



GOVT. OF NCT OF DELHI
Delhi Subordinate Services Selection Board
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Participant ID	
Participant Name	
Test Center Name	iON Digital Zone iDZ 1 Sector 62
Test Date	28/06/2022
Test Time	12:30 PM - 2:30 PM
Subject	Junior Engineer (Civil) or Section Officer (Civil)

Section : Mental Ability

Q.1 Which option will complete the series?
GAF, GEF, GIF, GOF, ?

- Ans A. HAG
 B. GUF
 C. GAH
 D. FUG

Question ID : 1841223095

Q.2 If,
A + B means A is the mother of B;
A - B means A is the brother B;
A % B means A is the father of B and
A x B means A is the sister of B,

which of the following shows that P is the paternal grandmother of Q?

- Ans A. $P + R \% S - Q$
 B. $P \times Q - S + R$
 C. $Q \times S + R \times P$
 D. $S - R + P \times Q$

Question ID : 1841223100

Q.3 If 15th July is Monday, 17th October comes on which day?

- Ans A. Thursday
 B. Wednesday
 C. Tuesday
 D. Monday

Question ID : 1841223091

Q.4 Two statements are given followed by three conclusions. The given statements are to be considered true. Decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statement I : All teachers are truthful.

Statement II : All truthful are just.

Conclusion I : Some truthful are teachers.

Conclusion II : No truthful is a teacher.

Conclusion III : Some just are teachers.

Ans A. Conclusion I and II follow

B. Conclusion I and III follow

C. Only conclusion I follows

D. Conclusion II and III follow

Question ID : 1841223103

Q.5 In the word 'STRING', how many pairs of the letters have the same number of letters between them in the word as in the English Alphabet?

Ans A. 3

B. 4

C. 1

D. 2

Question ID : 1841223096

Q.6 If today is Tuesday, what day will it be after 62 days?

Ans A. Tuesday

B. Thursday

C. Wednesday

D. Monday

Question ID : 1841223092

Q.7 If in each number the positions of the first and third digits are interchanged and 1 is added to the middle digit, which number will be at the third position in ascending order?
827, 485, 319, 743

Ans A. 827

B. 743

C. 319

D. 485

Question ID : 1841223110

Q.8 If,
A + B means that A is the mother of B
A - B means A is the sister of B
A x B means A is the father of B
A ÷ B means A is the brother of B

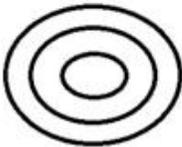
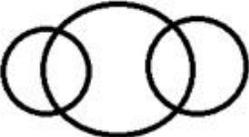
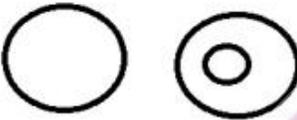
Which of the following options mean that R is the grandmother of S?

- Ans
- A. $R + P \times Q \div S$
 - B. $P + R - Q \div S$
 - C. $R - P \div Q \times S$
 - D. $Q \times R - P + S$

Question ID : 1841223099

Q.9 Which of the following Venn diagrams correctly describes the relationship between jackets, mufflers and winterwear?

Ans

- A. 
- B. 
- C. 
- D. 

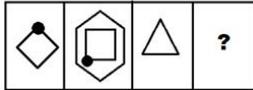
Question ID : 1841223093

Q.10 Find the odd one out.

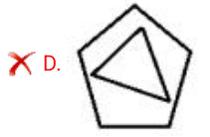
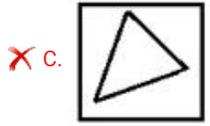
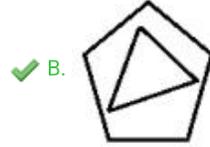
- Ans
- A. 75
 - B. 115
 - C. 207
 - D. 299

Question ID : 1841223109

Q.11 Find the correct image which matches the relationship of the third and the fourth figure to that of the first two figures.

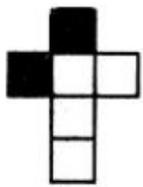


Ans

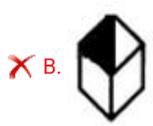


Question ID : 1841223106

Q.12 Choose the correct box for the given sheet of paper



Ans



Question ID : 1841223107

Q.13 'A + B' means A is neither greater nor smaller than B
'A \$ B' means A is neither greater than nor equal to B
'A @ B' means A is neither smaller than nor equal to B
'A % B' means A is not smaller than B
'A & B' means A is not greater than B

Based on the conditions, which of the following options is correct for the statement given below?

Statement : P \$ Q + S @ U & V

- Ans
- A. P @ V
 - B. Q + U
 - C. U \$ Q
 - D. S & P

Question ID : 1841223094

Q.14

- Ans
- A. D
 - B. A
 - C. B
 - D. C

Question ID : 1841223105

Q.15 Find the next number in the series.

165, 120, 85, 60, ?

- Ans
- A. 55
 - B. 40
 - C. 45
 - D. 50

Question ID : 1841223108

Q.16 In a certain code PEACEFUL is written as QDBBFEVK. How will you code COMMOTION?

- Ans
- A. BLKKPSJNP
 - B. DOOPLSNGO
 - C. DNNLPSJNO
 - D. BMMKORIMO

Question ID : 1841223097

Q.17 A and B start moving towards each other from points P and Q, respectively, that are 400 m apart. After walking 120 m, B turns right and goes 40 m, then she turns left and goes 80 m. She then turns left again and reaches the road on which she had started walking. If A and B walk with the same speed, what is the distance between them?

- Ans
- A. 80 m
 - B. 100 m
 - C. 40 m
 - D. 60 m

Question ID : 1841223098

Q.18

- Ans A.
 B.
 C.
 D.

Question ID : 1841223104

Q.19 Choose the odd one out.

- Ans A. PIHS
 B. KCAJ
 C. TSUM
 D. ETAL

Question ID : 1841223102

Q.20 Select the option that is related to the third word in the same way as the second word is related to the first word.
River : Flow :: Pond : ?

- Ans A. Course
 B. Flux
 C. Stagnant
 D. Drift

Question ID : 1841223101

Section : General Awareness

Q.1 Warren Hastings established the Calcutta Madrasa in which year for the teaching of Mohammedan law?

- Ans A. 1780
 B. 1813
 C. 1872
 D. 1742

Question ID : 1841223119

Q.2 Which microfinance institution has an extensive network of branches throughout 22 states in India and offers microloans to women entrepreneurs from low-income households for income generation activities?

- Ans A. Bandhan Financial Services Limited
 B. Asirvad Microfinance Limited
 C. Arohan Financial Services Limited
 D. Cashpor Micro Credit

Question ID : 1841223125

Q.3 Which state Government has decided to conduct a large-scale survey, to understand the impact of the COVID-19 pandemic on the psychological and emotional behaviour of school children?

- Ans A. Gujarat
 B. Delhi
 C. Karnataka
 D. Maharashtra

Question ID : 1841223115

Q.4 Jallikattu is celebrated in the Indian state of Tamil Nadu as a part of Pongal celebration on which day?

- Ans A. Maattu Pongal day - Third day
 B. Kannum Pongal - Fourth day
 C. Pongolo Pongal
 D. Bhogi - First day

Question ID : 1841223124

Q.5 Which Ministry has set up an online portal named 'Raksha Pension Shikayat Nivaran Portal' that aims to resolve pension-related grievances of ex-servicemen (ESM) and their dependents?

- Ans A. Ministry of Finance
 B. Ministry of Defense
 C. Ministry of External Affairs
 D. Ministry of Law and Justice

Question ID : 1841223114

Q.6 Which of the following war songs are sung in Nagaland?

- Ans A. Alha
 B. Bhagawati
 C. Baul
 D. Hereileu

Question ID : 1841223122

Q.7 Industrial Finance Corporation of India is a development finance institution under the jurisdiction of Ministry of Finance, Government of India which was established in ____.

- Ans A. 1952
 B. 1950
 C. 1948
 D. 1945

Question ID : 1841223126

Q.8 Which of the following is a scientific device that is used to measure the speed and rate of flow of a fluid that is flowing in a pipe?

- Ans A. Tonometer
 B. Venturimeter
 C. Tachometer
 D. Telemeter

Question ID : 1841223130

Q.9 The 7th edition of the four-day India International Science Festival (IISF) was held in _____, from December 10 to 13, 2021.

- Ans A. Sikkim
 B. Goa
 C. Assam
 D. Meghalaya

Question ID : 1841223111

Q.10 As per India's National Health Profile 2019, life expectancy in India for females is 70.2 in 2012 - 16 and it is _____ for males in the same period.

- Ans A. 75.4
 B. 68.2
 C. 77.3
 D. 67.4

Question ID : 1841223127

Q.11 The government of which state has signed Bollywood actor Sanjay Dutt as the brand ambassador on the occasion of the golden jubilee celebrations, marking the 50th year of the naming of the state?

- Ans A. Karnataka
 B. Arunachal Pradesh
 C. Kerala
 D. Himachal Pradesh

Question ID : 1841223116

Q.12 Chalo, Wancho and Pasi Kongki are the folk dances of which of the following state?

- Ans A. Assam
 B. Mizoram
 C. Odisha
 D. Arunachal Pradesh

Question ID : 1841223123

Q.13 The Indian Space Research Organisation has signed an agreement with which Chinese smart devices maker to strengthen the research and development of the NavIC messaging service?

- Ans A. Lenovo
 B. Oppo
 C. Xiaomi
 D. Huawei

Question ID : 1841223112

Q.14 One of the oldest Buddhist monuments in India, the Great Stupa at Sanchi was originally built in the 3rd century BCE by which king?

- Ans A. Krishnadevaraya
 B. Ashoka
 C. Prithviraj Chauhan
 D. Shah Jahan

Question ID : 1841223121

Q.15 The Indian Space Research Organisation (ISRO) has signed _____ for launching foreign satellites during 2021-2023.

- Ans A. seven agreements with five countries
 B. four agreements with four countries
 C. three agreements with two countries
 D. six agreements with four countries

Question ID : 1841223113

Q.16 Who served from 1809 to 1814 in the Revenue Department of the East India Company also worked as a personal Diwan to Woodforde and Digby?

- Ans A. Raja Ram Mohan Roy
 B. Chandrashekhar Azad
 C. Jyotiba Phule
 D. Bal Gangadhar Tilak

Question ID : 1841223120

Q.17 The Koppal Toy Cluster (KTC), which is being developed in the district of Koppalin of _____ is the first such infrastructure in the country.

- Ans A. Kerala
 B. Karnataka
 C. Rajasthan
 D. Gujarat

Question ID : 1841223128

Q.18 Big Dipper, the Great Bear or the Saptarshi is an example of _____.

- Ans A. Constellations
 B. Asteroids
 C. Meteoroids
 D. Planets

Question ID : 1841223129

Q.19 The women's team from Ladakh has lifted the _____ National Women's Ice Hockey Championship in Himachal Pradesh.

- Ans A. 5th
 B. 9th
 C. 8th
 D. 6th

Question ID : 1841223117

Q.20 TCS partnered with whom to become the new title sponsor and official IT services and technology consulting partner of the Toronto Waterfront Marathon through November 2026?

- Ans A. UK Running Series
 B. Canada Running Series
 C. Australia Running Series
 D. US Running Series

Question ID : 1841223118

Section : Arithmetic Ability

Q.1 The ratio of the amount for 2 years under compound interest annually and for one year under simple interest is 7 : 6. When the rate of interest is same, find the rate of interest. (upto two decimals)

- Ans A. 16.67%
 B. 13.67%
 C. 15.67%
 D. 14.67%

Question ID : 1841223139

Q.2

- Ans A. 3
 B. 0
 C. 2
 D. 1

Question ID : 1841223132

Q.3 The effective annual rate of interest corresponding to a compound interest of 10% per annum payable half yearly is:

- Ans A. 10.25%
 B. 12.25%
 C. 9.25%
 D. 11.25%

Question ID : 1841223138

Q.4

- Ans A. 5
 B. 6
 C. 3
 D. 4

Question ID : 1841223140

Q.5 Subtracting 35% of P from P is equivalent to multiplying P by:

- Ans A. 0.65 P
 B. 0.63 P
 C. 0.55 P
 D. 0.64 P

Question ID : 1841223135

Q.6 The three sides of a triangle measure 5 cm, 12 cm and 13 cm respectively. A rectangle equal in area to the triangle has a length of 10 cm. The perimeter of the rectangle is

- Ans A. 24 cm
 B. 26 cm
 C. 23 cm
 D. 25 cm

Question ID : 1841223145

Q.7 In a maternity Centre 6% of all the child birth result is twins. What is the approximate percentage of twins out of total children born. (upto one decimal)

- Ans A. 9.3
 B. 8.3
 C. 11.3
 D. 10.3

Question ID : 1841223136

Q.8 HCF of two numbers A and B is 25. HCF of two other numbers C and D is 32. What will be the HCF of A, B, C and D

- Ans A. 2
 B. 1
 C. 3
 D. 5

Question ID : 1841223131

Q.9 A certain number of people completed a job in 21 days. If there were 3 persons less, the work would have taken 7 more days. How many persons were there initially?

- Ans A. 10
 B. 11
 C. 12
 D. 13

Question ID : 1841223141

Q.10 Three friends A, B and C donate 6%, 5% and 7% of their salary to a trust in the given order. Salary of A and B is same and the difference of their donations is ₹120. The total donation by A and B is ₹350 more than C's donation. What is the percentage of the total salary to the three donations. (upto two decimals)

- Ans A. 4.02
 B. 4.15
 C. 3.46
 D. 6.05

Question ID : 1841223137

Q.11

- Ans A. 2017 - 18
 B. 2018 - 19
 C. 2016 - 17
 D. 2015 - 16

Question ID : 1841223150

Q.12 Ravi can do three-fifth of the work in 9 days and Rakesh can finish the remaining in 14 days. How long would they take to finish it together?

- Ans A. 10 days
 B. 11.5 days
 C. 10.5 days
 D. 11 days

Question ID : 1841223142

Q.13 A square is inscribed in a circle which is inscribed in an equilateral triangle. If one side of the triangle is 6 cm. Find the area of the square.

- Ans A. 7 cm^2
 B. 6 cm^2
 C. 5 cm^2
 D. 4 cm^2

Question ID : 1841223146

Q.14 Find the total number of composite factors $N = 340$.

- Ans A. 7
 B. 9
 C. 6
 D. 8

Question ID : 1841223134

Q.15

- Ans A. 95589
 B. 95598
 C. 95599
 D. 95636

Question ID : 1841223133

Q.16 Five gallons are drawn from a cask full of wine. It is then filled with water. Five gallons of mixture are again drawn and the cask is refilled with water. The ratio of the quantity of wine now left in the cask to that of the mixture in it is 16 : 25. How much does the cask hold.

- Ans A. 21 gallons
 B. 24 gallons
 C. 25 gallons
 D. 22 gallons

Question ID : 1841223144

Q.17 Average age of A, B and C is 72 years, however when D joins them then the average comes down to 70. Now a new person E whose age is 4 years more than D replaces A and the new average is 69 years. What is the age of A?

- Ans A. 73 years
 B. 72 years
 C. 71 years
 D. 70 years

Question ID : 1841223143

Q.18 A toy consists of a base that is the section of a sphere and a conical top. The volume of the conical top $36\pi \text{ cm}^2$ and its height is 12 cm. The total height of the toy is 20 cm. The volume of the sphere from which the base has been extracted is:

- Ans A. 126.4π
 B. 125π
 C. 127.4π
 D. 127π

Question ID : 1841223147

Q.19

- Ans A. Kerala
 B. Telengana
 C. Andhra Pradesh
 D. Chennai

Question ID : 1841223148

Q.20

- Ans A. 4.52
 B. 4.25
 C. 4.34
 D. 4.36

Question ID : 1841223149

Section : General English

Q.1 Complete the sentence using an appropriate adverb choosing from the following options given.

Saad isn't very well. He still hasn't _____ recovered from Covid.

- Ans A. highly
 B. deeply
 C. fully
 D. hardly

Question ID : 1841223152

Q.2 Given below are four jumbled sentences select the option that gives their correct logical sequence.

- A. It is the water in cellular organic matter that converts microwaves to heat energy with great efficiency and rapidity whereas other components such as starch, cellulose and protein are nowhere near as efficient.
- B. Least effective as an energy converter is fatty tissue which normally contains a very small amount of moisture.
- C. The most important material in any food is water.
- D. It is the major constituent of the cellular material and many foods contain over 70% of their normal weight as water.

- Ans A. CDAB
 B. ACDB
 C. BADC
 D. CADB

Question ID : 1841223162

Q.3 Fill in the blank with the correctly spelled word choosing from the options given below. Each character has its personality, and some of them are rather _____.

- Ans A. humeros
 B. humorous
 C. humerous
 D. humoros

Question ID : 1841223160

Q.4 Select the most appropriate Synonym of the given word.

ACCOMPLISH

- Ans A. guide
 B. conclude
 C. freeze
 D. halt

Question ID : 1841223156

Q.5 Select the most appropriate option to fill in the blank. I like the little peddler _____ has a crooked nose.

- Ans A. Who
 B. What
 C. Which
 D. When

Question ID : 1841223164

Q.6 Read the sentence and select the homophone which will correctly complete the sentence.
Fools rush in _____ angels fear to Tread.

- Ans
- A. Wire
 - B. Were
 - C. Where
 - D. Weir

Question ID : 1841223157

Q.7 Given below are four jumbled sentences select the option that gives their correct logical sequence.

- A. The domestic pressure cooker is usually constructed of heavy gauge aluminium and the pressure is regulated by weights placed upon a release valve.
- B. A common practice in pressure cooking is to allow a copious flow of steam from the release valve before capping it with weights.
- C. A safety valve is always fitted to prevent pressure inadvertently building up beyond the safe and specified level for the vessel construction.
- D. This ensures that all air is removed before the cooking process starts.

- Ans
- A. CDAB
 - B. ADBC
 - C. BADC
 - D. ACBD

Question ID : 1841223163

Q.8 Put the verbs in brackets into correct or more suitable verb form (future tense) choosing from the options given below.

Mr. Mehta (give) another lecture at the same time next week.

- Ans
- A. will gives
 - B. will be giving
 - C. will gave
 - D. gave

Question ID : 1841223154

Q.9 Fill in the blank with the correctly spelled word choosing from the options given below.
After observing the man and woman treating each other, we made an _____ that they were married.

- Ans
- A. inference
 - B. inferance
 - C. infarance
 - D. infernce

Question ID : 1841223161

Q.10 Complete the sentence using an appropriate preposition choosing from the following options given.

_____ the storm comes the calm.

- Ans A. after
 B. above
 C. across
 D. on

Question ID : 1841223153

Q.11 Select the most appropriate option to fill in the blank.
A man can't be too _____ in the choice of his enemies.

- Ans A. Connecting
 B. Cheerful
 C. Careful
 D. Striking

Question ID : 1841223165

Q.12 Select the most appropriate Antonym of the given word.

DAZZLE

- Ans A. blabber
 B. shoot
 C. dim
 D. roam

Question ID : 1841223155

Q.13 Complete the sentence using an appropriate preposition choosing from the following options given.

I have been learning the violin _____ I was seven.

- Ans A. Since
 B. If
 C. From
 D. As

Question ID : 1841223151

Q.14 Select the most appropriate meaning which best expresses the meaning of the given Idiom.
I have HIT UPON a good plan to get rid of him.

- Ans A. Curated
 B. Found
 C. Created
 D. Lost

Question ID : 1841223159

Q.15 Select the most appropriate meaning which best expresses the meaning of the given Idiom in the bold.

He is ready to **DISPOSE OFF** his car for Rs.1,50,000.

- Ans A. ruin
 B. sell
 C. destroy
 D. lend

Question ID : 1841223158

Comprehension:

Read the following passage and answer the questions given below.

FEEDING THE PRETERM BABY

Studies conducted at Sooriya Hospital, Chennai in 2017 on premature babies showed that swabbing the insides of cheeks with colostrum several times a day helps to bring down the incidence of hospital-acquired infections and speeds up overall recovery.

The preterm babies are best fed with unprocessed human milk obtained from their mothers. It has been shown that milk of mothers delivering prematurely has higher protein chloride and sodium content which is suitable for the nutritional needs of low-birth-weight babies.

Antimicrobial property of breast milk is of great importance to the preterm baby and the incidence of infectious sepsis and meningitis are greatly reduced. If the baby does not gain weight satisfactorily with breast milk alone, dietary supplements like vegetable oils (corn oil, groundnut oil) may be used which increase the caloric value without increasing its volume. The advantages of feeding breast milk to preterm babies are availability of easily digestible protein and fat and feeding tolerance. Factors in human milk may stimulate GI growth, motility and maturation. Enzymes naturally present in human milk help in the absorption and utilization of nutrients.

The decision whether the baby is to be breast fed or through a gavage is guided by maturity, birth weight and general condition of the baby. The infant can be started with expressed mother's milk. Bolus, intermittent, naso-gastric tube feeds every 2 hours in small babies and every 3 hours in larger babies can be done. Initial volume used will be as low as 1 - 2 ml for feeding infants of 1000g or less or as much as 4 - 5 ml per feed for an infant of 1500 g. If oral feed is tolerated, then increase the volume of feeding by 1ml/day in smaller infants or by as much as 3 - 5 ml in the larger infants. Feeding must be reduced, withheld or even omitted entirely when there is gastric retention or abdominal distention. Ultimately the volume of intake should be 150 - 170 ml/kg/day and calorie value 110 -120 ml/kg/day. If the rate of weight gain is low, the calorie intake is increased by adding vegetable oil (coconut oil or peanut oil, 0.5 ml every other meal). Most infants begin to gain more rapidly as their postnatal weight approaches 1400-1500 g and their caloric intake increases.

SubQuestion No : 16

Q.16 Fill in the blanks with correct word (from the passage) choosing from the options given below.

Enzymes naturally present in human milk help in the _____ and _____ of nutrients.

- Ans A. Reduction and Retention
 B. Absorption and Utilisation
 C. Sodium and Protein
 D. Sepsis and Meningitis

Question ID : 1841223170

Comprehension:

Read the following passage and answer the questions given below.

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Studies conducted at Sooriya Hospital, Chennai in 2017 on premature babies showed that swabbing the insides of cheeks with colostrum several times a day helps to bring down the incidence of hospital-acquired infections and speeds up overall recovery.

The preterm babies are best fed with unprocessed human milk obtained from their mothers. It has been shown that milk of mothers delivering prematurely has higher protein chloride and sodium content which is suitable for the nutritional needs of low-birth-weight babies.

Antimicrobial property of breast milk is of great importance to the preterm baby and the incidence of infectious sepsis and meningitis are greatly reduced. If the baby does not gain weight satisfactorily with breast milk alone, dietary supplements like vegetable oils (corn oil, groundnut oil) may be used which increase the caloric value without increasing its volume. The advantages of feeding breast milk to preterm babies are availability of easily digestible protein and fat and feeding tolerance. Factors in human milk may stimulate GI growth, motility and maturation. Enzymes naturally present in human milk help in the absorption and utilization of nutrients.

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SubQuestion No : 17

Q.17 What does the caloric value of infants range from?

- Ans**
- A. 110-120 ml/kg/day
 - B. 130-160 ml/kg/day
 - C. 1400-1500 g
 - D. 150-170 ml/kg/day

Question ID : 1841223169

Comprehension:

Read the following passage and answer the questions given below.

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The preterm babies are best fed with unprocessed human milk obtained from their mothers. It has been shown that milk of mothers delivering prematurely has higher protein chloride and sodium content which is suitable for the nutritional needs of low-birth-weight babies.

Antimicrobial property of breast milk is of great importance to the preterm baby and the incidence of infectious sepsis and meningitis are greatly reduced. If the baby does not gain weight satisfactorily with breast milk alone, dietary supplements like vegetable oils (corn oil, groundnut oil) may be used which increase the caloric value without increasing its volume. The advantages of feeding breast milk to preterm babies are availability of easily digestible protein and fat and feeding tolerance. Factors in human milk may stimulate GI growth, motility and maturation. Enzymes naturally present in human milk help in the absorption and utilization of nutrients.

The decision whether the baby is to be breast fed or through a gavage is guided by maturity, birth weight and general condition of the baby. The infant can be started with expressed mother's milk. Bolus, intermittent, naso-gastric tube feeds every 2 hours in small babies and every 3 hours in larger babies can be done. Initial volume used will be as low as 1 - 2 ml for feeding infants of 1000g or less or as much as 4 - 5 ml per feed for an infant of 1500 g. If oral feed is tolerated, then increase the volume of feeding by 1ml/day in smaller infants or by as much as 3 - 5 ml in the larger infants. Feeding must be reduced, withheld or even omitted entirely when there is gastric retention or abdominal distention. Ultimately the volume of intake should be 150 - 170 ml/kg/day and calorie value 110 -120 ml/kg/day. If the rate of weight gain is low, the calorie intake is increased by adding vegetable oil (coconut oil or peanut oil, 0.5 ml every other meal). Most infants begin to gain more rapidly as their postnatal weight approaches 1400-1500 g and their caloric intake increases.

SubQuestion No : 18

Q.18 Which quality of the breast milk reduces the higher chances of infectious sepsis and meningitis in the preterm babies?

- Ans**
- A. Antimicrobial
 - B. Hypoglycaemic
 - C. Antibacterial
 - D. Anti-inflammatory

Question ID : 1841223168

Comprehension:

Read the following passage and answer the questions given below.

FEEDING THE PRETERM BABY

Studies conducted at Sooriya Hospital, Chennai in 2017 on premature babies showed that swabbing the insides of cheeks with colostrum several times a day helps to bring down the incidence of hospital-acquired infections and speeds up overall recovery.

The preterm babies are best fed with unprocessed human milk obtained from their mothers. It has been shown that milk of mothers delivering prematurely has higher protein chloride and sodium content which is suitable for the nutritional needs of low-birth-weight babies.

Antimicrobial property of breast milk is of great importance to the preterm baby and the incidence of infectious sepsis and meningitis are greatly reduced. If the baby does not gain weight satisfactorily with breast milk alone, dietary supplements like vegetable oils (corn oil, groundnut oil) may be used which increase the caloric value without increasing its volume. The advantages of feeding breast milk to preterm babies are availability of easily digestible protein and fat and feeding tolerance. Factors in human milk may stimulate GI growth, motility and maturation. Enzymes naturally present in human milk help in the absorption and utilization of nutrients.

The decision whether the baby is to be breast fed or through a gavage is guided by maturity, birth weight and general condition of the baby. The infant can be started with expressed mother's milk. Bolus, intermittent, naso-gastric tube feeds every 2 hours in small babies and every 3 hours in larger babies can be done. Initial volume used will be as low as 1 - 2 ml for feeding infants of 1000g or less or as much as 4 - 5 ml per feed for an infant of 1500 g. If oral feed is tolerated, then increase the volume of feeding by 1ml/day in smaller infants or by as much as 3 - 5 ml in the larger infants. Feeding must be reduced, withheld or even omitted entirely when there is gastric retention or abdominal distention. Ultimately the volume of intake should be 150 - 170 ml/kg/day and calorie value 110 -120 ml/kg/day. If the rate of weight gain is low, the calorie intake is increased by adding vegetable oil (coconut oil or peanut oil, 0.5 ml every other meal). Most infants begin to gain more rapidly as their postnatal weight approaches 1400-1500 g and their caloric intake increases.

SubQuestion No : 19

Q.19 Select the appropriate meaning of the word.

MOTILITY

- Ans A. Drift
 B. Portability
 C. Lethal
 D. Morse

Question ID : 1841223171

Comprehension:

Read the following passage and answer the questions given below.

FEEDING THE PRETERM BABY

Studies conducted at Sooriya Hospital, Chennai in 2017 on premature babies showed that swabbing the insides of cheeks with colostrum several times a day helps to bring down the incidence of hospital-acquired infections and speeds up overall recovery.

The preterm babies are best fed with unprocessed human milk obtained from their mothers. It has been shown that milk of mothers delivering prematurely has higher protein chloride and sodium content which is suitable for the nutritional needs of low-birth-weight babies.

Antimicrobial property of breast milk is of great importance to the preterm baby and the incidence of infectious sepsis and meningitis are greatly reduced. If the baby does not gain weight satisfactorily with breast milk alone, dietary supplements like vegetable oils (corn oil, groundnut oil) may be used which increase the caloric value without increasing its volume. The advantages of feeding breast milk to preterm babies are availability of easily digestible protein and fat and feeding tolerance. Factors in human milk may stimulate GI growth, motility and maturation. Enzymes naturally present in human milk help in the absorption and utilization of nutrients.

The decision whether the baby is to be breast fed or through a gavage is guided by maturity, birth weight and general condition of the baby. The infant can be started with expressed mother's milk. Bolus, intermittent, naso-gastric tube feeds every 2 hours in small babies and every 3 hours in larger babies can be done. Initial volume used will be as low as 1 - 2 ml for feeding infants of 1000g or less or as much as 4 - 5 ml per feed for an infant of 1500 g. If oral feed is tolerated, then increase the volume of feeding by 1ml/day in smaller infants or by as much as 3 - 5 ml in the larger infants. Feeding must be reduced, withheld or even omitted entirely when there is gastric retention or abdominal distention. Ultimately the volume of intake should be 150 - 170 ml/kg/day and calorie value 110 -120 ml/kg/day. If the rate of weight gain is low, the calorie intake is increased by adding vegetable oil (coconut oil or peanut oil, 0.5 ml every other meal). Most infants begin to gain more rapidly as their postnatal weight approaches 1400-1500 g and their caloric intake increases.

SubQuestion No : 20

Q.20 Mother's milk contains higher content of ____?

- Ans
- A. Sodium Chloride and Nickel
 - B. Calcium Chloride and Zinc
 - C. Magnesium Chloride and Sodium
 - D. Protein Chloride and Sodium

Question ID : 1841223167

Section : General Hindi

Q.1 'चुपड़ी और दो-दो' लोकोक्ति का अर्थ है-

- Ans
- A. किसी को कष्ट देकर मौज करना।
 - B. उत्तम वस्तु और वह भी इतनी ज़्यादा।
 - C. थोड़ा-थोड़ा जमा करके अमीर हो जाओगे।
 - D. थोड़ी वस्तु से बड़ा काम नहीं हो सकता।

Question ID : 1841223182

Q.2 'चापलूसी करने' के अर्थ में निम्न में से किस मुहावरे का प्रयोग होगा-

- Ans
- A. ज़मीन आसमान एक करना
 - B. कान भरना
 - C. आँखे बिछाना
 - D. जूते चाटना

Question ID : 1841223181

Q.3 'अनल' पर्याय है-

- Ans A. बादल का
 B. वायु का
 C. जल का
 D. अग्नि का

Question ID : 1841223176

Q.4 'श्रावण' में है-

- Ans A. दीर्घ संधि
 B. गुण संधि
 C. यण् संधि
 D. अयादि संधि

Question ID : 1841223175

Q.5 अमावस्या का विलोम है-

- Ans A. कुहू
 B. चाँदनी
 C. प्रकाश
 D. पूर्णिमा

Question ID : 1841223178

Q.6 'कटु सत्य कहना' के अर्थ में निम्न में से किस मुहावरे का प्रयोग होता है-

- Ans A. खरी-खरी सुनाना
 B. खरी-खोटी सुनाना
 C. एक आँख से देखना
 D. उठा न रखना

Question ID : 1841223180

Q.7 'इतनी गर्मी पड़े तो सारे ग्लेशियर ही पिघल जाएँ।' वाक्य उदाहरण है-

- Ans A. सामान्य भविष्य का
 B. हेतुहेतुमद्भविष्य का
 C. संभाव्य वर्तमान का
 D. संभाव्य भविष्य का

Question ID : 1841223184

Q.8 वाक्य विन्यास की दृष्टि से शुद्ध वाक्य है-

- Ans A. रावण को मारा अयोध्या के राजा दशरथ के पुत्र राम ने।
 B. राम अयोध्या के राजा दशरथ के पुत्र ने रावण को मारा।
 C. दशरथ अयोध्या के राजा के पुत्र राम ने रावण को मारा।
 D. अयोध्या के राजा दशरथ के पुत्र राम ने रावण को मारा।

Question ID : 1841223185

Q.9 सर्वोचित शब्द से रिक्त स्थान भरें-
सेठ जी ने करोड़ों रुपये का _____ किया।

- Ans A. अर्जुन
 B. अर्चन
 C. अर्जन
 D. अंजन

Question ID : 1841223186

Q.10 'लता मंगेशकर गीत गा रही हैं।' वाक्य उदाहरण है-

- Ans A. सामान्य वर्तमान का
 B. तात्कालिक वर्तमान का
 C. सम्भाव्य वर्तमान का
 D. संदिग्ध वर्तमान का

Question ID : 1841223183

Q.11 निम्न में से गंगा का पर्यायवाची शब्द है-

- Ans A. ईहा
 B. वासव
 C. आगार
 D. सुरसरित

Question ID : 1841223177

Q.12 'अकरम ने रोटी खायी।' वाक्य में कारक है-

- Ans A. अपादान कारक
 B. सम्बंध कारक
 C. करण कारक
 D. कर्ता कारक

Question ID : 1841223172

Q.13 निम्न में से तुलनावचक क्रियाविशेषण शब्द है-

- Ans A. यथाक्रम
 B. किंचित
 C. काफी
 D. उतना

Question ID : 1841223173

Q.14 निम्न शब्दों में से गुणवाचक विशेषण का उदाहरण नहीं है-

- Ans A. दुष्ट
 B. सुडौल
 C. दूना
 D. सतही

Question ID : 1841223174

Q.15 निम्न में से कौन-सा विलोम युग्म सुमेलित नहीं है-

- Ans A. आशा - निराशा
 B. अवनत - उन्नत
 C. अथ - प्रारम्भ
 D. आय - व्यय

Question ID : 1841223179

Comprehension:

दिए गए गद्यांश के आधार पर प्रश्न के उत्तर दीजिए।

हिंदी क्षेत्र में पुनर्जागरण की चिंगारी औपनिवेशिक शोषण और दमन के प्रति असंतोष से फूटी, जिसका प्रतिफलन 1857 का औपनिवेशिक शासन से विद्रोह था। इतिहासकारों ने स्वीकार किया है कि यद्यपि इस विद्रोह के ज़ाहिर नेता ब्रिटिश शासन से असंतुष्ट भारतीय सामंत थे, पर उन्हें किसानों, सैनिकों, साधु-संतों और मुल्ला-मौलवियों का प्रत्यक्ष - अप्रत्यक्ष दोनों प्रकार का समर्थन प्राप्त था। यह विद्रोह अमानुषिक निर्दयता के साथ कुचल दिया गया, पर उसकी चिंगारी दमन की राख के नीचे बची रह गयी। इस राजनीतिक विद्रोह के साथ ही बंगाल का सामाजिक पुनर्जागरण हिंदी क्षेत्र में पहुँचा। बंगाल नवजागरण के एक प्रमुख नेता केशवचंद्र सेन ने पंजाब को और आर्य समाज के संस्थापक स्वामी दयानंद सरस्वती ने हिंदी क्षेत्र को सामाजिक जागरण-आंदोलन के लिए चुना। ठीक इसी समय सर सैयद अहमद और अब्दुल्ला साहब आदि ने मुस्लिम समाज में 'नयी रौशनी' फैलाने का आंदोलन शुरू किया। दुर्भाग्य की बात यह हुई कि अंग्रेज़ हिंदुओं-मुसलमानों की उस एकता को, जो 1857 के विद्रोह के समय पैदा हुई थी, अपनी कूटनीतिक चालों से भंग करने में सफल हो गये। 1885 में जब इण्डियन नेशनल कांग्रेस की स्थापना हुई, तब तक हिंदू और मुस्लिम समाज की फाँक चिंता जनक रूप ले चुकी थी। यह हिंदी-उर्दू क्षेत्र की सबसे दुर्भाग्यपूर्ण नियति थी।

SubQuestion No : 16

Q.16 निम्न में से कौन-सा शब्द युग्म अन्य से भिन्न है?

- Ans A. जागरण - आंदोलन
 B. मुल्ला - मौलवी
 C. प्रत्यक्ष - अप्रत्यक्ष
 D. हिंदू - मुसलमान

Question ID : 1841223188

Comprehension:

दिए गए गद्यांश के आधार पर प्रश्न के उत्तर दीजिए।

हिंदी क्षेत्र में पुनर्जागरण की चिंगारी औपनिवेशिक शोषण और दमन के प्रति असंतोष से फूटी, जिसका प्रतिफलन 1857 का औपनिवेशिक शासन से विद्रोह था। इतिहासकारों ने स्वीकार किया है कि यद्यपि इस विद्रोह के ज़ाहिर नेता ब्रिटिश शासन से असंतुष्ट भारतीय सामंत थे, पर उन्हें किसानों, सैनिकों, साधु-संतों और मुल्ला-मौलवियों का प्रत्यक्ष - अप्रत्यक्ष दोनों प्रकार का समर्थन प्राप्त था। यह विद्रोह अमानुषिक निर्दयता के साथ कुचल दिया गया, पर उसकी चिंगारी दमन की राख के नीचे बची रह गयी। इस राजनीतिक विद्रोह के साथ ही बंगाल का सामाजिक पुनर्जागरण हिंदी क्षेत्र में पहुँचा। बंगाल नवजागरण के एक प्रमुख नेता केशवचंद्र सेन ने पंजाब को और आर्य समाज के संस्थापक स्वामी दयानंद सरस्वती ने हिंदी क्षेत्र को सामाजिक जागरण-आंदोलन के किए चुना। ठीक इसी समय सर सैयद अहमद और अब्दुल्ला साहब आदि ने मुस्लिम समाज में 'नयी रौशनी' फैलाने का आंदोलन शुरू किया। दुर्भाग्य की बात यह हुई कि अंग्रेज़ हिंदुओं-मुसलमानों की उस एकता को, जो 1857 के विद्रोह के समय पैदा हुई थी, अपनी कूटनीतिक चालों से भंग करने में सफल हो गये। 1885 में जब इण्डियन नेशनल कांग्रेस की स्थापना हुई, तब तक हिंदू और मुस्लिम समाज की फाँक चिंता जनक रूप ले चुकी थी। यह हिंदी-उर्दू क्षेत्र की सबसे दुर्भाग्यपूर्ण नियति थी।

SubQuestion No : 17

Q.17 हिंदी क्षेत्र में पुनर्जागरण के उद्भव का निम्न में से क्या कारण था?

- Ans A. हिंदू-मुस्लिम एकता
 B. औपनिवेशिक शोषण एवं दमन
 C. 1857 का विद्रोह
 D. इण्डियन नेशनल कांग्रेस की स्थापना

Question ID : 1841223190

Comprehension:

दिए गए गद्यांश के आधार पर प्रश्न के उत्तर दीजिए।

हिंदी क्षेत्र में पुनर्जागरण की चिंगारी औपनिवेशिक शोषण और दमन के प्रति असंतोष से फूटी, जिसका प्रतिफलन 1857 का औपनिवेशिक शासन से विद्रोह था। इतिहासकारों ने स्वीकार किया है कि यद्यपि इस विद्रोह के ज़ाहिर नेता ब्रिटिश शासन से असंतुष्ट भारतीय सामंत थे, पर उन्हें किसानों, सैनिकों, साधु-संतों और मुल्ला-मौलवियों का प्रत्यक्ष - अप्रत्यक्ष दोनों प्रकार का समर्थन प्राप्त था। यह विद्रोह अमानुषिक निर्दयता के साथ कुचल दिया गया, पर उसकी चिंगारी दमन की राख के नीचे बची रह गयी। इस राजनीतिक विद्रोह के साथ ही बंगाल का सामाजिक पुनर्जागरण हिंदी क्षेत्र में पहुँचा। बंगाल नवजागरण के एक प्रमुख नेता केशवचंद्र सेन ने पंजाब को और आर्य समाज के संस्थापक स्वामी दयानंद सरस्वती ने हिंदी क्षेत्र को सामाजिक जागरण-आंदोलन के किए चुना। ठीक इसी समय सर सैयद अहमद और अब्दुल्ला साहब आदि ने मुस्लिम समाज में 'नयी रौशनी' फैलाने का आंदोलन शुरू किया। दुर्भाग्य की बात यह हुई कि अंग्रेज़ हिंदुओं-मुसलमानों की उस एकता को, जो 1857 के विद्रोह के समय पैदा हुई थी, अपनी कूटनीतिक चालों से भंग करने में सफल हो गये। 1885 में जब इण्डियन नेशनल कांग्रेस की स्थापना हुई, तब तक हिंदू और मुस्लिम समाज की फाँक चिंता जनक रूप ले चुकी थी। यह हिंदी-उर्दू क्षेत्र की सबसे दुर्भाग्यपूर्ण नियति थी।

SubQuestion No : 18

Q.18 हिंदी-उर्दू क्षेत्र के लिए सबसे दुर्भाग्यपूर्ण नियति निम्न में से थी।

- Ans A. सामाजिक पुनरुत्थान आंदोलन
 B. 1857 के विद्रोह के पश्चात् सरकारी दमन
 C. हिंदू-मुस्लिम एकता को तोड़ने में अंग्रेज़ों को सफलता प्राप्त होना
 D. सर सैयद अहमद द्वारा मुस्लिम समाज के उत्थान के लिए कार्य

Question ID : 1841223191

Comprehension:

दिए गए गद्यांश के आधार पर प्रश्न के उत्तर दीजिए।

हिंदी क्षेत्र में पुनर्जागरण की चिंगारी औपनिवेशिक शोषण और दमन के प्रति असंतोष से फूटी, जिसका प्रतिफलन 1857 का औपनिवेशिक शासन से विद्रोह था। इतिहासकारों ने स्वीकार किया है कि यद्यपि इस विद्रोह के ज़ाहिर नेता ब्रिटिश शासन से असंतुष्ट भारतीय सामंत थे, पर उन्हें किसानों, सैनिकों, साधु-संतों और मुल्ला-मौलवियों का प्रत्यक्ष - अप्रत्यक्ष दोनों प्रकार का समर्थन प्राप्त था। यह विद्रोह अमानुषिक निर्दयता के साथ कुचल दिया गया, पर उसकी चिंगारी दमन की राख के नीचे बची रह गयी। इस राजनीतिक विद्रोह के साथ ही बंगाल का सामाजिक पुनर्जागरण हिंदी क्षेत्र में पहुँचा। बंगाल नवजागरण के एक प्रमुख नेता केशवचंद्र सेन ने पंजाब को और आर्य समाज के संस्थापक स्वामी दयानंद सरस्वती ने हिंदी क्षेत्र को सामाजिक जागरण-आंदोलन के किए चुना। ठीक इसी समय सर सैयद अहमद और अब्दुल्ला साहब आदि ने मुस्लिम समाज में 'नयी रौशनी' फैलाने का आंदोलन शुरू किया। दुर्भाग्य की बात यह हुई कि अंग्रेज़ हिंदुओं-मुसलमानों की उस एकता को, जो 1857 के विद्रोह के समय पैदा हुई थी, अपनी कूटनीतिक चालों से भंग करने में सफल हो गये। 1885 में जब इण्डियन नेशनल कांग्रेस की स्थापना हुई, तब तक हिंदू और मुस्लिम समाज की फाँक चिंता जनक रूप ले चुकी थी। यह हिंदी-उर्दू क्षेत्र की सबसे दुर्भाग्यपूर्ण नियति थी।

SubQuestion No : 19

Q.19 इण्डियन नेशनल कांग्रेस की स्थापना कब हुई?

- Ans A. 1985
 B. 1857
 C. 1957
 D. 1885

Question ID : 1841223189

Comprehension:

दिए गए गद्यांश के आधार पर प्रश्न के उत्तर दीजिए।

हिंदी क्षेत्र में पुनर्जागरण की चिंगारी औपनिवेशिक शोषण और दमन के प्रति असंतोष से फूटी, जिसका प्रतिफलन 1857 का औपनिवेशिक शासन से विद्रोह था। इतिहासकारों ने स्वीकार किया है कि यद्यपि इस विद्रोह के ज़ाहिर नेता ब्रिटिश शासन से असंतुष्ट भारतीय सामंत थे, पर उन्हें किसानों, सैनिकों, साधु-संतों और मुल्ला-मौलवियों का प्रत्यक्ष - अप्रत्यक्ष दोनों प्रकार का समर्थन प्राप्त था। यह विद्रोह अमानुषिक निर्दयता के साथ कुचल दिया गया, पर उसकी चिंगारी दमन की राख के नीचे बची रह गयी। इस राजनीतिक विद्रोह के साथ ही बंगाल का सामाजिक पुनर्जागरण हिंदी क्षेत्र में पहुँचा। बंगाल नवजागरण के एक प्रमुख नेता केशवचंद्र सेन ने पंजाब को और आर्य समाज के संस्थापक स्वामी दयानंद सरस्वती ने हिंदी क्षेत्र को सामाजिक जागरण-आंदोलन के किए चुना। ठीक इसी समय सर सैयद अहमद और अब्दुल्ला साहब आदि ने मुस्लिम समाज में 'नयी रौशनी' फैलाने का आंदोलन शुरू किया। दुर्भाग्य की बात यह हुई कि अंग्रेज़ हिंदुओं-मुसलमानों की उस एकता को, जो 1857 के विद्रोह के समय पैदा हुई थी, अपनी कूटनीतिक चालों से भंग करने में सफल हो गये। 1885 में जब इण्डियन नेशनल कांग्रेस की स्थापना हुई, तब तक हिंदू और मुस्लिम समाज की फाँक चिंता जनक रूप ले चुकी थी। यह हिंदी-उर्दू क्षेत्र की सबसे दुर्भाग्यपूर्ण नियति थी।

SubQuestion No : 20

Q.20 हिंदी क्षेत्र में पुनर्जागरण के संदर्भ में असत्य है-

- Ans A. केशवचंद्र सेन ने बंगाल को और स्वामी दयानंद सरस्वती ने पंजाब को सामाजिक जागरण-आंदोलन के लिए चुना।
 B. सर सैयद और अब्दुल्ला साहब जैसे सुधारकों ने मुस्लिम समाज में नयी रौशनी फैलाई।
 C. हिंदी क्षेत्र में पुनर्जागरण बंगाल के सामाजिक पुनर्जागरण का ही प्रसार था।
 D. पुनर्जागरण का प्रतिफलन 1857 के विद्रोह के रूप में हुआ।

Question ID : 1841223192

Q.1

- Ans A.
 B.
 C.
 D.

Question ID : 1841223203

Q.2 How many Number of Resistances are used in a Wheatstone Bridge?

- Ans A. 5
 B. 3
 C. 6
 D. 4

Question ID : 1841223194

Q.3 If the rows and columns of a matrix are interchanged, then it is called as _____.

- Ans A. Transpose of a Matrix
 B. Skew Symmetric Matrix
 C. Triangular Matrix
 D. Orthogonal Matrix

Question ID : 1841223200

Q.4 A body of weight 200 Newtons is placed on a rough horizontal plane. Determine the coefficient of friction if a horizontal force of 120 Newtons just causes the body to slide over the horizontal plane.

- Ans A. 1.2
 B. 1.0
 C. 1.6
 D. 0.6

Question ID : 1841223208

Q.5 The velocity ratio of two pulleys connected by an open or crossed belt is:

- Ans A. directly proportional to their diameters
 B. inversely proportional to the square of their diameters
 C. directly proportional to the square of their diameters
 D. inversely proportional to their diameters

Question ID : 1841223212

Q.6 1 Watt = _____ Joule / second

- Ans A. 1
 B. 10
 C. 100
 D. 1000

Question ID : 1841223207

Q.7 Thevenin's Theorem states that, any linear active Double terminal network containing voltage and resistance sources can be replaced by a _____ Voltage source in _____ with _____ resistance.

- Ans A. Single, Parallel, Single
 B. Single, Series, Single
 C. Single, Parallel, Two
 D. Single, Series, Two

Question ID : 1841223210

Q.8

- Ans A.
 B.
 C.
 D.

Question ID : 1841223202

Q.9 _____ states, "Every body continues in a state of rest or uniform motion in a straight line unless it is compelled to change that state by some external force acting on it."

- Ans A. Newton's First Law of Motion
 B. Newton's Third Law of Motion
 C. Newton's Law of Gravitation
 D. Newton's Second Law of Motion

Question ID : 1841223205

Q.10

- Ans A.
 B.
 C.
 D.

Question ID : 1841223204

Q.11 Among the two series given : Series 1 : 1, 2, 4, 8, ___; and Series 2 : 256, 128, ___; the P^{th} term of both series are equal. Identify the value of P?"

- Ans
- A. 3
 - B. 6
 - C. 5
 - D. 4

Question ID : 1841223198

Q.12 _____ is determined by using the law of parallelogram of forces, between two forces acting at a point in plane .

- Ans
- A. Resultant Force
 - B. Load
 - C. Displacement
 - D. Moment of Inertia

Question ID : 1841223201

Q.13

- Ans
- A.
 - B.
 - C.
 - D.

Question ID : 1841223206

Q.14 By using Searle's apparatus, the coefficient of thermal conductivity is determined for _____.

- Ans
- A. Nontransmitter
 - B. Insulator
 - C. Bad Conductors
 - D. Good Conductors

Question ID : 1841223195

Q.15 Ohm's law is not applicable for non-metallic conductor like _____.

- Ans
- A. Copper
 - B. Tin
 - C. Silver
 - D. Silicon carbide

Question ID : 1841223209

Q.16 According to IS : 1680 – 1982, The concentration of total dissolved solids in boiler water should be _____ for Boilers operating up to 2.0 MN/m².

- Ans A. 3500 mg/l
 B. 5500 mg/l
 C. 4500 mg/l
 D. 6500 mg/l

Question ID : 1841223197

Q.17 The rate of discharge of seepage water through a porous medium per unit area of void space perpendicular to the direction of flow is known as _____.

- Ans A. Discharge Velocity
 B. Critical Velocity
 C. Seepage Velocity
 D. Spectral Velocity

Question ID : 1841223211

Q.18 Calculate the equivalent weight of Na₂CO₃ when it is titrated against HCl in presence of C₂₀H₁₄O₄.

- Ans A. 106
 B. 26.5
 C. 212
 D. 53

Question ID : 1841223196

Q.19 "The magnitude of the electrostatic force of attraction or repulsion between two point charges is directly proportional to the product of the magnitudes of charges and inversely proportional to the square of the distance between them" is stated in _____.

- Ans A. Newton's Law
 B. Faraday's Law
 C. Ampere's Law
 D. Coulomb's Law

Question ID : 1841223193

Q.20

- Ans A. Minor of the element
 B. Major of the element
 C. Matrices of the element
 D. Multiple of the Element

Question ID : 1841223199

Q.1 Method of applying water to the soil surface in the form of rain is _____.

- Ans
- A. Border irrigation
 - B. Furrow method
 - C. Trickle Irrigation
 - D. Sprinkler Irrigation

Question ID : 1841223221

Q.2 The horizontal distance from the centre of a well to the practical limit of the cone of depression in an aquifer is known as the _____ of the well.

- Ans
- A. Center of Influence
 - B. Diameter of Influence
 - C. Depth of Influence
 - D. Radius of Influence

Question ID : 1841223224

Q.3 are the devices used to engage or disengage two rotating machine components as and when desired.

- Ans
- A. Brake
 - B. Crank
 - C. Clutches
 - D. Shaft

Question ID : 1841223213

Q.4

- Ans
- A.
 - B.
 - C.
 - D.

Question ID : 1841223230

Q.5

- Ans
- A. Glazed Doors
 - B. Lugged Doors
 - C. Flush Doors
 - D. Louvered Doors

Question ID : 1841223218

Q.6

- Ans A. Artesian aquifer
 B. Perched aquifer
 C. Confined aquifer
 D. Un-Confined aquifer

Question ID : 1841223223

Q.7 According to Pascals law, The intensity of pressure for a fluid at rest is _____ in all directions.

- Ans A. Higher
 B. Lesser
 C. Zero
 D. Equal

Question ID : 1841223227

Q.8 longitudinal horizontal members parallel to the wall used in scaffolding is called as:

- Ans A. Standards
 B. Putlogs
 C. Stringers
 D. Planks

Question ID : 1841223219

Q.9 Reynolds Number for Laminar Flow in Pipes is _____.

- Ans A. Less than 2000
 B. Greater than 2000
 C. Greater than 4000
 D. Between 2000 and 4000

Question ID : 1841223229

Q.10 _____ are used to connect two non-parallel and non-intersecting shafts.

- Ans A. Bevel Gears
 B. Worm Gears
 C. Spiral Gears
 D. Spur Gears

Question ID : 1841223214

Q.11 Specifications for vicat apparatus used to find of intial setting time of cement is _____.

- Ans A. IS 5512 (1996)
 B. IS 5511 (1996)
 C. IS 5513 (1996)
 D. IS 5514 (1996)

Question ID : 1841223231

Q.12 What is the chezys formula for steady and uniform flow in rigid boundary open channels?

- Ans A.
 B.
 C.
 D.

Question ID : 1841223225

Q.13

- Ans A. Snap header Closer
 B. Queen Closer
 C. King Closer
 D. Bull Nose Mitre

Question ID : 1841223216

Q.14 According to Indian standarads, Shallow foundations are laid normally to depth of _____.

- Ans A. 4.5 meters
 B. 3 meters
 C. 7.5 meters
 D. 6 meters

Question ID : 1841223215

Q.15 Calculate the specific weight of a one litre of a liquid which weighs 9N.

- Ans A. 9 N/m^3
 B. 90 N/m^3
 C. 9000 N/m^3
 D. 900 N/m^3

Question ID : 1841223226

Q.16 Among the following figures identify the Correct one, Relationship between Absolute, Gauge, Atmospheric and vacuum Pressures.

- Ans A.
 B.
 C.
 D.

Question ID : 1841223228

Q.17 When mixed with _____, Anhydrous cement compounds react with each other to form hydrated compounds.

- Ans
- A. Kersone
 - B. Mercury
 - C. Water
 - D. Petrol

Question ID : 1841223232

Q.18 The minimum width of tread without nosing shall be _____ for residential buildings.

- Ans
- A. 250 mm
 - B. 150 mm
 - C. 450 mm
 - D. 350 mm

Question ID : 1841223220

Q.19 Usual allowance for camber in the intrados in the flat arch is _____.

- Ans
- A. 1 / 100 of the span
 - B. 1 / 200 of the span
 - C. 1 / 150 of the span
 - D. 1 / 50 of the span

Question ID : 1841223217

Q.20 Intensity of irrigation is defined as the percentage of CCA , which is proposed to be annually irrigated. What is meant by CCA in the above definition?

- Ans
- A. Culturable Command Area
 - B. Crop Command Area
 - C. Culturable Common Area
 - D. Crop Common Area

Question ID : 1841223222

Section : Discipline3

Q.1 Among the following which is NOT a out put device.

- Ans
- A. Printer
 - B. Monitor
 - C. Plotter
 - D. Key board

Question ID : 1841223244

Q.2

- Ans A.
 B.
 C.
 D.

Question ID : 1841223239

Q.3 COD stands for:

- Ans A. Clean Oxygen Demand
 B. Chemical Oxygen Demand
 C. Chlorine Oxygen Demand
 D. Calcium Oxygen Demand

Question ID : 1841223252

Q.4 An admixture which delays the setting of cement paste is _____.

- Ans A. Retarder
 B. Accelerator
 C. Water Reducing Admixture
 D. Air-Entraining Admixtures

Question ID : 1841223237

Q.5 _____ is used for delay in the setting time of concrete.

- Ans A. Retarder
 B. Air-Entraining Admixtures
 C. Water Reducing Admixture
 D. Accelerator

Question ID : 1841223235

Q.6 What is the minimum specified thickness of steel pipes of 1000 to 1200 mm used in the water distribution layouts?

- Ans A. 8 mm
 B. 5 mm
 C. 7 mm
 D. 6 mm

Question ID : 1841223250

Q.7 Unit for Torque is _____.

- Ans A.
 B.
 C.
 D.

Question ID : 1841223241

Q.8 As per Indian standards 10262 - 2009, maximum water Content required to prepare concrete with 10 mm nominal maximum size aggregate is _____.

- Ans A.
 B.
 C.
 D.

Question ID : 1841223234

Q.9 Among the following, which method is "NOT" used for analysing Truss.

- Ans A. Graphical Method
 B. Method of Joints
 C. Method of Sections
 D. Macaulay's Method

Question ID : 1841223243

Q.10 The quantity of water required to be stored in the reservoir for equalising fluctuating demand against constant supply is known as:

- Ans A. The Breakdown Storage
 B. The Total Reservoir Storage
 C. The Fire Storage
 D. The Balancing Storage

Question ID : 1841223245

Q.11 As per Euler's theory on columns, the Critical Load for Columns with Hinged Ends is given by:

- Ans A.
 B.
 C.
 D.

Question ID : 1841223242

Q.12 What is the trade name for Aluminium sulphate?

- Ans A. Soda alum
 B. Green vitriol
 C. Alfloc
 D. Filter alum

Question ID : 1841223248

Q.13 pH value for drinking water is: _____

- Ans A. 10.5 to 12.5
 B. 8.5 to 10.5
 C. 6.5 to 8.5
 D. 4.5 to 6.5

Question ID : 1841223247

Q.14 _____ shape of aggregate gives good workability.

- Ans A. Angular
 B. Elongated
 C. Rounded
 D. Flaky

Question ID : 1841223236

Q.15 According to CPHEEO, to avoid erosion due to sand and other gritty material carried in the sewer, the maximum velocity should not exceed _____.

- Ans A. 3.0 m/S
 B. 6.0 m/S
 C. 1.5 m/S
 D. 4.5 m/S

Question ID : 1841223251

Q.16 Ratio of Lateral strain to longitudinal strain is _____.

- Ans A. Slenderness Ratio
 B. Volumetric Strain
 C. Poisson's Ratio
 D. Radius of Gyration

Question ID : 1841223238

Q.17 In _____ system, the water in the conveying section flows freely due to gravity.

- Ans A. Pumping
 B. Pressure
 C. Combined
 D. Free Flow

Question ID : 1841223246

Q.18

- Ans A.
 B.
 C.
 D.

Question ID : 1841223240

Q.19 According to IS : 2386 (Part I) – 1963, to conduct Sieve analysis, the minimum weight of the sample of 20 mm size aggregate to be taken is:

- Ans A. 5 kg
 B. 1 kg
 C. 25 kg
 D. 10 kg

Question ID : 1841223233

Q.20 The treatment by which the disease producing bacteria and other micro-organisms present in water are killed is known as _____.

- Ans A. Filtration
 B. Sedimentation
 C. Water Softening
 D. Disinfection

Question ID : 1841223249

Section : Discipline4

Q.1 The ratio of the volume of air space to the volume of solids in a soil mass is called as _____.

- Ans A. California Bearing Ratio
 B. Air-Space Ratio
 C. Air Void Ratio
 D. Critical Void Ratio

Question ID : 1841223259

Q.2 As per IS : 2720 (Part XXX) – 1980, the vane in Vane shear test for the measurement of shear strength of cohesive soils shall consist of four blades each fixed at _____ to the adjacent blades.

- Ans A.
 B.
 C.
 D.

Question ID : 1841223262

Q.3 A three-hinged arch has hinged supports at each abutment. The external restraint provided by both the abutments is _____.

- Ans A. Four
 B. Three
 C. One
 D. Two

Question ID : 1841223267

Q.4 In AUTOCAD, the commnad used to draw Parallellines or Curves is:

- Ans
- A. Fillet
 - B. Paste
 - C. Copy
 - D. Offset

Question ID : 1841223272

Q.5 A compiler translates a high-level program into a low-level program.

- Ans
- A. Assembler
 - B. Compiler
 - C. SQL
 - D. Linkers

Question ID : 1841223263

Q.6 Asper IS : 12269 – 2013, what is the Maximum Insoluble residue (as percent by mass) for Ordinary Portland Cement, 53 Grade?

- Ans
- A. 8.0
 - B. 2.0
 - C. 6.0
 - D. 4.0

Question ID : 1841223255

Q.7 According to the classification of building limes in IS 712 : 1984, Magnesium/dolomitic lime used for finishing coat in plastering, white washing, etc. comes under _____ category.

- Ans
- A. Class D
 - B. Class C
 - C. Class B
 - D. Class A

Question ID : 1841223256

Q.8 According to IS : 79 - 1975, the Acid value of Type – 1, linseed stand oil for paints is:

- Ans
- A. 3
 - B. 4
 - C. 5
 - D. 6

Question ID : 1841223257

Q.9

Ans A.

B.

C.

D.

Question ID : 1841223265

Q.10 ____ encompass the personal and corporate standards of behavior expected by professionals.

Ans A. Punctual Ethics

B. General Ethics

C. Professional Ethics

D. Global Ethics

Question ID : 1841223271

Q.11 Among the different types of rocks given under options, identify the igneous rock.

Ans A. Lime Stone

B. Sand Stone

C. Granite

D. Slate

Question ID : 1841223253

Q.12 ____ is defined as a set of international standards on quality management and quality assurance developed to help companies effectively document the quality system elements needed to maintain an efficient quality system.

Ans A. ISO 6000

B. ISO 9000

C. ISO 8000

D. ISO 7000

Question ID : 1841223270

Q.13 The mechanism of one dimensional consolidation in soils was proposed by:

Ans A. Taylor

B. Darcy

C. Terzaghi

D. Skempton

Question ID : 1841223261

Q.14 According to IS : 1077 : 1992, non-modular size of the bricks is _____.

- Ans A.
 B.
 C.
 D.

Question ID : 1841223254

Q.15 _____ soils are formed by the transportation and deposition of wind.

- Ans A. Glacial
 B. Aeolian
 C. lacustrine
 D. Alluvial

Question ID : 1841223258

Q.16 What is the Indian standard for "Safety code for handling and storage of building materials".

- Ans A. IS 7068 (1975)
 B. IS 7069 (1975)
 C. IS 7868 (1975)
 D. IS 7969 (1975)

Question ID : 1841223268

Q.17 What type of frame it will be, if it has 3 joints and 4 members?

- Ans A. Redundant Frame
 B. Deficient Frame
 C. Perfect Frame
 D. Efficient Frame

Question ID : 1841223264

Q.18 According to Workmen's compensation act 1923, Amount of compensation where death results from the injury is an amount equal to _____ of the monthly wages of the deceased workman multiplied by the relevant factor.

- Ans A. 40%
 B. 20%
 C. 60%
 D. 80%

Question ID : 1841223269

Q.19 In moment distribution method of structural analysis, the ratio of the moment induced at fixed end to the moment required at free end is known as:

- Ans
- A. Stiffness Factor
 - B. Distribution Factor
 - C. Moment Factor
 - D. Carry-Over Factor

Question ID : 1841223266

Q.20 In _____ type of soils, more than half the coarse fraction is larger than 4.75-mm IS Sieve size.

- Ans
- A. Clay
 - B. Sand
 - C. Silt
 - D. Gravel

Question ID : 1841223260

Section : Discipline5

Q.1 Find the quantity of cement mortar of 1 : 6 required for 12 mm plastering of two walls, each of them having length = 7.80 meters and height = 1.25 meters?

- Ans
- A. 17.50 m²
 - B. 20.50²
 - C. 18.50 m²
 - D. 19.50 m²

Question ID : 1841223289

Q.2 Number of Spheres as Abrasive charge to be used for Grade - D Aggregates in Los Angeles Abrasion Testing Machine is _____.

- Ans
- A. 6
 - B. 11
 - C. 12
 - D. 8

Question ID : 1841223276

Q.3 The value of a property at the end of its utility period without dismantling is known as:

- Ans
- A. Book Value
 - B. Scrap Value
 - C. Salvage Value
 - D. Market Value

Question ID : 1841223291

Q.4

- Ans A. 0.8
 B. 0.7
 C. 0.6
 D. 0.5

Question ID : 1841223282

Q.5 Walls of one brick thick and less shall each be measured separately in:

- Ans A. Square Meter
 B. Running Meter
 C. Number
 D. Cubic Meter

Question ID : 1841223286

Q.6 According to Nagpur road plan, IRC has classified the Indian roads into _____ categories.

- Ans A. 5
 B. 6
 C. 3
 D. 7

Question ID : 1841223274

Q.7 In the _____ type of split switch, the tongue rail does not end at the heel of the switch, but extends further and is rigidly connected.

- Ans A. Fixed Heel
 B. Undercut Switch
 C. Overriding Switch
 D. Loose Heel

Question ID : 1841223278

Q.8 Modulus of Elasticity of structural steel is _____.

- Ans A.
 B.
 C.
 D.

Question ID : 1841223280

Q.9 The Safe Stopping Sight Distance value recommended by IRC for 60 km/h speed is:

- Ans A. 60 meters
 B. 40 meters
 C. 80 meters
 D. 20 meters

Question ID : 1841223275

Q.10 What is the Imperfection factor for buckling class "A & B"

- Ans A. 0.21 & 0.34
 B. 0.32 & 0.45
 C. 0.54 & 0.67
 D. 0.43 & 0.56

Question ID : 1841223284

Q.11 In AUTOCAD, the command that is made use of to draw internal walls during house plan development is:

- Ans A. Copy
 B. Dline
 C. Offset
 D. Snap

Question ID : 1841223273

Q.12 For multiple riveted connections, a service bolt shall be provided in every _____ hole.

- Ans A. Seventh or Eighth
 B. Fifth or Sixth
 C. Ninth or Tenth
 D. Third or Fourth

Question ID : 1841223281

Q.13 According to IS : 4701 – 1982, the the range of side slope values (Horizontal : Vertical) provided for unlined canals formed in black cotton soils in embankment is:

- Ans A. 1.5 : 1 to 2.5 : 1
 B. 2 : 1 to 3 : 1
 C. 2.5 : 1 to 3.5 : 1
 D. 1.5 : 1 to 3 : 1

Question ID : 1841223288

Q.14 What is the effective length of a prismatic compression member, whose boundary conditions are "Translation & Rotation are Restrained at One end and Translation is Free & Rotation is Restrained at the other end"

- Ans A. 1.2 L
 B. 2.0 L
 C. 1.0 L
 D. 0.8 L

Question ID : 1841223283

Q.15 _____ is prepared to decide financial aspect and give idea of the cost of the proposal to sanctioning authority.

- Ans
- A. Revised Estimate
 - B. Cube Rate Estimate
 - C. Plinth Area Estimate
 - D. Preliminary Estimate

Question ID : 1841223285

Q.16 According to IRC : 37 - 2001, total pavement thickness for cumulative traffic of 2 msa for a CBR value of 6% is _____.

- Ans
- A. 350 mm
 - B. 450 mm
 - C. 500 mm
 - D. 615 mm

Question ID : 1841223277

Q.17 An old residential structure excluding the price of land has been bought by a person at a price of ₹30,000 /-. Expecting the life of the Structure as 20 years, what is the amount of annual sinking fund at 4% interest, if the scrap value of the building is taken as 10% of the cost of purchase.

- Ans
- A. 907.20
 - B. 917.20
 - C. 920.30
 - D. 900.70

Question ID : 1841223292

Q.18 Find out the quantity of earth work excavation for foundation whose centre line length is 20 m, width/depth ratio of the trench is 0.5 and depth is 1.00 meters.

- Ans
- A. 13.00 m³
 - B. 15.00 m³
 - C. 10.00 m³
 - D. 12.00 m³

Question ID : 1841223287

Q.19 Roller bearings have been used in _____.

- Ans
- A. Both Steel and Concrete Bridges
 - B. Not Suitable for Both Steel and Concrete Bridges
 - C. Only Concrete Bridges, Not in Steel Bridges
 - D. Only Steel Bridges, Not in Concrete Bridges

Question ID : 1841223279

Q.20 If the price of the steel is ₹7,850.00 per Ton used in RCC works. Then what is the total cost of steel for 100 Quintal.

Ans A. ₹78,500.00

B. ₹7,85,000.00

C. ₹785.00

D. ₹7,850.00

Question ID : 1841223290

