## DSSSB JE CE

Previous Year Paper ( 23 Oct 2019) Shift 2

| GOVT. OF NCT OF DELHI |  |
| :--- | :--- |
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Section: Mental Ability
Q. 1 Find the INCORRECT term in the series?

L, N, Q, U, A
Ans

Q. 2 In the given question, select the related letter/word/number from the given alternatives.

7: 42 :: 9 : ?
Ans

Q. 3 Seven students $A, B, C, D, E, F$ and $G$ reach school in a particular sequence. $F$ reaches
immediately before A but does not immediately follow D. C is the last one to reach school. E reaches immediately after A and is subsequently followed by G .

Who reaches third in the sequence of reaching school?
Ans

Q. 4 Which of the given set of letters represents the group of class-teacher as well as professor?


Ans

1. $C \& D$
2. O \& C
人3.B\&E
人4.0\&D
Q. 5 From the given responses, find the missing letter in the series.

CF, GJ, KN, ?, SV
Ans
>1.VB
> 2 . cw

- $3 . O R$

X4. AY
Q. 6 Choose the odd one from the given alternatives.

Ans

v 2. GJ:OQ
>3.OR:SV
(4.AD:IL
Q. 7 Complete the series by choosing the right figure from the given options.

Question Figures


Ans

$>2$

Q. 8 Complete the series by choosing right figure from the given choices.

(a)
(b)

Ans

$\times 2$

>3.

$\times 4$

Q. 9 In the given question, select the related letter/word/number from the given alternatives RMTY: QNSZ : : UKBF :

Ans

(2. TRAG

- 3. TLAG

X4. LATG
Q. 10 Choose the odd one from the given alternatives.

Ans
1.EFG
2. $2 \times W$
>3.0QP
Q. 11 In the question given below, there is a statement followed by two conclusions. You have to take the given statement to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusion logically follow(s) from the given statements.

## Statements:

$\mathrm{A}<\mathrm{B}<\mathrm{C} \leq \mathrm{D}=\mathrm{E}$

## Conclusions:

I. $B \leq E$
II. $\mathrm{B}<\mathrm{E}$

Ans
X 1. Either conclusion I or II follows
2. Neither conclusion I nor II follows

X 3. Only conclusion I follows

- 4 . Only conclusion II follows
Q. 12 Complete the following series.
$8,19,52,107$, ?
Ans
>1. 160
X

2. 192
v 3.184
$>4.152$
Q. 13 Which of the given Venn diagrams best represents a relationship among Carnivorous, Lion and Deer?
Ans
X1

>2

$\times 3$


- 4. 


Q. 14 Find the INCORRECT term in the given series:
$2,3,3,4,7,8,15,12$
Ans
>1.4
v 2.8
X 3.12
>4.3
Q. 15 Three positions of a dice are given. Find out which is found opposite the letter 2 in the given cube.


Ans
>1.4
> 2.6
>3.1
ข 4.5
Q. 16 Choose the odd number pair from the given options:

Ans
X1.7:350
X 2.5:130

- $3.9: 289$

4. $8: 520$
Q. 17 In the given question, select the related letter/word/number from the given alternatives.

FLOOD : RAINFALL :: $\qquad$ :
Ans
Х 1. Tsunami : Drizzling
2. Cyclone : Wind
3. Thunder: River
4. Drought: Crop
Q. 18 In the question below is a statement followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement.

## Statement:

Only science students are permitted to attend the conference, other than science students no one is permitted.

## Conclusions:

I. All students present at the conference are science students.
II. Those who do not have a science background are not allowed in the conference.

Ans

1. Neither conslusion I nor II follows

X 2. Only conclusion II follows
3. Both conslusion I and II follow

X 4. Only conclusion I follows
Q. 19 A team of five is to be selected amongst five male players Amit, Bobby, Chintu, Dhruv and Emy and four female players Prachi, Kiran, Reeta and Shruti. Some criteria for selection are:

Dhruv and Kiran cannot be together.
Amit and Shruti have to be together.
Prachi does not play with Reeta.
Reeta does not play with Bobby.
Chintu and Emy have to be together.
If Bobby is one of the members, the other members of the team are:
Ans
§ 1. Reeta, Amit, Shruti, Kiran
2. Prachi, Amit, Shruti, Reeta
3. Prachi, Dhruv, Shruti, Kiran

- 4. Prachi, Amit, Shruti, Kiran
Q. 20 In the given question, select the related letter/word/number from the given alternatives.

X:L:: $\qquad$ _ : $\qquad$
Ans

1. H: D
2. $X: E$
3. U:V
4. $\mathrm{H}: \mathrm{V}$

## Section: General Awareness

Q. 1 सिंधु घाटी सभ्यता के बारे में निम्नलिखित में से कौन सा कथन गलत है?

Ans

1. इस सभ्यता में कृषि के लिए हल का आविष्कार किया गया था
2. राखीगढ़ी परिपक्व-सिंधु घाटी सभ्यता के काल में एक बंदरगाह-शहर था
3. अन्य सिंधु घाटी शहरों के विपरीत, धोलावीरा तीन भागों में विभाजित था
4. कालीबंगन और लोथल में आग की वेदी थी जहाँ बलि दी जा सकती थी
Q. 2 The Kumbh Mela is held every $\qquad$ years in India.
Ans $\square$
>2.4

## Q. 3 भारतीय संविधान के निम्नलिखित विशेषताओं में से कौन सी आयरिश संविधान से ली गयी है?

Ans
v. 1 . राज्य के नीति-निदेशक सिद्धांत
2. संघीय सरकार के सिद्धांत
3. मौलिक कर्तव्य
4. मौलिक अधिकार

## Q. 4 पिल्लनकरोवी <br> $\qquad$ का दूसरा नाम है।

Ans 1 1. सितार
(2. ड्रम
3. हारमोनियम
4. बाँसुरी
Q. 5 Which of the following dances and its origin state is incorrectly matched?

Ans $>$ 1. Sattriya - Assam
(2. Bharatnatyam - Tamil Nadu

X 3. Kathakali - Kerala

- 4. Kathak - Karnataka
Q. 6 According to the Census 2011, which of the following states is the most populated state of India?
Ans

1. Rajasthan
2. Uttar Pradesh

X 3. West Bengal
(4. Bihar
Q. 7 Which of the following soil-conservation methods is generally implemented in the coastal and dry regions?
Ans

1. Contour ploughing
2. Terrace farming3. Mulching
3. Shelter belts
Q. 8 Acetic acid is present in:

Ans
X 1. Curd spinach

- 2. Vinegar3. Ant's sting
(4. Lime water
Q. 9 आवास के संबंध में गलत कथन अंकित करें।

Ans1. विभिन्न प्रकार के पौधे और जानवर एक ही आवास में नहीं रह सकते हैं
2. आवास भोजन और पानी प्रदान करता है
3. किसी सजीव का वह स्थान जिसमे वह रहता है, उसे आवास कहलाता है।
4. आवास का अर्थ है वास स्थान (एक घर)।
Q. 10 "द इलियाड" और "द ओडिसी" पुस्तकों के लेखक कौन हैं?

Ans

1. हेसियोड
2. प्लेटो
3. हेरोडोटस
4. होमर
Q. 11 Plasmodium initially multiply within:

Ans
X 1. Red Blood Cells
X 2. Pancreas

- 3. Liver cells

4. White Blood Cells
Q. 12 तापी द्रोणी के कुछ हिस्से $\qquad$ में स्थित है।

Ans 1. गुजरात, मध्यप्रदेश और राजस्थान
2. मध्यप्रदेश, गुजरात, और महाराष्ट्र
3. महाराष्ट्र, कर्नाटक और छत्तीसगढ़
4. राजस्थान, मध्य प्रदेश और उत्तर प्रदेश
Q. 13 FAIR is an upcoming international accelerator facility at Darmstadt, Germany of which India is a Founder-Member country. Which Indian institution is the nodal institution at the national level for implementation of this project?

Ans
X 1. IIT Kharagpur
2. Bose Institute, Kolkata
3. Saha Institute of Nuclear Physics, Kolkata
Q. 14 Consider an object moving along a straight line. Let it travel 5 m in the first second, 5 m more in the next second, 5 m in the third second and 5 m in the fourth second. This type of motion is known as:
Ans
入1. Velocity

- 2. Uniform motion

X 3. Acceleration

- 4. Non uniform motion
Q. 15 संविधान सभा में जवाहरलाल नेहरू $\qquad$ के अध्यक्ष थे।
Ans

1. प्रांतीय संविधान समिति और प्रक्रिया नियम समिति
2. संघ शक्ति समिति और संचालन समिति
3. प्रारूप समिति और संघ शक्ति समिति
4. संघीय संविधान समिति और संघ शक्ति समिति
Q. 16 Who had published a massive three-volume work called 'The History of British India'?

Ans
-1. James Mill
(2. Robert Dan
3. David Ricardo
(4. Alec Stewart
Q. 17 Who among the following has been appointed as the CFO and MD of World Bank?

Ans
X 1. Arundhati Bhattacharya
(2. David Malpass

X 3. Arun Kumar
v 4. Anshula Kant
Q. 18 राष्ट्रीय खाद्य सुरक्षा अधिनियम सम्बन्धी निम्नलिखित कथनों में से कौनसा कथन गलत है?

Ans

1. अधिनियम सम्पूर्ण भारत पर लागू था
2. इस अधिनियम को खाद्य का अधिकार अधिनियम भी कहा जाता है
3. अधिनियम में यह प्रावधान किया गया कि 18 वर्ष या उससे अधिक आयु की घरेलू महिला राशन कार्ड जारी करने के उद्देश्य से घर की मुखिया होगी
4. यह अधिनियम वर्ष 2015 में लागू किया गया था
Q. 19 Which of the following dynasties coincides with the period of 1320 to 1414 ?

Ans1. Khalji Dynasty2. Lodhi Dynasty3. Sayyid Dynasty
4. Tughlaq Dynasty

## Question ID : 54592768107

Q. 20 निम्नलिखित में से किसे उद्योग की कार्यशील पूंजी के रूप में वर्गीकृत किया जाता है?

Ans
X1. औजार
2. कच्चा माल
( 3. मशीनें
(4. इमारत

## Question ID : 54592768098

Section : Arithmetic Ability
Q. 1 A trader marks his goods 60 percent above the cost price. He sells one-third of goods at marked price, half of the remaining goods at a discount of 20 percent and rest of the goods at cost price. Find his profit percentage.
Ans

- 1.29 .33 percent

2. 33.33 percent

X 3.27 .66 percent
4. 25 percent
Q. 2 A labour was employed for 30 days to complete a piece of work. He got Rs. 10 for every working day and 20 percent deducted of his daily wages for the day he did not work. If he got Rs. 216 for the whole work, then find the number of days which he did not work?
Ans

Q. 3 What should come in place of the question mark (?) in the following question?
$\left(\frac{35}{2100} \times 175\right)$ of $\frac{1}{5} \div 20=?$
Ans
$\times 1 \cdot \frac{3}{35}$
-2. $\frac{7}{240}$
$\times 3 . \frac{35}{3}$
$\times 4 . \frac{6240}{7}$
Q. 4 If a man packs 5 or 6 chikoos in each box, he is left with 3 chikoos. But if he packs 8 or 9 chikoos in each box, he is again left with 3 chikoos. Find the no of chikoos that he had.
Ans
X 1.177
$\times$
2. 183

X 3.357

- 4.363
Q. 5 If the length of a rectangle increases by the ratio of $10: 11$ and its breadth increases by the ratio $8: 15$, then its area increase by the ratio of:
Ans
>1.2:5
X2.3:8
- $3.16: 33$
(4.4:9
Q. 6 The following graph gives the Production of six articles in India for the year 1990. Study the graph and answer the question that follow.


The production of $F$ was how many times the production of $A$ ?
Ans
X1. 2.1
>2.3.1

- 3.2 .45
$>_{4.4} 4$
Q. 7 A bus moves with a speed of 30 kmph for 12 minutes and for next 8 minutes at a speed of 45 kmph . Find the average speed of the bus.

Ans
X 1.38 kmph
2. 2.48 kmph
v 3.36 kmph
4. 24 kmph
Q. 8 A goods train takes 18 seconds to pass through a platform from 162 m long and 15 seconds to pass through another platform 120 m long. The length of the goods train (in m ) is:
Ans
X 1.75
v 2.90
入 3.60
X4.105
Q. 9 There are two bags A and B. Bag A contains 160 balls in which 55 percent are red in colour and remaining are of white in colour. Bag B contains 240 balls in which 65 percent are red in colour and remaining are of white in colour.

What percentage of the total number of balls in $A$ and $B$ are red colour balls?
Ans
X 1.60 percent
Х 2.58 .4 percent

- 3.61 percent

4. 57.5 percent
Q. 10 In a lake, 30 percent of the fish were caught, 12 percent of the fish caught died and remaining 2772 were put for the sale. Find the total number of fish in the lake.
Ans

v 2.10500
Х 3.12500
<4.9200
Q. 11 A shopkeeper cheats his customer by giving two successive discounts of 15 percent and 10 percent instead of a single discount of 25 percent on the marked price of a product. But customer gave Rs. 30 less than his bill, thus shopkeeper neither gains nor losses any extra amount. Find the marked price of the product.
Ans
X1.Rs. 2800
(2. Rs. 1500
v 3. Rs. 2000
>4.Rs. 3000
Q. 12 Find the area of a quadrant of a circle whose circumference is 132 cm .

Ans

1. 154 square cm

* 3.346 .5 square cm

4. 308 square cm
Q. 13
$\frac{3}{4}-\frac{5}{6}+\frac{3}{6}-\frac{8}{8}=?$
Ans
-1. $\frac{-14}{24}$
<2. $\frac{-20}{24}$
Х3. $\frac{-19}{24}$
X4. $\frac{-17}{24}$
Q. 142 cubes each of volume 125 cubic cm are joined end to end. Find the surface area of the resulting cuboid.
Ans
X 1.224 square cm
X2. 180 square cm3. 250 square cm
5. 240 square cm
Q. 15 The table given below shows the number of applicants who have applied for exam at various centres as percentage of total number of applicants. The table also shows the number of online applicants and absent applicants as a percentage of total applicants of each centre. Total number of applicants is 12,000 .

| Exam <br> centre | Total <br> applicants | Online <br> applicants | Absent <br> Applicants |
| :---: | :---: | :---: | :---: |
| A | $15 \%$ | $30 \%$ | $36 \%$ |
| B | $25 \%$ | $44 \%$ | $25 \%$ |
| C | $20 \%$ | $52 \%$ | $32 \%$ |
| D | $24 \%$ | $46 \%$ | $18 \%$ |
| E | $16 \%$ | $38 \%$ | $20 \%$ |

What are the total number of present applicants from exam centre $B$ and $C$ together?
Ans

Q. 16 What approximate value will come in place of the question mark?

Q. 18 The areas of three fields are $288 \mathrm{~cm}^{2}, 408 \mathrm{~cm}^{2}, 552 \mathrm{~cm}^{2}$. Equal minimum size blocks are made in the field. If the width of each rectangular block is 4 cm . find its length.
Ans

Q. 19 In a college, the ratio of number of students to the number of teachers is $10: 3$. For a charity, a students and a teacher contributes in the ratio $3: 5$ respectively. If total contribution is of Rs. 67500 and each teacher contribute Rs. 1000 more than the each student, find the total students in the college.
Ans

Q. 20 The compound interest accrued on Rs. 12000 in two years is Rs.1996.80. What will be the simple interest accrued at the same rate of interest for the third year on the total amount at the end of two years?
Ans
Х 1. Rs. 1256.63
(2. Rs. 8500.25
< 3.Rs. 9845.5

- 4 . Rs. 1119.74


## Section : General English

## Q. 1 Select the most appropriate option to fill in the blank.

I took a short cut by running $\qquad$ the field.

Ans

< 2 by
X3.over
>4.than
Q. 2 Select the most appropriate option to fill in the blank.
$\qquad$ of the victims in the $\qquad$ terror attack were children and women.
Ans

1. All, past
2. Few, present

- 3. Most, recent

4. Many, prior
Q. 3 Select the most appropriate option to substitute the underlined segment in the given sentence.

He ate nothing and leaves his cottage to go to work.
Ans

1. He eats nothing
2. He eats anything

X 3 . He is eating nothing
4. He is eating something
Q. 4 Select the most appropriate option to fill in the blank.

A garden knife is $\qquad$ used for right pruning.
Ans

Q. 5 Select the most appropriate ANTONYM of the given word.

## Consensus

Ans
v1. Disagreement
2. Agreement

X 3. Accord
X4. Harmony

## Q. 6 Identify the segment in the sentence which contains the grammatical error.

Her mother/ drove her too her/ music recital and/ so she was on time.
Ans
Х 1. music recital and
2. Her mother
3. so she was on time.
4. drove her too her

## Q. 7 Select the INCORRECTLY spelt word.

Ans
X 1. Permanent
v 2. Pavillion
X 3. Performance
4. Privilege
Q. 8 Select the most appropriate option to fill in the blank.

The disciplinary committee has $\qquad$ a three - years ban on the defaulters.
Ans
< 1. configured
2. diagnosed
-f 3. recommended
(4. disciplined
Q. 9 Select the word which means the same as the group of words given.

One who knows everything
Ans
X1.Omnipresent

- 2. Omniscient

3. Omnipotent
(4. Gullible
Q. 10 Select the most appropriate synonym of the given word.

## Ecstatic

Ans

1. Overjoyed

Х 2. Unenthusiastic
X 3. Mournful
Х4. Dejected
Q. 11 Select the most appropriate option to substitute the underlined segment in the given sentence.

A writer always is having his own vision of life.
Ans
-1. Always has
2. Every time is having
3. Every time will have
4. Always is having
Q. 12 Parts of a sentence have been jumbled up. Arrange these parts in a meaningful order.
P. do not think
Q. people who live in cities and towns
R. any connection
S. that they have
T. with the forest

Ans

- 1. QPSRT
(2. QPTRS

X 3. PSRQT
X 4. PQSTR
Q. 13 Parts of a sentence have been jumbled up. Arrange these parts in a meaningful order.

## P. and debate

Q. subject of discussion
R. on all
S. Environment has become a current
T. public platforms

Ans
入1.PSQRT
(2. QSRTP
<3. PSRTQ

- 4 . SQPRT
Q. 14 Identify the segment in the sentence which contains the grammatical error.

He always leaves/ important decisions/ to the last moment./No error
Ans

- 1. No Error2. important decisions

X 3. to the last moment.
X 4. He always leaves
Q. 15 Select the most appropriate meaning of the given idiom.

## Go the extra mile

Ans

1. To cross limits2. To waste money

## Question ID : 54592768148

## Comprehension:

Answer the questions based on the following passage.
Superstars breaking down in front of the camera and apologising for misdeeds-these were unusual visuals from Australia last week, as the ball tampering scandal took a heavy toll on the guilty trio. Far away and somewhat unnoticed, ICC chief executive David Richardson made an important admission. He said laws pertaining to on-field misbehaviour need revision.

Other than questioning whether the rules are appropriate, he also suggested grading acts of misbehaviour according to the degree of seriousness. In short, Richardson accepted what the world has been saying all along, that the existing mechanism of dealing with such incidents is not efficient enough. Because amending rules in the ICC requires the consent of a majority of member boards, matters often go to votes and that is where politics comes in. So it has to be seen how members react to the chief executive's remarks. But for the betterment of the game's image and its own image of being a meek body that toes the line of influential boards, the ICC has to take this seriously.

There is no doubt that cricketers dare to break the rules because they know that they will get away with light sanctions like a fine or a suspended ban sentence. There is no consistency in handing out punishments either. A major reason things turned ugly repeatedly in the last few months is the governing body's history of ineptness in dealing with these issues

Now that the Australian board has taken the exemplary step of suspending the captain and vice-captain for a year each and a top ICC official has spoken of correcting the system, it's time for the establishment to be proactive. Repercussions of scandals are not always felt in India where nothing stops sponsors from queuing up, but for cricket to do business outside the subcontinent, reputation is important. Richardson's comments are significant because they had a lot to do with this aspect. Sooner the ICC paid heed the better, because time may be ticking away.

SubQuestion No : 16
Q. 16 According to the author, all except one is the reason for cricketers to break the rules in cricket. Find the odd one out.
Ans

1. Governing body's history of ineptness in dealing with such incidences in the past
2. The cognizance of the fact that they can get away without much harsh punishment meted out to them

X 3. Lack of consistency and framework in meting out punishments to the guilty

- 4. Laws pertaining to on-field misbehaviour need revision


## Comprehension:

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SubQuestion No: 17
Q. 17 What is the closest possible substitute for the word 'exemplary' as used in the first line of the last paragraph?

Ans
v 1. Commendable
(2. Punctilious
(3. Demeaning

入4. Revere

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Other than questioning whether the rules are appropriate, he also suggested grading acts of misbehaviour according to the degree of seriousness. In short, Richardson accepted what the world has been saying all along, that the existing mechanism of dealing with such incidents is not efficient enough. Because amending rules in the ICC requires the consent of a majority of member boards, matters often go to votes and that is where politics comes in. So it has to be seen how members react to the chief executive's remarks. But for the betterment of the game's image and its own image of being a meek body that toes the line of influential boards, the ICC has to take this seriously.

There is no doubt that cricketers dare to break the rules because they know that they will get away with light sanctions like a fine or a suspended ban sentence. There is no consistency in handing out punishments either. A major reason things turned ugly repeatedly in the last few months is the governing body's history of ineptness in dealing with these issues.

Now that the Australian board has taken the exemplary step of suspending the captain and vice-captain for a year each and a top ICC official has spoken of correcting the system, it's time for the establishment to be proactive. Repercussions of scandals are not always felt in India where nothing stops sponsors from queuing up, but for cricket to do business outside the subcontinent, reputation is important. Richardson's comments are significant because they had a lot to do with this aspect. Sooner the ICC paid heed the better, because time may be ticking away.

SubQuestion No: 18
Q. 18 Why do the members of the ICC have to take chief executive David Richardson's remarks seriously?
Ans

1. To win a fan- following from cricketers and fans alike
2. For cricket to do business outside subcontinent, reputation is important
3. So as to appease and gain favour with the current ICC chief

- 4. Betterment of the game's image and its own image as a meek body that toes the line


## Comprehension:

Answer the questions based on the following passage.
Superstars breaking down in front of the camera and apologising for misdeeds-these were unusual visuals from Australia last week, as the ball tampering scandal took a heavy toll on the guilty trio. Far away and somewhat unnoticed, ICC chief executive David Richardson made
an important admission. He said laws pertaining to on-field misbehaviour need revision.
Other than questioning whether the rules are appropriate, he also suggested grading acts of misbehaviour according to the degree of seriousness. In short, Richardson accepted what the world has been saying all along, that the existing mechanism of dealing with such incidents is not efficient enough. Because amending rules in the ICC requires the consent of a majority of member boards, matters often go to votes and that is where politics comes in. So it has to be seen how members react to the chief executive's remarks. But for the betterment of the game's image and its own image of being a meek body that toes the line of influential boards, the ICC has to take this seriously.

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Now that the Australian board has taken the exemplary step of suspending the captain and vice-captain for a year each and a top ICC official has spoken of correcting the system, it's time for the establishment to be proactive. Repercussions of scandals are not always felt in India where nothing stops sponsors from queuing up, but for cricket to do business outside the subcontinent, reputation is important. Richardson's comments are significant because they had a lot to do with this aspect. Sooner the ICC paid heed the better, because time may be ticking away.

SubQuestion No: 19

## Q. 19 Select a suitable title for the passage.

Ans 1. Taming on-field acts of misbehaviour
2. ICC and the cricketing world
3. The ball tempering scandal
4. Time for a makeover, ICC

## Comprehension:

Answer the questions based on the following passage.
Superstars breaking down in front of the camera and apologising for misdeeds-these were unusual visuals from Australia last week, as the ball tampering scandal took a heavy toll on the guilty trio. Far away and somewhat unnoticed, ICC chief executive David Richardson made an important admission. He said laws pertaining to on-field misbehaviour need revision.

Other than questioning whether the rules are appropriate, he also suggested grading acts of misbehaviour according to the degree of seriousness. In short, Richardson accepted what the world has been saying all along, that the existing mechanism of dealing with such incidents is not efficient enough. Because amending rules in the ICC requires the consent of a majority of member boards, matters often go to votes and that is where politics comes in. So it has to be seen how members react to the chief executive's remarks. But for the betterment of the game's image and its own image of being a meek body that toes the line of influential boards, the ICC has to take this seriously.

There is no doubt that cricketers dare to break the rules because they know that they will get away with light sanctions like a fine or a suspended ban sentence. There is no consistency in handing out punishments either. A major reason things turned ugly repeatedly in the last few months is the governing body's history of ineptness in dealing with these issues.

Now that the Australian board has taken the exemplary step of suspending the captain and vice-captain for a year each and a top ICC official has spoken of correcting the system, it's time for the establishment to be proactive. Repercussions of scandals are not always felt in India where nothing stops sponsors from queuing up, but for cricket to do business outside the subcontinent, reputation is important. Richardson's comments are significant because they had a lot to do with this aspect. Sooner the ICC paid heed the better, because time may be ticking away.

SubQuestion No : 20
Q. 20 Why does the ICC chief executive feel that the existing mechanism of dealing with acts of misbehaviour are not efficient enough?

1. Repercussions of the scandal are not always felt in India but may extend to world over
2. Amending the rules requires the consent of a majority of member boards, that is
where politics comes in and makes the task difficult
3. A lack of will and commitment towards the revision of framework

X
4. Acts of misbehaviour lack a certain seriousness and often go unnoticed

Section : General Hindi
Q. 1 'आलस्य' शब्द का विशेषण क्या है?

Ans
Х1. अलस
2. आलस
3. आलसीपन
4. आलसी
Q. 2 निम्नलिखित में से कौन-सा एक शब्द तत्सम है?

Ans

2. मकान
3. काम
(4. कोढ़
Q. 3 अधजल गगरी $\qquad$ जाय'।

Ans
2. फैलत
3. लुढ़कत

入4. उछलत
Q. 4 जाके पाँव न फटे बिवाई सो क्या जाने पीर पराई' का अर्थ है:

Ans

1. कठोर होना
2. दूसरे के कष्ट को अनुभव करना
3. दयालू होना
4. जिसके ऊपर बीतती है वही जानता है
Q. 5 वह ग्ताम में वास करता है,' इस वाक्य में 'में' कौन-सी कारक विभक्ति है?

Ans
(1. सम्बन्ध
2. करण
3. सम्प्रदान
v. 4 . अधिकरण

## Q. 6 एक शब्द का चयन कीजिए।

## 'विधान मण्डल द्वारा पारित या स्वीकृत विधि'

Ans

1. अधिनियम
2. नियम
3. विनिमय
4. अध्यादेश
Q. 7 "रात को पहरा देने वाला आज घर गया।" इस वाक्य में 'रात को पहरा देने वाला' कौन सा पदबंध है?

Ans
-1. संज्ञा पदबंध
2. क्रिया पदबंध
3. विशेषण पदबंध
4. सर्वनाम पदबंध
Q. 8 व्याकरण की दृष्टि 'प्रेम' शब्द क्या है?

Ans

1. भाववाचक संज्ञा
2. क्रिया
3. अव्यय
4. विशेषण
Q. 9 निम्नलिखित में से कौन-सा भूतकाल का उदाहरण है?

Ans

1. वह पढ़ चुका है
2. वह पढ़ता है
3. सीता जा रही थी
4. सम्भव है राम पढ़े
Q. 10 इनमें से सर्वनाम कौन-सा है?

Ans

1. ही
( 2. बात
X3. तक
v. 4. सो
Q. 11 अन्य + अन्य की सन्धि से बना शब्द है:

Ans


1. अन्याय
2. अन्योन्य
Q. 12 'उल्लेख' में $\qquad$ उपसर्ग है।

Ans
2. उल्ल
Q. 13 जिसका चिन्तन न किया जा सके' वाक्यांश के लिए दिए गए विकल्पों में से उपर्युक्त शब्द चुनिए।

Ans
v1. अचिंत्य
2. अल्पज

X3. अज्ञ
(4. अटल
Q. 14 कनिष्ठ' शब्द में प्रयुक्त प्रत्यय है:

Ans

v 2. इष्ठ
Х 3 . ष्ठ
(4. इष्ट
Q. 15 'ज्येष्ठ' का विलोम शब्द है:

Ans


## Comprehension:

निम्नलिखित गद्यांश को पढ़कर दिए गए प्रश्न का उत्तर दें।
सच्चे वीर अपने प्रेम के जोर से लोगों को सदा के लिए बाँध देते हैं। वीरता की अभिव्यक्ति कई प्रकार से होती है, कभी लड़ने-मरने से, खून बहाने से, तोप तलवार के सामने बलिदान करने से होती है, तो कभी जीवन के गूढ़ तत्व और सत्य की तलाश में बुद्ध जैसे राजा विरक्त होकर वीर हो जाते हैं, और सारे संसार में शांति व समृद्धि फैलाते हैं। वीरता एक प्रकार की अंत: प्रेरणा है, जब कभी उसका विकास हुआ तभी एक रौनक, एक रंग, एक बहार संसार में छा गई। वीरता हमेशा निराली और नई होती है। वीरों को बनाने के कारखाने नहीं होते है। जिसमें सौदेबाजी की जा सके। लाभ-व-हानि देखा जा सके। वे तो देवदार के वृक्ष की भाँति जीवन रूपी वन में स्वंय पैदा होते हैं और बिना किसी के पानी दिए, बिना किसी के दूध पिलाये बढ़ते हैं। 'जीवन के केन्द्र में निवास करो और सत्य की चट्टान पर दृढ़ता से खड़े हो जाओ। बाहर की सतह छोड़कर जीवन के अंदर की तहों में पहुँचे तब नए रंग खिलेंगे।
यही वीरता का संदेश

SubQuestion No: 16
Q. 16 वीरों के देवदार वृक्ष से तुलना की गई है, क्योंकि दोनों:

Ans

1. खाना-पीना मिलने पर ही बढ़ते हैं
2. दोनों का दिल उदार होता है
3. सत्य का हमेशा पालन करते हैं
4. स्वयं पैदा होते हैं और बिना किसी के दूध पिलाए बढ़ते हैं

## Comprehension:

निम्नलिखित गद्यांश को पढ़कर दिए गए प्रश्न का उत्तर दें।
सच्चे वीर अपने प्रेम के जोर से लोगों को सदा के लिए बाँध देते हैं। वीरता की अभिव्यक्ति कई प्रकार से होती है, कभी लड़ने-मरने से, खून बहाने से, तोप तलवार के सामने बलिदान करने से होती है, तो कभी जीवन के गूढ़ तत्व और सत्य की तलाश में बुद्ध जैसे राजा विरक्त होकर वीर हो जाते हैं, और सारे संसार में शांति व समृद्धि फैलाते हैं। वीरता एक प्रकार की अंत: प्रेरणा है, जब कभी उसका विकास हुआ तभी एक रौनक, एक रंग, एक बहार संसार में छा गई। वीरता हमेशा निराली और नई होती है। वीरों को बनाने के कारखाने नहीं होते हैं। जिसमें सौदेबाजी की जा सके। लाभ-व-हानि देखा जा सके। वे तो देवदार के वृक्ष की भाँति जीवन रूपी वन में स्वंय पैदा होते हैं और बिना किसी के पानी दिए, बिना किसी के दूध पिलाये बढ़ते हैं। 'जीवन के केन्द्र में निवास करो और सत्य की चट्टान पर दृढ़ता से खड़े हो जाओ। बाहर की सतह छोड़कर जीवन के अंदर की तहों में पहुँचे तब नए रंग खिलेंगे।
यही वीरता का संदेश
SubQuestion No: 17
Q. 17 वीरता का एक विशेष लक्षण है:

Ans
-1. नयापन
(2. करूणा
3. हास्य

X4. नकल

## Comprehension:

निम्नलिखित गद्यांश को पढ़कर दिए गए प्रश्न का उत्तर दें।
सच्चे वीर अपने प्रेम के जोर से लोगों को सदा के लिए बाँध देते हैं। वीरता की अभिव्यक्ति कई प्रकार से होती है, कभी लड़ने-मरने से, खून बहाने से, तोप तलवार के सामने बलिदान करने से होती है, तो कभी जीवन के गूढ़ तत्व और सत्य की तलाश में बुद्ध जैसे राजा विरक्त होकर वीर हो जाते हैं, और सारे संसार में शांति व समृद्धि फैलाते हैं। वीरता एक प्रकार की अंत: प्रेरणा है, जब कभी उसका विकास हुआ तभी एक रौनक, एक रंग, एक बहार संसार में छा गई। वीरता हमेशा निराली और नई होती है। वीरों को बनाने के कारखाने नहीं होते हैं। जिसमें सौदेबाजी की जा सके। लाभ-व-हानि देखा जा सके। वे तो देवदार के वृक्ष की भाँति जीवन रूपी वन में स्वंय पैदा होते हैं और बिना किसी के पानी दिए, बिना किसी के दूध पिलाये बढ़ते हैं। 'जीवन के केन्द्र में निवास करो और सत्य की चट्टान पर दृढ़ता से खड़े हो जाओ। बाहर की सतह छोड़कर जीवन के अंदर की तहों में पहुँचे तब नए रंग खिलेंगे।
यही वीरता का संदेश
SubQuestion No : 18

## Q. 18 वीरता का संदेश क्या है?

Ans

1. उद्देश्य के लिए सच्चाई पर चट्टान की तरह अटल रहना
2. हमेशा नया और निराला रहना
3. बुद्ध जैसे राजा की भाँति विरक्त होना
4. यह संकल्प कि किसी भी हालत में युद्ध जीतना है

## Comprehension:

निम्नलिखित गद्यांश को पढ़कर दिए गए प्रश्न का उत्तर दें।
सच्चे वीर अपने प्रेम के जोर से लोगों को सदा के लिए बाँध देते हैं। वीरता की अभिव्यक्ति कई प्रकार से होती है, कभी लड़ने-मरने से, खून बहाने से, तोप तलवार के सामने बलिदान करने से होती है, तो कभी जीवन के गूढ़ तत्व और सत्य की तलाश में बुद्ध जैसे राजा विरक्त होकर वीर हो जाते हैं, और सारे संसार में शांति व समृद्धि फैलाते हैं। वीरता एक प्रकार की अंत: प्रेरणा है, जब कभी उसका विकास हुआ तभी एक रौनक, एक रंग, एक बहार संसार में छा गई। वीरता हमेशा निराली और नई होती है। वीरों को बनाने के कारखाने नहीं होते हैं। जिसमें सौदेबाजी की जा सके। लाभ-व-हानि देखा जा सके। वे तो देवदार के वृक्ष की भाँति जीवन रूपी वन में स्वंय पैदा होते हैं और बिना किसी के पानी दिए, बिना किसी के दूध पिलाये बढ़ते हैं। 'जीवन के केन्द्र में निवास करो और सत्य की चट्टान पर दृढ़ता से खड़े हो जाओ। बाहर की सतह छोड़कर जीवन के अंदर की तहों में पहुँचे तब नए रंग खिलेंगे। यही वीरता का संदेश

SubQuestion No: 19
Q. 19 इस गद्यांश के लिए उपयुक्त शीर्षक होगा:

Ans

1. वीरों का उत्पन्न होना
2. देवदार और वीर
3. वीरता संस्मरण
v 4 . सच्ची वीरता

## Comprehension:

निम्नलिखित गद्यांश को पढ़कर दिए गए प्रश्न का उत्तर दें।
सच्चे वीर अपने प्रेम के जोर से लोगों को सदा के लिए बाँध देते हैं। वीरता की अभिव्यक्ति कई प्रकार से होती है, कभी लड़ने-मरने से, खून बहाने से, तोप तलवार के सामने बलिदान करने से होती है, तो कभी जीवन के गूढ़ तत्व और सत्य की तलाश में बुद्ध जैसे राजा विरक्त होकर वीर हो जाते हैं, और सारे संसार में शांति व समृद्धि फैलाते हैं। वीरता एक प्रकार की अंत: प्रेरणा है, जब कभी उसका विकास हुआ तभी एक रौनक, एक रंग, एक बहार संसार में छा गई। वीरता हमेशा निराली और नई होती है। वीरों को बनाने के कारखाने नहीं होते हैं। जिसमें सौदेबाजी की जा सके। लाभ-व-हानि देखा जा सके। वे तो देवदार के वृक्ष की भाँति जीवन रूपी वन में स्वंय पैदा होते हैं और बिना किसी के पानी दिए, बिना किसी के दूध पिलाये बढ़ते हैं। 'जीवन के केन्द्र में निवास करो और सत्य की चट्टान पर दृढ़ता से खड़े हो जाओ। बाहर की सतह छोड़कर जीवन के अंदर की तहों में पहुँचे तब नए रंग खिलंगे।
यही वीरता का संदेश
SubQuestion No: 20
Q. 20 निम्नलिखित में कौन-सा रूप वीरता का नहीं है?

Ans

3. त्याग
(4. युद्ध

Section : Discipline1
Q. 1 1bar hydrostatic force is equal to $\qquad$ -

Ans

- 1.100 kPa

X2. 1 kPa
入 3.1000 kPa
Х 4.10 kPa
Q. 2 In wall supported slab system, the thickness of floor slab generally varies from $\qquad$ -.

Ans
X $1.10 \mathrm{~mm}-50 \mathrm{~mm}$

- $2.100 \mathrm{~mm}-200 \mathrm{~mm}$3. $300 \mathrm{~mm}-400 \mathrm{~mm}$4. $20 \mathrm{~mm}-30 \mathrm{~mm}$
Q. 3 Vacuum Pressure is $\qquad$
Ans Х 1. the product of Atmospheric pressure and absolute pressure

2. the difference of Atmospheric pressure and absolute pressure
3. the dividend of Atmospheric pressure and absolute pressure
4. the addition of Atmospheric pressure and absolute pressure

Q. 5 All imaginary fluids are $\qquad$ .

Ans 1. ideal plastic fluid
2. real fluids

- 3. ideal fluids

4. plastic fluids
Q. 6 The resultant force on a sluice gate, $\mathrm{F}=\ldots$. Where, $\mathrm{F} 1=$ Pressure force on the upstream side of sluice gate F2 = Pressure force on the downstream side of the sluice gate.
Ans

Q. 7 A curve with a flat portion represent a soil in which some intermediate size particles are missing. Such a soil is known as $\qquad$ —.
Ans1. organic Soil
5. inorganic Soil
6. well graded soil

- 4. skip graded soil
Q. 8 The relative density percentage of soil which is loose in nature is $\qquad$ _.

Ans
Х 1.35-65 percent
2. 0-15 percent

- 3. 15-35 percent

4. 65-85 percent
Q. 9 The clay whose sensitivity ranges from 8-16 has which kind of the structure?

Ans 1. Honeycomb

- 2. Flocculent

3. Rectangular
(4. Circular
Q. 10 The strain at any point in the steel is equal to that in the adjoining concrete is known as

Ans1. strain compatibility
2. stress capability

X 3. compression ability
(4. tension ability
Q. 11 The process of removal of organic matter and calcium compounds in the soil before the dispersing agents are mixed is called as

Ans
Х 1. Coagulation2. Initial Precaution
3. Pretreatment
4. Isothermal process
Q. 12 Specific Gravity of Mercury is $\qquad$ .
Ans

>2. 10.6
v 3.13 .64. 15.6
Q. 13 In ribbed slab system, the thickness of floor slab generally varies from $\qquad$ -.
Ans1. $100 \mathrm{~mm}-200 \mathrm{~mm}$
2. $50 \mathrm{~mm}-100 \mathrm{~mm}$

人4． $150 \mathrm{~mm}-250 \mathrm{~mm}$

## Q． 14 What is defined as the water content corresponding to the arbitrary limit between liquid and plastic state of consistency of soil？

Ans
Х 1．Plasticity index
v 2．Liquid limit
3．Shrinkage limit
（4．Plastic limit

Q． 15 The ratio of the plasticity index to flow index is known as $\qquad$ －．

Ans
人1．liquid index
2．consistency index
X 3．soil index
－4．toughness index

Q． 16 The Value of Density of water is $\qquad$ －．

Ans
X $1.5 \mathrm{gm} / \mathrm{cm}^{3}$
入 $2.0 .5 \mathrm{gm} / \mathrm{cm}^{3}$
－ $3.1 \mathrm{gm} / \mathrm{cm}^{3}$
＞ $4.10 \mathrm{gm} / \mathrm{cm}^{3}$

Q． 17 CGS unit of Viscosity is $\qquad$
Ans
X 1．（Dyne－sec）／（cm ${ }^{3}$ ）
2． （Dyne－sec）／（cm）
－3．（Dyne－sec）$/\left(\mathrm{cm}^{2}\right)$
Х 4．（Dyne－sec $\left.{ }^{3}\right) /\left(\mathrm{cm}^{2}\right)$

Q． 18 Surface tension can be defined as $\qquad$ ＿．

Ans
1．The force acting on the surface of a liquid in contact with ground
2．The compressive force acting on the surface of a liquid in contact with a gas
－3．The tensile force acting on the surface of a liquid in contact with a gas
4．The shear force acting on the surface of a liquid in contact with a gas

Q． 19 Which water is subject to polar，electrostatic and ionic binding forces？

Ans

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Q.20 The clay whose activity is higher than 1.40 is generally called as $\qquad$
Ans


- 2. active Clay
> 3. normal Clay
(4. neutral Clay


3

## Section : Discipline2

Q. 1 The property of freshly mixed concrete which determines the ease and homogeneity with which it can be placed, mixed, compacted and finished is called as
Ans

Q. 2 The law that states the compressive strength of hardened concrete is inversely proportional to the water-cement ratio, provided the mix is of workable consistency is called as $\qquad$ .
Ans
X 1. Hydrostatic Law
X 2. Bernoulli's Law3. Pascal's Law
4. Abrams' Law
Q. 3 Influence line diagram for bending moment at any section in 3 hinged stiffening girder of suspension bridge is same as that for $\qquad$ -.

Ans
X 1. U shaped arch
2. Horse shoe shaped arch

- 3. Circular arch

4. Parabolic arch
Q. 4 If a rigid body is in equilibrium under a system of forces and/or moments, the virtual work done by this system of forces and /or moments during virtual displacement is $\qquad$
Ans
5. 0

3 3. Negative
人4. Positive
Q. 5 In which system, the floor slab is supported directly on the columns, without the presence of stiffening beams, except at the periphery?
Ans

1. Flat plate system
2. Flat slab system

X 3. Ribbed slab system
X 4. Beam supported slab system
Q. 6 Who Published the Moment Distribution method?

Ans

v 2. Hardy Cross
3. Bernaulli

X4. Euler
Q. 7 The horizontal distance from one support to another is called as

Ans

- 1. Span

X 2 . Crown
X 3. Rise
(4. Abutment
Q. 8 If yield point does not exist, the working stress is taken as that of a $\qquad$ proof stress.
Ans
入1.0.1

- 2.0 .2
$\times 3$.
>4.0.15
Q. 9 Who proposed the method of tension coefficient?

Ans
X 1. Castigliano
2. Hardy Cross

X3. Euler

- 4. Muller-Breslau
Q. 10 Strain energy method is also called as $\qquad$ ـ.
Ans
X 1. Virtual work load method2. Real work method

3. Castigliano's method

X4. Euler's Method
Q. 11 Which method uses the theorem which states that the change in the slope between two points on a straight member under flexure is equal to the area of $\mathrm{M} /$ EI diagram between those two points?

Ans
入1. Conjugate beam method
X 2. Macaulay's method
3. Strain energy method

- 4. Moment area method
Q. 12 Which was the first method developed to analyze the indeterminate structures?

Ans
X 1. Slope deflection method
(2. Column analogy method

- 3. Consistent deformation method

4. Moment distribution method
Q. 13 Which of the following instrument is used to measure the deformation?

Ans
-1. Extensometer
X 2. Barometer
3. Speedometer
4. Impact test apparatus
Q. 14 How many degree of indeterminacy does propped cantilever have?

Ans

- 1 .
>2.3
>3.2
>4.0
Q. 15 Which one of the following cement has its raw materials as Bauxite and Limestone?

Ans

1. Ordinary Portland Cement
2. Sulphate Resisting Portland Cement

- 3. Aluminous Cement

4. Portland Pozzolana Cement
Q. 16 The resisting force parallel to the plane is known as $\qquad$ -.

Ans
X 1. Pulling force
2. Shearing resistance
3. Normal force
4. Pushing force
Q. 17 Which of the following is a not a lateral load resisting system?

Ans
v 1. Inclined column
2. Frames

X 3 . Tubes
4. Shear walls
Q. 18 Who published the theorem which states in a linearly elastic structure, partial derivative of the strain energy with respect to a load is equal to the deflection of the point where the load is acting, the deflection being measured in the direction of the load?

Ans

- 1. Castigliano

⒉ Pascal
X3. Euler
(4. Bernaulli
Q. 19 If a specimen is loaded beyond the elastic limit and then unloaded, a permanent strain is left in the specimen. This is known as $\qquad$
Ans
2. temporary set
3. elongation set
4. formation set
Q. 20 Which one of the following cement is produced or made conforming to IS 8041:1990?

Ans

1. Portland Slag Cement

X 2. Portland Pozzolana Cement

- 3. Rapid Hardening Portland Cement

4. Ordinary Portland Cement
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Section : Discipline3
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Q. 1 Which of the is not belongs to angular measurements systems?

Ans
Х 1. Centesimal system
X 2. Sexagesimal system
(3. Hours system

- 4. Conversion system
Q. 2 Revenue chain consists of links $\qquad$ -.
Ans
- 2.16

X 3.15
X 4.18
Q. 3 Which of the following is not a natural error?

Ans

1. Wind vibrations
2. Atmospheric refraction
3. Turning points

- 4. Errors in sighting
Q. 4 While chaining along sloping ground, which of following instrument is used to transfer the points to the ground?
Ans
Х1. Arrows
$>$

2. Whites
3. Plumb bob4. Plaster's laths
Q. 5 Which of following tape is made up of alloy of nickel (36 percent) and steel?

Ans
X 1. Linen tape
X 2. Metallic tape

- 3. Invar tape4. Cloth tape
Q. 6 The probable error of a single observation is calculated from the equation.

Ans
-1. $E s= \pm 0.6745 \sqrt{ } \sum v^{2} / n-1$
Х2. $E s= \pm 0.6745 \sqrt{ } \sum v^{2} / r-1$
Х $3 . \mathrm{Es}= \pm 0.834 \sqrt{ } \sum \mathrm{v}^{2} / \mathrm{n}-1$
Х4. $\mathrm{Es}= \pm 0.834 \sqrt{ } \sum \mathrm{r}^{2} / \mathrm{n}-1$
Q. 7 Which of the following minor instruments is used for setting out gradients?

Ans
Х 1. Pantagraph2. Fennel's clinometer
3. Ceylon ghat tracer
4. The sextant
Q. 8 Which of the following is not special methods of spirit leveling?

Ans
X 1. Profile levelling
(2. Cross sectioning
3. Differential levelling

- 4. Anti-cross levelling
Q. 9 Indian pattern clinometer can be also calles as $\qquad$ _.

Ans
Х 1. de lisle's clinometer
2. abney clinometer
3. bural and leveller

- 4. tangent clinometer
Q. 10 Accidental errors also called as

Ans Х 1. Mistakes
X 2. Systematic errors

- 3. Compensating errors

X4. Cumulative errors
Q. 11 In errors due to incorrect chain, correction to area is done by using formula.

Ans


X 2. $A=(3 e-1) A^{\prime}$
入3. $A^{\prime}=(1+3 e) A$

- 4. $A=(1+2 e) A^{\prime}$
Q. 12 In centesimal system of angular measurement 2 grades is equal to $\qquad$ -.

Ans
X 1.20 centigrades
X 2.10 centigrades
Х 3.20 centi-centigaredes
Q. 13 The vernier carries an index mark which forms the $\qquad$ of the vernier.

Ans


X 2. focal point
X 3. center
4. straight line
Q. 14 The design procedure accepting Hooke's law is known as $\qquad$ -.

Ans (1. Mohr's method
2. Macaulay's method

- 3. Working stress method4. Castigliano's method
Q. 15 Box sextant small pocket instrument cannot be used to find.

Ans

1. Locating inaccessible points
v 2. minor errors
2. Horizontal and vertical angles
3. Chain angles
Q. 16 Gunter's chain is also called as

Ans
(1. engineers chain
2. revenue chain

* 3. surveyor's chain

4. band chain
Q. 17 While calculating the correction to volume, $\mathrm{V}=(1+3 \mathrm{e}) \mathrm{v}$ ', e can calculated by:

Ans
X $1 .(\Delta \mathrm{L}-\mathrm{L}) / \mathrm{L}$
>2.L/ $\Delta \mathrm{L}$
ง 3. $\Delta L / L$
>4.L- $\Delta \mathrm{L}$
Q. 18 The lines which are run in the field to check the accuracy of the work is called as $\qquad$ _.

Ans
X 1. Base lines
2. Main survey lines

4．Tie line

Q． 191 Nautical mile equals to how many metres？
Ans1． 1954 m
（2． 1000 m
人 3.60 m
f 4.1852 m

Q． 20 Which of the following is the trial and error method in plane table surveying？
Ans
v 1．Lehmann＇s method
Х 2．Graphical method
－3．Tracing paper method
（4．Mechanical method

## Section：Discipline4

Q． 1 The time between the first watering of a crop at the time of its sowing to its last watering before harvesting is called as $\qquad$
Ans
（1．crop period
$\checkmark 2$
2．base period
3．rotation period
74．growth period

Q． 2 If $A$ is delta，$B$ is base period and $D$ is duty，then the relation between delta and duty in meters is given by
Ans


X2． $\mathrm{A}=\frac{11.2 D}{B}$
入3． $\mathrm{A}=\frac{11.2 B}{D}$
入4． $\mathrm{A}=\frac{8.64 D}{B}$

Q． 3 The sewer which collects sewage directly from the house is called as $\qquad$ ＿．

Ans1. Submain sewer

ง 2. Lateral sewer
X
3. Combined sewer4. Trunk sewer
Q. 4 Rabi Season is also known as $\qquad$
Ans X1. Monsoon Season

- 2. Winter Season
- 3. Summer Season

X4. Both Summer \& Winter Season
Q. 5 Decrease in temperature of the free atmospheric air with altitude is known as

Ans 1. Coriolis Force

- 2. Lapse Rate

3. Saturation pressure
(4. Dew Point
Q. 6 The ratio of water stored in the root zone during irrigation to the water needed in the root zone prior to irrigation is known as $\qquad$
Ans
X 1. Efficiency of water-application

- 2. Efficiency of water-storage

3. Efficiency of water-conveyance

X4. Efficiency of water-use
Q. 7 Vicat apparatus is used to measure

Ans
X 1. Permeability of cement

- 2. Setting time of cement

3. Fineness of cement
(4. Soundness of cement
Q. 8 While finding the tape corrections, correction for temperature is calculated by using formula.

Ans
入1. $\mathrm{Ct}=\mathrm{a}(\mathrm{TO}+\mathrm{Tm}) \mathrm{L}$

- 2. $\mathrm{Ct}=\mathrm{a}(\mathrm{Tm}-\mathrm{TO}) \mathrm{L}$

X 3. $\mathrm{Ct}=\mathrm{a}+(\mathrm{Tm}-\mathrm{TO}) \mathrm{L}$
Х4. $\mathrm{Ct}=\mathrm{a}(\mathrm{Tm}+\mathrm{TO}) \mathrm{L}$
Q. 9 In rational method, run off or storm water flow $Q=K$. A. I. $\mathbf{R i}$, if $Q$ is expressed in liter per second ,A in hectare and $R i$ in cm per hour then $K$ value will be $\qquad$
Ans1. 34

- 2.28

X 3.30
>4.
Q. 10 Cumulative frequency curve that shows the percent of time specified discharge were equaled or exceeded during a given period is known as $\qquad$
Ans

1. Hydrograph
2. Mass duration curve
3. Power duration curve
v 4. Flow duration curve
Q. 11 As per public health and environmental engineering organization, for 50,000-100,000 population ,density of population per hector will be
Ans
X 1. 2800-3500
v $2.300-350$
X3.1200-1400
<4.500-1000
Q. 12 Soundness of cement is measured using $\qquad$
Ans (1. Permeability apparatus
4. Phycnometer

- 3. Le-Chatelier Apparatus
< 4. Vicat apparatus
Q. 13 Incorrect counting of tape lengths in chaining is $\qquad$ _.
Ans $>1$. compensating + or -

2. cumulative + or -

X 3. mistake

- 4 . blunder
Q. 14 For the population 50,000 to 750,000 ,the manual recommends peak factor(i.e. the ratio of maximum to average flows) will be $\qquad$ —.
Ans
人1.10.25
Q. 15 Both flakiness index and elongation index test is not applicable to the aggregates having the size smaller than $\qquad$
Ans


Х 2.2 .36 mm

- 3.6 .3 mm
> 4.10 mm
Q. 16 The amount of irrigation water required in order to meet the evapotranspiration needs of the crop during its full growth is called as $\qquad$
Ans
Х1. Farm efficiency
v 2. Consumptive irrigation requirement
X 3. Consumptive use

4. Net irrigation requirement
Q. 17 Error due to temperature in chaining is

Ans
(1. Cumulative +
(2. Cumulative -

- 3. Cumulative + or -

X4. Compensating + or -
Q. 18 A Hydraulic Jump is said to be Oscillating Jump if its Froude number is $\qquad$ .

Ans
 1. Between 1.7 to 2.5

Х 2. Between 4.5 to 9
-3. Between 2.5 to 4.5
X4. Equal to 1
Q. 19 Which of the following is indirect levelling method?

Ans 1. Barometric levelling

- 2. Trigonometric levelling

3. Spirit levelling
(4. Difference levelling
Q. 20 Which of the following is not a sewer lines test?

Ans
Х1. Water test

- 2. Smell test

3. Smoke test

X4. Air test

## Section : Discipline5

Q. 1 If S is the strength of concrete and x is the gel/space ratio, then According to Power's and Brownyard the relation between strength and gel/space ratio is given by $\qquad$
Ans
X $1 . S=160 / x^{3}$
$X 2 . s=240 / x^{3}$
X $3 . S=160 x^{3}$

- $4 . S=240 x^{3}$
Q. 2 Which of the following is the examples of ceramic materials?

Ans
X 1. Paints
< 2. Rubber
Х 3. Plastic
v 4. Glass
Q. 3 Curve which changes the alignment of road from downhill to uphill is called as $\qquad$ -.
Ans
v 1 . Summit curve
> 2. Sag curve
3. Transition curve

- 4. Reverse curve
Q. 4 Attrition test is used to measure the $\qquad$ —.
Ans 1. Crushing value of stones
- 2. Wear of stones

3. Texture of stones

4 4. Strength of stones
Q. 5 Elongated aggregates are those whose length is $\qquad$ -.
Ans

1. 1.8 times its mean dimension
2. Equal to its mean dimension
3. 1.2 times its mean dimension

人4. 0.6 times its mean dimension
Q. 6 The space at a road Junction over which traffic is not allowed to move is known as $\qquad$ —.

Ans


X 2. Footpaths
X 3. Camber
4. Pedestrian Crossing
Q. 7 The super-plasticizers are used as admixture for the following purpose $\qquad$
Ans

- 1. To disperse particles, remove air bubbles and to retard setting

2. To decrease the cement content
3. To decrease the setting time
(4. To disperse particles only
Q. 8 A brick when cut at one end by half header and half stretcher, it is known as

## $\rightarrow$

Ans

- 1. King Closer

2. Bat Closer

- 3. Queen Closer
(4. Beveled Closer
Q. 9 If $p$ is the Standard consistency of cement, the amount of water used to find the initial setting time of cement is $\qquad$
Ans

Q. 10 Schmidi's Rebound Hammer technique is used to measure $\qquad$
Ans
- 1. Surface hardness

2. Compressive strength
3. Tensile Strength
(4. Shrinkage limit
Q. 11 Softening point of bitumen can be measured using $\qquad$ _.
Ans1. Furol viscometer
4. Briquette mould apparatus3. Penetrometer apparatus
5. Ring and Ball apparatus
Q. 12 Which of the following coarse aggregate requires minimum cement paste?

Ans

1. Angular aggregates
2. Irregular aggregates
3. Flaky aggregates

- 4. Rounded aggregates
Q. 13 Which of the following parameter is least concerned in case of self-compacting concrete?

Ans
(1. Sand-aggregate ratio

- 2. Water-cement ratio

3. Water-powder ratio

Х4. Types of admixture used
Q. 14 A cylinder with diameter $D$, length $L$, and $P$ be the compressive load applied on cylinder, then split tensile strength is given by

Ans
X1.P/mLD

- 2. $2 P / \pi L D$
< $3.4 \mathrm{P} / \pi \mathrm{LD}$
<4.16P/rLD
Q. 15 Average specific gravity of rocks varies from $\qquad$ _.

Ans
X 1.2 .6 to 2.75
(2. 2.55 to 2.7

- 3.2 .6 to 2.8
> 4.2 .45 to 2.7
Q. 16 Which of the following chemical is added to make glass a fire resistant?

Ans
>1. Silica
X 2 . Soda
7 3. Lead oxide

- 4. Potash


## Q. 17 Briquette Mould is used for which of the following test of bitumen?

Ans

1. Flash and Fire point test
2. Specific Gravity test

人 3. Adhesion test
4. Ductility test
Q. 18 Which of the following concrete has the ability to heal its crack?

Ans


1. Self compacting concrete
2. High performance concrete

3 3. Shortcrete
4. Bacterial concrete
Q. 19 A short road which is closed off at one end is known as

Ans1. City blocks
(2. Green belt

- 3. Cul-de-sac

4. Focal point
Q. 20 As per IS : 3495 (part I), to find the compressive strength of bricks, load is applied at a uniform rate of $\qquad$ —.
Ans
X $1.44 \mathrm{~N} / \mathrm{m}^{2}$ per minute
-2. $7 \mathrm{~N} / \mathrm{m}^{2}$ per minute

- $3.14 \mathrm{~N} / \mathrm{m}^{2}$ per minute

Х $4.50 \mathrm{~N} / \mathrm{m}^{2}$ per minute

