. Initial D.O. of the sample is 8.0 and after 5 days it is 2.0. Its BOD is:

- Ans
1. 6 mg/l
 2. 894 mg/l
 3. 2400 mg/l
 4. 900 mg/l

Question ID : 54592767649

Q.5 One of the natural factors influencing camber is:

- Ans
1. Amount of rainfall
 2. Type of material used for wearing coarse
 3. Nature of subsoil met with
 4. Topography of the area

Question ID : 54592767638

Q.6 A minimum amount of dissolved oxygen (D.O) desirable in any water body is not less than:

- Ans
1. 2 mg/l
 2. 5 mg/l
 3. 3 mg/l
 4. 1 mg/l

Question ID : 54592767647

Q.7 An old worn out tyre may offer more friction on a dry surface than a new tyre with treads because:

- Ans
1. New tyres have a smoother surface
 2. Hollows of treads of tyres have more friction
 3. Old tyres have more contact area
 4. Old tyres get more accustomed to the surface of the road

Question ID : 54592767634

Q.8 Grade compensation on curves is a minimum of:

- Ans**
1. 100/R
 2. 156/R
 3. 56/R
 4. 76/R

Question ID : 54592767635

Q.9 The primary function of ballast in railways is to:

- Ans**
1. Conceal and makeup irregularities of sleepers
 2. Prevent growth of vegetation on formation
 3. Provide elasticity
 4. Maintain the gauge

Question ID : 54592767641

Q.10 Traffic density is the:

- Ans**
1. Number of vehicles per unit length
 2. Number of vehicles moving in a specific direction per hour
 3. Number of vehicles moving in a specific direction per lane per day
 4. Maximum number of vehicles passing a given point in one hour

Question ID : 54592767637

Q.11 Turbidity in water is measured by the:

- Ans**
1. intensity of light scattered when light is passed through
 2. concentration of suspended solids collected after centrifuging
 3. concentration of colloidal and suspended solids after sedimentation
 4. difference in suspended solid concentration before and after filtration

Question ID : 54592767645

Q.12 For any waste:

- Ans**
1. COD may be less than BOD
 2. Depending upon the percentage of biodegradable matter, it may be either way
 3. COD is always greater than BOD
 4. BOD and COD are equal

Question ID : 54592767648

Q.13 What is the Threshold Odor Number (TON), if 180 mL of odor-free distilled water is required to produce a 200 mL mixture from a 20 mL odor?

- Ans**
1. 9
 2. 0.9
 3. 10
 4. 1

Question ID : 54592767646

Q.14 Specific yield of an aquifer is defined as the ratio of the _____.

- Ans**
1. volume water retained when a saturated soil is freely drained to the volume of soil
 2. volume of pore space to the total volume of soil
 3. volume of water freely drained from a saturated soil to the volume of soil
 4. volume of pore space to the volume of soil grains

Question ID : 54592767632

Q.15 Four rain-gauge stations A, B, C and D in a catchment area have recorded 20, 25, 22 and 15 cm respectively. If their Thiessen weights are 0.3, 0.4, 0.1 and 0.2, then what is the average depth of rainfall on the catchment?

- Ans**
1. 19.2 cm
 2. 22.2 cm
 3. 21.2 cm
 4. 20.2 cm

Question ID : 54592767631

Q.16 A combined value of flakiness and elongation index is to be determined for a sample of aggregates. The sequence in which the two tests are conducted is:

- Ans**
1. Flakiness index test followed by elongation index test on the whole sample
 2. Elongation index test followed by flakiness index test on the whole sample
 3. Flakiness index test followed by elongation index test on the non-flaky aggregates
 4. Elongation index test followed by flakiness index test on no elongated aggregates

Question ID : 54592767644

Q.17 Square crossing in railways is to be avoided because:

- Ans**
1. It requires more space
 2. Wear is more
 3. Only one track can be used at a time
 4. Both wheels of the axle have to simultaneously jump over

Question ID : 54592767643

Q.18 Water distribution systems are sized to meet the _____.

- Ans**
1. average hourly demand
 2. average daily demand and fire demand
 3. maximum daily demand and fire demand
 4. maximum hourly demand

Question ID : 54592767650

Q.19 The ideal form of the curve for the summit curve is:

- Ans**
1. Lemniscates
 2. Circular
 3. Spiral
 4. Parabolic

Q.20 If the peak ordinate of a 4 h unit hydrograph of a basin is $270 \text{ m}^3/\text{s}$, then the peak ordinate of a 8 h unit hydrograph of the same basin will be:

- Ans**
1. Difficult to tell
 2. Less than $270 \text{ m}^2/\text{s}$
 3. Equal to $270 \text{ m}^3/\text{s}$
 4. More than $270 \text{ m}^3/\text{s}$

Section : Discipline5

Q.1 What is the ratio of bending moment at the centre of a simply supported beam to the bending moment at the centre of a fixed beam, when both are of same span and both are subjected to same u.d.l.?

- Ans**
1. 1.5
 2. 6
 3. 3
 4. 9

Q.2 In the structural analysis, the unit load method used is:

- Ans**
1. Another name of stiffness method
 2. An extension of Maxwell's reciprocal theorem
 3. Applicable only to statically indeterminate structures
 4. Derived from the Castigliano's theorem

Q.3 A statically indeterminate structure is the one which:

- Ans**
1. Is not stable for general loading
 2. Can be analyzed with the equations of statics alone
 3. Cannot be analyzed using the equations of statics alone
 4. Cannot be analyzed at all

Q.4 In a linear elastic structural element:

- Ans**
1. Stiffness is equal to flexibility
 2. Stiffness is inversely proportional to flexibility
 3. Stiffness is directly proportional to flexibility
 4. Stiffness and flexibility are related

Q.5 A simply supported of span 'L' m beam is subjected to a uniformly varying load with zero intensity at the two ends and with the maximum intensity of w/m at the centre. The maximum B.M will be equal to:

- Ans
1. $wL^2/12$
 2. $wL^2/24$
 3. $w^2L/12$
 4. $wL^2/6$

Question ID : 54592767656

Q.6 Temporary hardness in water is caused by the presence of:

- Ans
1. Nitrates of Ca and Mg
 2. Sulphates of Ca and Mg
 3. Chlorides of Ca and Mg
 4. Bicarbonates of Ca and Mg

Question ID : 54592767654

Q.7 Material required for M25 grade concrete in nominal mix is:

- Ans
1. 1 : 3 : 6
 2. 1 : 1.5 : 3
 3. 1 : 1 : 2
 4. 1 : 2 : 4

Question ID : 54592767669

Q.8 For analyzing the pin jointed frames by the method of joints, the number of equations of static equilibrium available is:

- Ans
1. 1
 2. 2
 3. 0
 4. 3

Question ID : 54592767662

Q.9 A suspension cable, supporting loads, will be under:

- Ans
1. Compression
 2. Tension
 3. Compression and bending
 4. Bending

Question ID : 54592767666

Q.10 A thin cylinder of diameter 100 mm and thickness 5 mm is subjected to an internal fluid pressure of 10 N/mm^2 . The hoop stress is:

- Ans
1. 50 N/mm^2
 2. 10 N/mm^2
 3. 100 N/mm^2
 4. 5000 N/mm^2

Question ID : 54592767657

Q.11 For coagulation, which of the following chemical is used?

- Ans
1. Ammonium chloride
 2. Aluminium sulphate
 3. Copper sulphate
 4. Aluminium chloride

Question ID : 54592767655

Q.12 As per IS: 1343-2012, the minimum characteristic strength of pre-stressed concrete to be used for post-tensioned and pre-tensioned structural elements are respectively:

- Ans
1. M20 for both
 2. M40 and M30
 3. M30 and M40
 4. M15 and M20

Question ID : 54592767670

Q.13 The influence line diagram for S.F or B.M at a section is:

- Ans
1. The value of S.F or B.M at that section when the unit load is at the centre of the span
 2. The S.F or B.M diagram
 3. The value of S.F or B.M at that section when the unit load is placed over that section only
 4. The variation in the value of S.F or B.M at that section as the unit load transverses the span from left to right

Question ID : 54592767663

Q.14 Atmospheric temperature rises because of the release of:

- Ans
1. Suspended particulate matter
 2. O₃
 3. CO₂
 4. Aerosols

Question ID : 54592767653

Q.15 A cantilever is subjected to a concentrated load, W at the free end and is propped at the free end to the same level as that of the fixed support. The reaction in the prop (rigid) will be:

- Ans
1. 2W
 2. W
 3. W/2
 4. 3W/8

Question ID : 54592767661

Q.16 In terms of Poisson's ratio (μ) the ratio of Young's modulus (E) to Shear modulus (G) of elastic material is:

- Ans
1. $2(1 + \mu)$
 2. $2(1 - \mu)$
 3. $(1 + \mu)/2$
 4. $(1 - \mu)/2$

Q.17 Two primary air pollutants are:

- Ans**
1. Sulphur oxide and hydrocarbon
 2. Nitrogen oxide and peroxyacetylnitrate
 3. Sulphur oxide and ozone
 4. Ozone and peroxyacetylnitrate

Question ID : 54592767652

Q.18 If the shear force at a section of a beam under bending is equal to zero then the bending moment at the section is:

- Ans**
1. Minimum
 2. Maximum or Minimum
 3. Maximum
 4. Zero

Question ID : 54592767658

Q.19 If 'L' is the span of a three hinged arch, 'h' is the rise and 'w' is the u.d.l per unit length over the entire span, the horizontal reaction at each support is given by:

- Ans**
1. $wL^2/8h$
 2. $wL^2/10h$
 3. $wL^2/6h$
 4. $wL^2/4h$

Question ID : 54592767665

Q.20 Anaerobic treatment is best suited for:

- Ans**
1. high efficiency
 2. strong organic wastes
 3. dilute inorganic wastes
 4. toxic wastes

Question ID : 54592767651