



**Staff Selection Commission**  
(Government Of India)

**EXAM DATE : 22-March-2018**  
**EXAM NAME : SSC Examination TOTAL**  
**MARKS : 200**

**EXAM START TIME : 10:00:00**  
**EXAM DURATION : 01:00 Hrs**  
**TOTAL NO OF QUESTIONS : 100**

**QID : 1** - In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

The Taj Mahal can be (1)/ called jewel (2)/ of the nation. (3)/ No error (4)

**Options:**

- 1) 1
- 2) 2
- 3) 3
- 4) 4

**Correct Answer:** 2

**Candidate Answer:** 1

**QID : 2** - In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

Nivedita's love for everything Indian (1)/ was eloquently demonstrated in her serve of tea to Lady Minto, (2)/ who was on a visit to the Dakshineswar temple. (3)/ No error (4)

**Options:**

- 1) 1
- 2) 2
- 3) 3
- 4) 4

**Correct Answer:** 2

**Candidate Answer:** 3

**QID : 3** - In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.

I \_\_\_\_\_ successful, I just know it.

**Options:**

- 1) would be
- 2) will be
- 3) may be
- 4) can be

**Correct Answer:** will be

**Candidate Answer:** will be

**QID : 4** - In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.

The purpose of life is not to simply survive, but to discover \_\_\_\_\_ fulfillment.

**Options:**

- 1) inner
- 2) outer
- 3) outmost
- 4) top

**Correct Answer:** inner

**Candidate Answer:** inner

**QID : 5** - In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.

**Supercilious**

**Options:**

- 1) Modest
- 2) Sociable
- 3) Arrogant
- 4) Rational

**Correct Answer:** Arrogant

**Candidate Answer:** Modest

**QID : 6** - In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.

**Insolent**

**Options:**

- 1) Shy
- 2) Sorrowful
- 3) Happy
- 4) Rude

**Correct Answer:** Rude

**Candidate Answer:** Sorrowful

**QID : 7** - In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.

**Thwart**

**Options:**

- 1) Stop
- 2) Hinder
- 3) Balk
- 4) Assist

**Correct Answer:** Assist

**Candidate Answer:** Balk

**QID : 8** - In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.

**Anile**

**Options:**

- 1) Senile
- 2) Young
- 3) Foolish
- 4) Soft

**Correct Answer:** Young

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 9** - Rearrange the parts of the sentence in correct order.

**The debate**

**P : on allowing euthanasia to**

**Q : protect the dignity of patients in a**

**R : vegetative state has become a key question**

**Options:**

- 1) PRQ
- 2) RPQ
- 3) QRP
- 4) PQR

**Correct Answer:** PQR

**Candidate Answer:** PQR

**QID : 10** - A sentence has been given in Active/Passive Voice. Out of the four given alternatives, select the one which best expresses the same sentence in Passive/Active Voice.

**Somebody hit the beggar with a stone.**

**Options:**

- 1) The beggar was hit with a stone.
- 2) The beggar was hurt by a stone.
- 3) The beggar is hit by a stone.
- 4) The beggar hit with a stone.

**Correct Answer:** The beggar was hit with a stone.

**Candidate Answer:** The beggar is hit by a stone.

**QID : 11** - A sentence has been given in Direct/Indirect Speech. Out of the four given alternatives, select the one which best expresses the same sentence in Indirect/Direct Speech.

**"Bring me a glass of water," said the saint to his followers.**

**Options:**

- 1) The saint asked his followers to bring him a glass of water.
- 2) The saint asked for a glass of water.
- 3) The saint wanted a glass of water from his followers.
- 4) The saint asked his followers to brought him a glass of water.

**Correct Answer:** The saint asked his followers to bring him a glass of water.

**Candidate Answer:** The saint asked his followers to brought him a glass of water.

**QID : 12** - In the following question, a word has been written in four different ways out of which only one is correctly spelt. Select the correctly spelt word.

**Options:**

- 1) Mainvever
- 2) Maneuver
- 3) Maneover
- 4) Manever

**Correct Answer:** Maneuver

**Candidate Answer:** Maneuver

**QID : 13 - In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.**

Teachers \_\_\_\_\_ the country require proper training at the appropriate time in their careers. On account of the unique occupational dynamic, together \_\_\_\_\_ the constant pressure to address the growing expectations of society and the \_\_\_\_\_ of teaching pedagogy, teachers need to be engaged in continual re-examination of their role. This cannot be achieved unless they incorporate the subjects as varied \_\_\_\_\_ applied ethics, human psychology, spirituality, \_\_\_\_\_ values, peace studies, and organisational behaviour.

**Teachers \_\_\_\_\_ the country require proper training**

**Options:**

- 1) cross
- 2) over
- 3) beyond
- 4) across

**Correct Answer:** across

**Candidate Answer:** across

**QID : 14 - In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.**

Teachers \_\_\_\_\_ the country require proper training at the appropriate time in their careers. On account of the unique occupational dynamic, together \_\_\_\_\_ the constant pressure to address the growing expectations of society and the \_\_\_\_\_ of teaching pedagogy, teachers need to be engaged in continual re-examination of their role. This cannot be achieved unless they incorporate the subjects as varied \_\_\_\_\_ applied ethics, human psychology, spirituality, \_\_\_\_\_ values, peace studies, and organisational behaviour.

**dynamic, together \_\_\_\_\_ the constant pressure**

**Options:**

- 1) at
- 2) From
- 3) into
- 4) with

**Correct Answer:** with

**Candidate Answer:** with

**QID : 15 - In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.**

Teachers \_\_\_\_\_ the country require proper training at the appropriate time in their careers. On account of the unique occupational dynamic, together \_\_\_\_\_ the constant pressure to address the growing expectations of society and the \_\_\_\_\_ of teaching pedagogy, teachers need to be engaged in continual re-examination of their role. This cannot be achieved unless they incorporate the subjects as varied \_\_\_\_\_ applied ethics, human psychology, spirituality, \_\_\_\_\_ values, peace studies, and organisational behaviour.

**society and the \_\_\_\_\_ of teaching pedagogy,**

**Options:**

- 1) effective
- 2) effectively
- 3) effectiveness
- 4) effectives

**Correct Answer:** effectiveness

**Candidate Answer:** effectiveness

**QID : 16 - In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.**

Teachers \_\_\_\_\_ the country require proper training at the appropriate time in their careers. On account of the unique occupational dynamic, together \_\_\_\_\_ the constant pressure to address the growing expectations of society and the \_\_\_\_\_ of teaching pedagogy, teachers need to be engaged in continual re-examination of their role. This cannot be achieved unless they incorporate the subjects as varied \_\_\_\_\_ applied ethics, human psychology, spirituality, \_\_\_\_\_ values, peace studies, and organisational behaviour.

**subjects as varied \_\_\_\_\_ applied ethics,**

**Options:**

- 1) as
- 2) like
- 3) same
- 4) such

**Correct Answer:** as

**Candidate Answer:** such

**QID : 17 - In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.**

Teachers \_\_\_\_\_ the country require proper training at the appropriate time in their careers. On account of the unique occupational dynamic, together \_\_\_\_\_ the constant pressure to address the growing expectations of society and the \_\_\_\_\_ of teaching pedagogy, teachers need to be engaged in continual re-examination of their role. This cannot be achieved unless they incorporate the subjects as varied \_\_\_\_\_ applied ethics, human psychology, spirituality, \_\_\_\_\_ values, peace studies, and organisational behaviour.

**spirituality, \_\_\_\_\_ values, peace studies, and organisational behaviour.**

**Options:**

- 1) democracy
- 2) democrat
- 3) democrats
- 4) democratic

**Correct Answer:** democratic

**Candidate Answer:** democratic

**QID : 18 - In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.**

**Come in handy**

**Options:**

- 1) Be that type of a person who loves to work with his hands.
- 2) Turn out to be useful.
- 3) Always be ready to help strangers in need.
- 4) Be always prepared for any kind of hardship.

**Correct Answer:** Turn out to be useful.

**Candidate Answer:** Be that type of a person who loves to work with his hands.

**QID : 19 - In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.**

**Let bygones be bygones**

**Options:**

- 1) Even bad memories become memorable.
- 2) The past will return to haunt you unless you completely forget.
- 3) Forget past offences or causes of conflict and be reconciled.
- 4) Your past deeds will never leave you.

**Correct Answer:** Forget past offences or causes of conflict and be reconciled.

**Candidate Answer:** Forget past offences or causes of conflict and be reconciled.

**QID : 20 - In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.**

**A person who is intolerant towards those holding different opinions**

**Options:**

- 1) Clement
- 2) Magnanimous
- 3) Complaisant
- 4) Bigot

**Correct Answer:** Bigot

**Candidate Answer:** Magnanimous

**QID : 21 - In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.**

**Exercising a compelling charm which inspires devotion in others**

**Options:**

- 1) Vile
- 2) Charismatic
- 3) Offensive
- 4) Odious

**Correct Answer:** Charismatic

**Candidate Answer:** Charismatic

**QID : 22 - In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement".**

A simple glance at one's garden (**uplifted**) the mood.

**Options:**

- 1) uplift
- 2) uplifts
- 3) uplifting
- 4) no improvement

**Correct Answer:** uplifts

**Candidate Answer:** uplift

**QID : 23** - In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement".

Data of seizure of tiger body parts reveal that of the 14 cases, five (**was reported**) inside the reserves.

**Options:**

- 1) was reports
- 2) were reported
- 3) is reported
- 4) no improvement

**Correct Answer:** were reported

**Candidate Answer:** no improvement

**QID : 24** - The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.

In physically

**A**-fit people, calorie restriction

**B**-and periodic fasting slows

**C**-down the ageing process

**Options:**

- 1) ABC
- 2) CBA
- 3) CAB
- 4) BCA

**Correct Answer:** ABC

**Candidate Answer:** ABC

**QID : 25** - In the following question, four words are given out of which one word is correctly spelt. Select the correctly spelt word.

**Options:**

- 1) expansion
- 2) patronag
- 3) conctituet
- 4) presipitat

**Correct Answer:** expansion

**Candidate Answer:** expansion

**QID : 26** - In the following question, select the related word pair from the given alternatives.

**Death : Birth :: ? : ?**

निम्नलिखित प्रश्न में दिए गए विकल्पों में से संबंधित शब्द युग्म को चुनिए।

**मृत्यु : जन्म :: ? : ?**

**Options:**

- 1) Up : Slow  
ऊपर : धीमा
- 2) Win : Match  
विजय : मैच
- 3) Export : Import  
निर्यात : आयात
- 4) Huge : Wide  
विशाल : चौड़ा

**Correct Answer:** Export : Import

निर्यात : आयात

**Candidate Answer:** Export : Import

निर्यात : आयात

**QID : 27** - In the following question, select the related number from the given alternatives.

**44 : 47 :: 58 : ?**

निम्नलिखित प्रश्न में दिए गए विकल्पों में से संबंधित संख्या को चुनिए।

**44 : 47 :: 58 : ?**

**Options:**

- 1) 61
- 2) 63
- 3) 65
- 4) 59

**Correct Answer:** 61

**Candidate Answer:** 61

**QID : 28** - In the following question, select the related letter/letters from the given alternatives.

**NOS : PQU :: KLP : ?**

निम्नलिखित प्रश्न में दिए गए विकल्पों में से संबंधित अक्षर/अक्षरों को चुनिए।

**NOS : PQU :: KLP : ?**

**Options:**

- 1) LNS
- 2) MNO
- 3) KOR
- 4) MNR

**Correct Answer:** MNR

**Candidate Answer:** MNR

**QID : 29** - In the following question, select the odd word pair from the given alternatives.

निम्नलिखित प्रश्न में दिए गए विकल्पों में से विषम शब्द युग्म को चुनिए।

**Options:**

1) Rectangle – Perimeter  
आयत – परिमाप

2) Circle – Circumference

वृत्त – परिधि

3) Perimeter – Square

परिमाप – वर्ग

4) Triangle – Perimeter

त्रिभुज – परिमाप

**Correct Answer:** Perimeter – Square

परिमाप – वर्ग

**Candidate Answer:** Perimeter – Square

परिमाप – वर्ग

**QID : 30** - In the following question, four number pairs are given. The number on left side of (-) is related to the number on the right side of (-) with some Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the

नीचे दिए गए प्रश्न में, चार संख्या युग्म दिए गए हैं। (-) के बायीं ओर दी संख्या (-) के दायीं ओर दी गई संख्या से तर्क/नियम से सम्बंधित है। तीन उसी एक तर्क/नियम के आधार पर समान हैं। दिए गए विकल्पों में से भिन्न को चुनिए।

**Options:**

1) 4 – 16

2) 9 – 81

3) 6 – 36

4) 7 – 47

**Correct Answer:** 7 – 47

**Candidate Answer:** 7 – 47

**QID : 31** - In the following question, select the odd letter/letters from the given alternatives.

निम्नलिखित प्रश्न में दिए गए विकल्पों में से विषम अक्षर/अक्षरों को चुनिए।

**Options:**

1) BFJN

2) GKOS

3) LPQV

4) MQUY

**Correct Answer:** LPQV

**Candidate Answer:** LPQV

**QID : 32** - Arrange the given words in the sequence in which they occur in the dictionary.

1. Terrible
2. Therefore
3. Theatre
4. Terminal
5. Thankful

निम्नलिखित शब्दों को शब्दकोश में आने वाले क्रम के अनुसार लिखें।

1. Terrible
2. Therefore
3. Theatre
4. Terminal
5. Thankful

**Options:**

1) 41532

2) 32415

3) 12345

4) 54123

**Correct Answer:** 41532

**Candidate Answer:** 41532

**QID : 33** - In the following question, select the missing number from the given series.

7, 11, 15, 19, 23, ?

निम्नलिखित प्रश्न में दिए गए विकल्पों में से लुप्त अंक ज्ञात कीजिए।

7, 11, 15, 19, 23, ?

**Options:**

- 1) 29
- 2) 30
- 3) 27
- 4) 31

**Correct Answer:** 27

**Candidate Answer:** 27

**QID : 34** - A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

NVX, LTV, JRT, ?, FNP

एक अनुक्रम दिया गया है, जिसमें से एक पद लुप्त है। दिए गए विकल्पों में से वह सही विकल्प चुनिए, जो अनुक्रम को पूरा करे।

NVX, LTV, JRT, ?, FNP

**Options:**

- 1) GRS
- 2) GRP
- 3) IPR
- 4) HPR

**Correct Answer:** HPR

**Candidate Answer:** HPR

**QID : 35** - Weight of L is one-fourth of the weight of V. Weight of V is twice of the weight of B. Weight of B is half of the weight of C. Weight of C is thrice of the weight of H. The weight of V is greater than the weight of how many persons among L, B, H and C?

L का भार V के भार का एक-चौथाई है। V का भार B के भार का दोगुना है। B का भार C के भार का आधा है। C का भार H के भार का तिगुना है। V का भार, L, B, H तथा C में से कितने व्यक्तियों के भार से अधिक है?

**Options:**

- 1) 3
- 2) 2
- 3) 1
- 4) 0

**Correct Answer:** 3

**Candidate Answer:** 3

**QID : 36** - From the given alternatives, select the word which **CANNOT** be formed using the letters of the given word.

Pseudonym

दिए गए विकल्पों में से वह शब्द चुनिए जो दिए गए शब्द के अक्षरों का प्रयोग करके **नहीं** बनाया जा सकता है।

Pseudonym

**Options:**

- 1) Son
- 2) Does
- 3) Pose
- 4) Pendulum

**Correct Answer:** Pendulum

**Candidate Answer:** Pendulum

**QID : 37** - In a certain code language, "TOLDER" is written as "WSQGIW". How is "SPIRAL" written in that code language?

एक विशिष्ट कोड भाषा में, "TOLDER" को "WSQGIW" लिखा जाता है। इस कोड भाषा में "SPIRAL" को किस प्रकार लिखा जाएगा?

**Options:**

- 1) NVTQEV
- 2) ULQEWV
- 3) VTNUEQ
- 4) NOLQVW

**Correct Answer:** VTNUEQ

**Candidate Answer:** VTNUEQ

**QID : 38** - In a certain code language, '1' represents 'x', '2' represents '+', '3' represents '=' and '4' represents '-'. Find out the answer to the following question.

$$10 \times 4 \div 5 - 80 + 16 = ?$$

किसी निश्चित कोड भाषा में '1', '2', '3' को प्रदर्शित करता है, '4', '5' को प्रदर्शित करता है, '6', '7' को प्रदर्शित करता है और '8', '9' को प्रदर्शित करता है। निम्नलिखित प्रश्न का उत्तर ज्ञात करें।

$$10 \times 4 \div 5 - 80 + 16 = ?$$

**Options:**

- 1) 3
- 2) 31
- 3) 16
- 4) 12

**Correct Answer:** 31

**Candidate Answer:** 31

**QID : 39** - The following equation is incorrect. Which two signs should be interchanged to correct the equation?

$$16 \div 4 - 50 \times 4 + 18 = 26$$

निम्नलिखित समीकरण गलत है। इस समीकरण को सही करने के लिए किन दो चिन्हों को आपस में अदला-बदली करना चाहिए?

$$16 \div 4 - 50 \times 4 + 18 = 26$$

**Options:**

- 1) + and  $\div$   
+ और  $\div$
- 2) + and  $\times$   
+ और  $\times$
- 3) - and +  
- और +
- 4)  $\div$  and  $\times$   
 $\div$  और  $\times$

**Correct Answer:** + and  $\times$

+ और  $\times$

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 40** - If  $3\$8 = -50$ ,  $3\$5 = -20$  and  $2\$3 = -10$ , then find the value of  $9\$1 = ?$

यदि  $3\$8 = -50$ ,  $3\$5 = -20$  और  $2\$3 = -10$ , तो  $9\$1 = ?$  का मान ज्ञात करें।

**Options:**

- 1) 10
- 2) -20
- 3) 90
- 4) 80

**Correct Answer:** 80

**Candidate Answer:** -20

**QID : 41** - Which of the following terms follows the trend of the given list?

ABCABcaBC, ABCAbcABC, ABCabCABC, ABcaBCABC, AbcABCABC, \_\_\_\_\_.

निम्नलिखित में से कौन सा पद दी गयी सूची के क्रम के अनुसार है?

ABCABcaBC, ABCAbcABC, ABCabCABC, ABcaBCABC, AbcABCABC, \_\_\_\_\_.

**Options:**

- 1) ABCABCabC
- 2) abCABCABC
- 3) ABCABcaBC
- 4) ABCAbcABC

**Correct Answer:** abCABCABC

**Candidate Answer:** abCABCABC

**QID : 42** - The following is a map showing a route for a cycle race. The route starts and goes 12 km East, then there is a turn towards North where the route goes on for 5 km, then there is a turn towards East where the route goes on for 11 km, then there is a right turn from where the route goes on 5 km to reach the end. What is the position of the end with respect to that start?

निम्नलिखित एक साइकिल दौड़ के लिए मार्ग दिखाए जाने वाला नक्शा है। मार्ग शुरू होता है और 12 कि.मी. पूर्व की तरफ जाता है, फिर वहां उत्तर की ओर एक मोड़ है जहां से यह मार्ग 5 कि.मी. तक चलता है, फिर वहाँ पूर्व की तरफ एक मोड़ है जहां से यह मार्ग 11 कि.मी. तक जाता है, फिर वहाँ एक दाहिना मोड़ है जहां से यह मार्ग अंत स्थल तक पहुंचने के लिए 5 कि.मी. जाता है। उस शुरुआत के संबंध में अंत स्थल की स्थिति क्या है?



**Options:**

- 1) 1 km East  
1 कि.मी. पूर्व
- 2) 23 km East  
23 कि.मी. पूर्व
- 3) 23 km West  
23 कि.मी. पश्चिम
- 4) 1 km West  
1 कि.मी. पश्चिम

**Correct Answer:** 23 km East  
23 कि.मी. पूर्व

**Candidate Answer:** 23 km East  
23 कि.मी. पूर्व

**QID : 43** - In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

**Statement I:** All icons are drawings  
**Statement II:** No portraits are icons

**Conclusion I:** Some drawings are portraits  
**Conclusion II:** All portraits are drawings

प्रश्न में दो कथन दिये गये हैं जिसके आगे दो निष्कर्ष I और II निकाले गये हैं। आपको मानना है कि दोनों कथन सत्य है चाहे वह सामान्यतः ज्ञात तथ्यों से भिन्न प्रतीत होते हों। आपको निर्णय करना है की दिए गए निष्कर्षों में से कौन-सा/कौन-से निश्चित रूप से कथन द्वारा सही निकाला जा सकता है/सकते हैं, यदि कोई हो।

**कथन I:** सभी आइकन ड्राइंग होते हैं  
**कथन II:** कोई भी पोर्ट्रेट आइकन नहीं होता है

**निष्कर्ष I:** कुछ ड्राइंग पोर्ट्रेट होती हैं  
**निष्कर्ष II:** सभी पोर्ट्रेट ड्राइंग होते हैं

**Options:**

- 1) Only conclusion I follows  
केवल निष्कर्ष I सही है
- 2) Only conclusion II follows  
केवल निष्कर्ष II सही है
- 3) Both conclusions I and II follow  
दोनों निष्कर्ष I और II सही है
- 4) Neither conclusion I nor conclusion II follows  
ना तो निष्कर्ष I सही है ना ही निष्कर्ष II

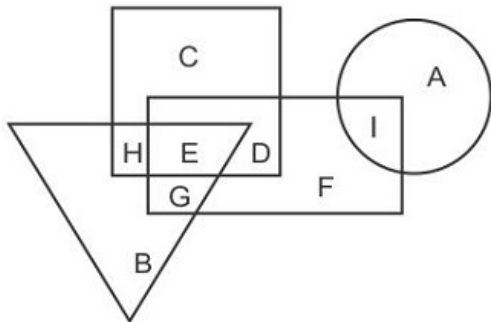
**Correct Answer:** Neither conclusion I nor conclusion II follows  
ना तो निष्कर्ष I सही है ना ही निष्कर्ष II

**Candidate Answer:** Neither conclusion I nor conclusion II follows  
ना तो निष्कर्ष I सही है ना ही निष्कर्ष II

**QID : 44** -

In the following figure, rectangle represents Hairstylists, circle represents Food stylists, triangle represents Playwrights and square represents Indians. Which set of letters represents Indians who are not Hairstylists?

निम्नलिखित आकृति में, आयत हेयर स्टाइलिस्ट को प्रदर्शित करता है, वृत्त फूड स्टाइलिस्ट को प्रदर्शित करता है, त्रिभुज प्लेराइट्स को प्रदर्शित करता है और वर्ग भारतीयों को प्रदर्शित करता है। अक्षरों का कौन सा समूह उन भारतीयों को प्रदर्शित करता है जो हेयर स्टाइलिस्ट नहीं है?



**Options:**

- 1) ED
- 2) HC
- 3) GD
- 4) GFI

**Correct Answer:** HC

**Candidate Answer:** HC

**QID : 45** - A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

**HVJ, NBP, THV, ZNB, ?**

एक अनुक्रम दिया गया है, जिसमें से एक पद लुप्त है। दिए गए विकल्पों में से वह सही विकल्प चुनिए, जो अनुक्रम को पूरा करे।

**HVJ, NBP, THV, ZNB, ?**

**Options:**

- 1) ESG
- 2) GUI
- 3) FTH
- 4) HVI

**Correct Answer:** FTH

**Candidate Answer:** FTH

**QID : 46** - In the following question, select the missing number from the given series.

**13, 17, 26, 42, 67, ?**

निम्नलिखित प्रश्न में दिए गए विकल्पों में से लुप्त अंक ज्ञात कीजिए।

**13, 17, 26, 42, 67, ?**

**Options:**

- 1) 103
- 2) 91
- 3) 109
- 4) 111

**Correct Answer:** 103

**Candidate Answer:** 103

**QID : 47** - In the following question, four groups of three numbers are given. In each group the second and third number are related to the first number by a Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

नीचे दिए गए प्रश्न में, तीन संख्याओं के चार समूह दिए गए हैं। प्रत्येक समूह में दूसरी तथा तीसरी संख्या पहली संख्या से किसी एक तर्क/नियम से सम्बंधित है। तीन उसी एक तर्क/नियम के आधार पर समान हैं। दिए गए विकल्पों में से भिन्न को चुनिए।

**Options:**

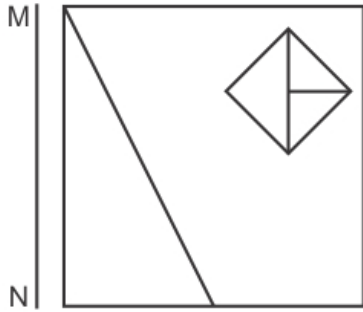
- 1) (8, 24, 16)
- 2) (3, 9, 6)
- 3) (14, 42, 28)
- 4) (9, 36, 18)

**Correct Answer:** (9, 36, 18)

**Candidate Answer:** (9, 36, 18)

If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?

यदि एक दर्पण को MN रेखा पर रखा जाए तो दी गयी उत्तर आकृतियों में से कौन-सी आकृति प्रश्न आकृति का सही प्रतिबिम्ब होगी?



Options:

1)



2)



3)



4)



Correct Answer:



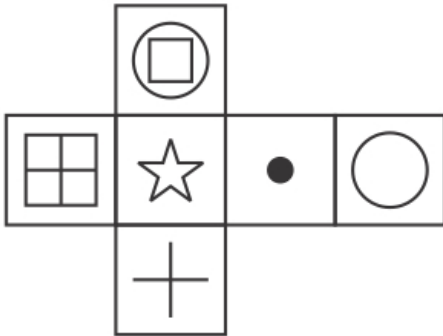
Candidate Answer:



QID : 49 -

Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?

निम्नलिखित उत्तर आकृति में से कौन सा घन दिए गए प्रश्न आकृति में से खुले घन से बनाया नहीं जा सकता?



Options:

1)



2)



3)



4)



Correct Answer:



Candidate Answer:



QID : 50 -

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, for example 'C' can be represented by 41, 34 etc and 'Y' can be represented by 67, 78 etc. Similarly, you have to identify the set for the word 'SOWN'.

एक शब्द केवल एक संख्या-समूह द्वारा दर्शाया गया है, जैसा कि विकल्पों में से किसी एक में दिया गया है। विकल्पों में दिए गए संख्या-समूह अक्षरों के दो वर्गों द्वारा दर्शाए गए हैं, जैसा कि दिए गए दो आव्यूहों में है। आव्यूह-I के स्तम्भ और पंक्ति की संख्या 0 से 4 और आव्यूह-II की 5 से 9 है। इन आव्यूहों से एक अक्षर को पहले उसकी पंक्ति और बाद में स्तम्भ संख्या द्वारा दर्शाया जा सकता है। उदाहरण के लिए 'C' को 41, 34 आदि द्वारा दर्शाया जा सकता है तथा 'Y' को 67, 78 आदि द्वारा दर्शाया जा सकता है। इसी तरह से आपको प्रश्न में दिए शब्द 'SOWN' के लिए समूह को पहचानना है।

Matrix I आव्यूह - I					
	0	1	2	3	4
0	A	I	H	E	I
1	K	L	L	J	D
2	E	L	D	D	A
3	D	C	J	C	C
4	I	C	L	H	H

Matrix II आव्यूह - II					
	5	6	7	8	9
5	R	T	V	Q	X
6	W	V	Y	O	P
7	V	N	V	Y	S
8	Z	N	X	T	T
9	S	X	N	Y	X

Options:

- 1) 21,55,40,86
- 2) 41,58,40,88
- 3) 44,66,43,89
- 4) 95,68,65,97

Correct Answer: 95,68,65,97

Candidate Answer: 95,68,65,97

QID : 51 - The difference between 44 % of a number and 33% of the same number is 286. What is the 54% of that number?

एक संख्या के 44% और उसी संख्या के 33% के बीच का अंतर 286 है। उस संख्या का 54% क्या है?

Options:

- 1) 1564
- 2) 1404
- 3) 1456
- 4) 1304

Correct Answer: 1404

Candidate Answer: 1404

**QID : 52 -**

Find the number of zeroes in  $129!$ .

129! में शून्यों की संख्या कितनी है?

**Options:**

- 1) 31
- 2) 33
- 3) 35
- 4) 37

**Correct Answer:** 31

**Candidate Answer:** 33

**QID : 53 -** The two lines  $3x-8y=16$  and  $2x+4y=6$  intersect at  $(a, b)$ . Find the value of  $a^2-4b^2$ .

दो रेखाएं  $3x-8y = 16$  और  $2x + 4y = 6$ ,  $(a, b)$  पर मिलती हैं।  $a^2-4b^2$  का मान ज्ञात करें।

**Options:**

- 1) 5
- 2) 10
- 3) 15
- 4) 20

**Correct Answer:** 15

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 54 -**

If  $a^3 + a - 1 = 0$  then find the value of  $a^6 + a^4 + a - 2$ .

यदि  $a^3 + a - 1 = 0$  है, तो  $a^6 + a^4 + a - 2$  का मान ज्ञात करें।

**Options:**

- 1) -1
- 2) 0
- 3) 1
- 4) 2

**Correct Answer:** -1

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 55 -** Which of the following conditions is correct for a right angled triangle?

समकोण त्रिभुज के लिए निम्न स्थितियों में से कौन सी सही है?

**Options:**

- 1) Sum of the two angles of a triangle is greater than the third angle  
त्रिभुज के दो कोणों का योग तीसरे कोण से बड़ा है
- 2) Sum of the two angles of a triangle is less than the third angle  
त्रिभुज के दो कोणों का योग तीसरा कोण से कम है
- 3) Sum of the two angles of a triangle is equal to the third angle  
त्रिभुज के दो कोणों का योग तीसरा कोण के बराबर है
- 4) None of these  
इनमें से कोई नहीं

**Correct Answer:** Sum of the two angles of a triangle is equal to the third angle  
त्रिभुज के दो कोणों का योग तीसरा कोण के बराबर है

**Candidate Answer:** Sum of the two angles of a triangle is greater than the third angle  
त्रिभुज के दो कोणों का योग तीसरे कोण से बड़ा है

**QID : 56 -** Which of the following combination of sides results in the formation of obtuse angled triangle?

अधिक कोण त्रिभुज के गठन में भुजाओं के निम्नलिखित संयोजनों में कौन सा संयोजन सही है?

**Options:**

- 1) 6,7,13
- 2) 5, 6, 8
- 3) 4, 5, 6
- 4) None of these  
इनमें से कोई नहीं

**Correct Answer:** 5, 6, 8

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 57** - In an exam, 87% students passed and 2093 failed. What is the total number of students appearing in the exam?

एक परीक्षा में, 87% छात्र उत्तीर्ण हुए हैं तथा 2093 छात्र अनुत्तीर्ण हुए हैं। परीक्षा में उपस्थित होने वाले छात्रों की कुल संख्या क्या है?

**Options:**

- 1) 16100
- 2) 14007
- 3) 15200
- 4) 18200

**Correct Answer:** 16100

**Candidate Answer:** 16100

**QID : 58** - The ratio of present ages of Sheetal and Divya is 6 : 5. After 8 years, their ages will be in the ratio of 22 : 19. What is the present age (in years) of Divya?

शीतल तथा दिव्या की वर्तमान आयु का अनुपात 6 : 5 है। 8 वर्ष पश्चात, उनकी आयु 22 : 19 के अनुपात में हो जाएगी। दिव्या की वर्तमान आयु (वर्षों में) क्या है?

**Options:**

- 1) 22
- 2) 38
- 3) 34
- 4) 30

**Correct Answer:** 30

**Candidate Answer:** 30

**QID : 59** - In a bucket, paint and oil are in the ratio 7 : 5. 24 litres of mixture is drawn off and 24 litres of oil is added. If the ratio of paint and oil becomes 1 : 1, then how many litres of paint was contained in the bucket initially?

एक बाल्टी में पेंट तथा तेल 7 : 5 के अनुपात में है। मिश्रण में से 24 लीटर निकाला जाता है तथा 24 लीटर तेल मिलाया जाता है। यदि पेंट तथा तेल का अनुपात 1 : 1 हो जाता है, तो प्रारंभ में बाल्टी में कितने लीटर पेंट था?

**Options:**

- 1) 49
- 2) 63
- 3) 84
- 4) 98

**Correct Answer:** 98

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 60** - The average age of Sita and Gita is 30 years. If Rita replaces Sita, then the average age will become 28 years and if Rita replaces Gita, then the average age will become 32 years. What are the respective ages (in years) of Sita, Gita and Rita?

सीता तथा गीता की औसत आयु 30 वर्ष है। यदि रीता, सीता को प्रतिस्थापित करती है, तो औसत आयु 28 वर्ष हो जाएगी तथा यदि रीता, गीता को प्रतिस्थापित करती है, तो औसत आयु 32 वर्ष हो जाएगी। सीता, गीता तथा रीता की क्रमशः आयु (वर्षों में) क्या है?

**Options:**

- 1) 40, 44, 36
- 2) 44, 40, 36
- 3) 34, 26, 30
- 4) 30, 26, 34

**Correct Answer:** 34, 26, 30

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 61** - A sum of Rs 800 becomes Rs 1000 in 2 years at simple interest. What is the per annum rate of interest (in percent)?

800 रु की एक धनराशि साधारण ब्याज पर 2 वर्षों में 1000 रु हो जाती है। वार्षिक ब्याज की दर (प्रतिशत में) क्या है?

**Options:**

- 1) 12.5
- 2) 25
- 3) 8.5
- 4) 17

**Correct Answer:** 12.5

**Candidate Answer:** 12.5

**QID : 62** - D sells a table to E at a profit of 30% and E sells it to F at a loss of 30%. What is the ratio of cost prices of D and F?

D, E को एक मेज़ 30% के लाभ पर बेचता है तथा E उसे F को 30% की हानि पर बेचता है। D तथा F के क्रय मूल्यों का अनुपात क्या है?

**Options:**

- 1) 100:91
- 2) 100:130
- 3) 100:126
- 4) 1:1

**Correct Answer:** 100:91

**Candidate Answer:** 100:91

**QID : 63** - The marked price of a calculator is Rs 750. It is sold at a discount of 22%. If the cost price of the calculator is Rs 500, then what is the profit (in Rs)?

एक कैलकुलेटर का अंकित मूल्य 750 रु है। इसे 22% की छूट पर बेचा गया है। यदि कैलकुलेटर का क्रय मूल्य 500 रु है, तो लाभ (रु में) क्या है?

**Options:**

- 1) 85
- 2) 105
- 3) 95

4) 115

**Correct Answer:** 85

**Candidate Answer:** 85

**QID : 64** -

If  $\sqrt{3} = 1.732$ , then what is the value of

$$\left( \sqrt{3} - \frac{10}{\sqrt{3}} + \sqrt{27} \right)?$$

यदि  $\sqrt{3} = 1.732$  है, तो  $\left( \sqrt{3} - \frac{10}{\sqrt{3}} + \sqrt{27} \right)$

का मान क्या है?

**Options:**

- 1) 1.154
- 2) 1.577
- 3) 1.464

4) 2.358

**Correct Answer:** 1.154

**Candidate Answer:** 1.154

**QID : 65** - P, Q and R alone can complete a work in 12, 15 and 20 days respectively. In how many days will they together complete the same work?

P, Q तथा R अकेले एक कार्य को क्रमशः 12, 15 तथा 20 दिन में पूरा कर सकते हैं। वे साथ मिलकर कार्य को कितने दिन में पूरा करेंगे?

**Options:**

- 1) 4
- 2) 5
- 3) 6

4) 3.5

**Correct Answer:** 5

**Candidate Answer:** 5

**QID : 66** - The distance between two cities X and Y is 270 km. First train starts from X at 7:00 a.m. and travels towards Y at 40 km/hr. Second train starts from Y at 8:30 a.m. and travels towards X at 30 km/hr. At what time (in a.m.) will both the trains meet?

दो शहरों X तथा Y के मध्य की दूरी 270 कि.मी. है। पहली रेलगाड़ी X से 7:00 बजे पूर्वाह्न (ए.एम.) पर चलना प्रारंभ करती है तथा Y की ओर 40 कि.मी./घंटा की गति से चलती है। दूसरी रेलगाड़ी, Y से 8:30 बजे पूर्वाह्न (ए.एम.) पर चलना प्रारंभ करती है तथा X की ओर 30 कि.मी./घंटा की गति से चलती है। दोनों रेलगाड़ियाँ किस समय (पूर्वाह्न (ए.एम.) में) मिलेंगी?

**Options:**

- 1) 10:00
- 2) 11:00
- 3) 11:30
- 4) 12:30

**Correct Answer:** 11:30

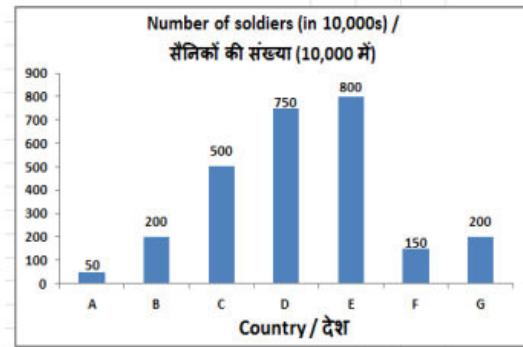
**Candidate Answer:** [ NOT ANSWERED ]



QID : 67 -

The bar graph shows the number of soldiers in the armies of different countries. Study the diagram and answer the following questions.

यह बार ग्राफ़ विभिन्न देशों की सेनाओं में सैनिकों की संख्या को दर्शाता है। इस आरेख का अध्ययन करें और निम्नलिखित प्रश्नों के उत्तर दें।



Which country has the least number of soldiers?

किस देश में सैनिकों की संख्या सबसे कम है?

**Options:**

- 1) A
- 2) D
- 3) F
- 4) B

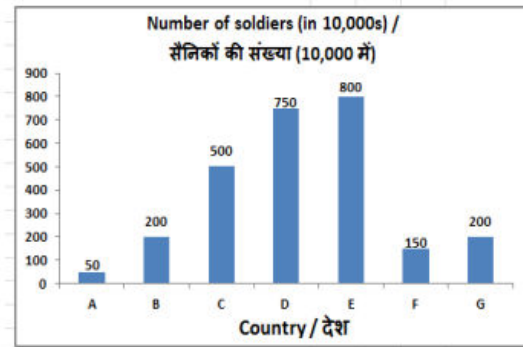
**Correct Answer:** A

**Candidate Answer:** A

QID : 68 -

The bar graph shows the number of soldiers in the armies of different countries. Study the diagram and answer the following questions.

यह बार ग्राफ़ विभिन्न देशों की सेनाओं में सैनिकों की संख्या को दर्शाता है। इस आरेख का अध्ययन करें और निम्नलिखित प्रश्नों के उत्तर दें।



What is the ratio of number of soldiers of country B to those of country D?

देश B और देश D के सैनिकों की संख्या का अनुपात क्या है?

**Options:**

1) 15 : 4

2) 8 : 15

3) 15 : 8

4) 4 : 15

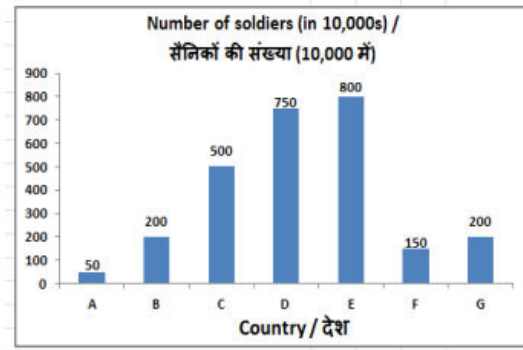
**Correct Answer:** 4 : 15

**Candidate Answer:** 4 : 15

QID : 69 -

The bar graph shows the number of soldiers in the armies of different countries. Study the diagram and answer the following questions.

यह बार ग्राफ़ विभिन्न देशों की सेनाओं में सैनिकों की संख्या को दर्शाता है। इस आरेख का अध्ययन करें और निम्नलिखित प्रश्नों के उत्तर दें।



Number of soldiers of country F is greater than those of country A by \_\_\_\_\_.

देश F के सैनिकों की संख्या देश A के सैनिकों से \_\_\_\_\_ से अधिक है।

**Options:**

- 1) 50%
- 2) 66.7%
- 3) 300%
- 4) 200%

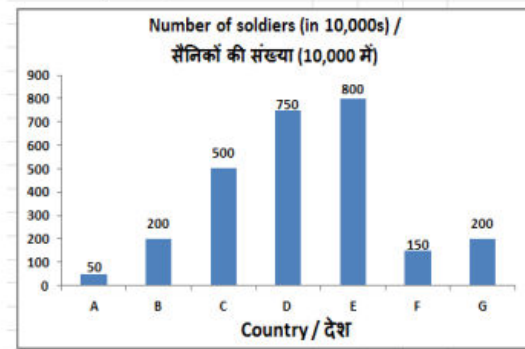
**Correct Answer:** 200%

**Candidate Answer:** 200%

QID : 70 -

The bar graph shows the number of soldiers in the armies of different countries. Study the diagram and answer the following questions.

यह बार ग्राफ विभिन्न देशों की सेनाओं में सैनिकों की संख्या को दर्शाता है। इस आरेख का अध्ययन करें और निम्नलिखित प्रश्नों के उत्तर दें।



If country D spends \$20000 per soldier annually, then how much does it spend (in \$ millions) on all its soldiers annually?

यदि देश D प्रति वर्ष प्रति सैनिक पर डॉलर 20000 खर्च करता है, तो यह हर वर्ष अपने सभी सैनिकों पर कितना खर्च करता है (डॉलर मिलियन में)?

**Options:**

- 1) 15000
- 2) 37500
- 3) 150000
- 4) 375000

**Correct Answer:** 150000

**Candidate Answer:** [ NOT ANSWERED ]

QID : 71 - The perimeter and the breadth of a rectangle are 46 cm and 8 cm respectively. Calculate the length of its diagonal (in cm).

एक आयत की परिमाप और चौड़ाई क्रमशः 46 सेंटीमीटर और 8 सेंटीमीटर है। इसके विकर्ण की लंबाई (सेंटीमीटर में) की गणना करें।

**Options:**

- 1) 17
- 2) 34
- 3) 15
- 4) 30

**Correct Answer:** 17

**Candidate Answer:** 15

QID : 72 - Calculate the area (in  $\text{cm}^2$ ) of a circle whose diameter is 7 cm.

एक वृत्त का क्षेत्रफल (वर्ग सेंटीमीटर में) की गणना करें, जिसका व्यास 7 सेंटीमीटर है।

**Options:**

- 1) 38.5
- 2) 77
- 3) 32.5
- 4) 65

**Correct Answer:** 38.5

**Candidate Answer:** 38.5

QID : 73 - Find the surface area (in  $\text{cm}^2$ ) of a sphere of diameter 28 cm.

28 सेंटीमीटर व्यास वाले एक गोले के सतह का क्षेत्रफल (वर्ग सेंटीमीटर में) ज्ञात करें।

**Options:**

1) 3422

2) 3852

3) 2464

4) 3550

**Correct Answer:** 2464

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 74** - What is the value of  $(2 + \tan 60^\circ)$  ?

$(2 + \tan 60^\circ)$  का मान क्या है?

**Options:**

1) 3

2)  $2/\sqrt{3}$

3)  $4/\sqrt{3}$

4)  $2+\sqrt{3}$

**Correct Answer:**  $2+\sqrt{3}$

**Candidate Answer:**  $2+\sqrt{3}$

**QID : 75** -  $\Delta XYZ$  is right angled at Y. If  $\sin X = 12/13$ , then what is the value of  $\operatorname{cosec} Z$  ?

$\Delta XYZ$  में Y पर समकोण है। यदि  $\sin X = 12/13$  है, तो  $\operatorname{cosec} Z$  का मान क्या है?

**Options:**

1)  $5/12$

2)  $5/13$

3)  $13/5$

4)  $13/12$

**Correct Answer:**  $13/5$

**Candidate Answer:**  $13/5$

**QID : 76** - A worldwide financial messaging network which exchange messages between banks and financial institutions is known as \_\_\_\_\_.

एक विश्वव्यापी वित्तीय संदेशन नेटवर्क जो बैंकों और वित्तीय संस्थानों के बीच संदेशों का आदान-प्रदान करता है, इसे \_\_\_\_\_ के रूप में जाना जाता है।

**Options:**

1) CHAPS

सीएचएपीएस

2) SWIFT

एसडब्ल्यूआईएफटी

3) NEFT

एनईएफटी

4) SFMS

एसफएमएस

**Correct Answer:** SWIFT

एसडब्ल्यूआईएफटी

**Candidate Answer:** SFMS

एसफएमएस

**QID : 77** - 'Marketing Support and Services Scheme' (in the Eleventh Plan) Supports artisans related to \_\_\_\_\_.

'विपणन सहायता और सेवाएं योजना' (ग्यारहवीं योजना में) \_\_\_\_\_ से संबंधित कारीगरों का समर्थन करता है।

**Options:**

1) Handicrafts

हस्तशिल्प

2) Leather goods

चमड़े के सामान

3) Gems and Jewellery

रत्न और आभूषण

4) Handlooms

हथकरघा

**Correct Answer:** Handicrafts

हस्तशिल्प

**Candidate Answer:** Leather goods

चमड़े के सामान

**QID : 78** - Himalaya has emerged from which of the geosyncline?

हिमालय की उत्पत्ति किस भूसन्नति से हुई है?

**Options:**

- 1) Tethys  
टेथिस
- 2) Shiwalik  
शिवालिक
- 3) Indo-brahma  
इंडो-ब्रह्मा
- 4) Godavari  
गोदावरी

**Correct Answer:** Tethys  
टेथिस

**Candidate Answer:** Indo-brahma  
इंडो-ब्रह्मा

**QID : 79** - Trans-himalaya rivers are: \_\_\_\_\_.

हिमालय पार की नदियाँ हैं: \_\_\_\_\_।

**Options:**

- 1) Sutlej, Indus, Ganga  
सतलज, सिंधु, गंगा
- 2) Brahmaputra, Indus, Sutlej  
ब्रह्मपुत्र, सिंधु, सतलज
- 3) Brahmaputra, Indus, Ganga  
ब्रह्मपुत्र, सिंधु, गंगा
- 4) Brahmaputra, Sutlej, Ganga  
ब्रह्मपुत्र, सतलज, गंगा

**Correct Answer:** Brahmaputra, Indus, Sutlej  
ब्रह्मपुत्र, सिंधु, सतलज

**Candidate Answer:** Brahmaputra, Sutlej, Ganga  
ब्रह्मपुत्र, सतलज, गंगा

**QID : 80** - Buddha was born in \_\_\_\_\_.

बुद्ध का जन्म \_\_\_\_\_ में हुआ था?

**Options:**

- 1) Vaishali  
वैशाली
- 2) Lumbini  
लुम्बिनी
- 3) Kapilavastu  
कपिलवस्तु
- 4) Patliputra  
पाटलिपुत्र

**Correct Answer:** Lumbini  
लुम्बिनी

**Candidate Answer:** Lumbini  
लुम्बिनी

**QID : 81** - The first important ruler to emerge from the Chola Dynasty was \_\_\_\_\_.

चोल राजवंश से उभरने वाला पहला महत्वपूर्ण शासक \_\_\_\_\_ था।

**Options:**

- 1) Vijayalaya  
विजयालय
- 2) Rajaraja Chola  
राजराज चोल
- 3) Rajendra Chola  
राजेंद्र चोल
- 4) Rajadhiraj Chola  
राजाधिराज चोल

**Correct Answer:** Rajaraja Chola  
राजराज चोल

**Candidate Answer:** Rajadhiraj Chola  
राजाधिराज चोल

**QID : 82** - V.G. Jog is famous for which musical instrument?

वी.जी. जोग किस वाद्य संगीत के लिए प्रसिद्ध हैं?

**Options:**

- 1) Sitar  
सितार
- 2) Violin  
वायलिन
- 3) Tabla  
तबला
- 4) Santoor  
संतूर

**Correct Answer:** Violin  
वायलिन

**Candidate Answer:** Violin  
वायलिन

**QID : 83** - Which company has signed an agreement with UNESCO to launch virtual reality content and 360 degree videos on Indian heritage sites?

किस कंपनी ने भारतीय विरासत स्थलों के आभासी वास्तविकता और 360 डिग्री वीडियो को शुरू करने के लिए यूनेस्को के साथ समझौते पर हस्ताक्षर किया है?

**Options:**

- 1) Nokia  
नोकिया
- 2) Sunstar  
सन स्टार
- 3) Samsung  
सैमसंग
- 4) Amazon  
अमेजन

**Correct Answer:** Samsung  
सैमसंग

**Candidate Answer:** Sunstar  
सन स्टार

**QID : 84** - In which of the following fields Yamuna Krishnan has been awarded with 9th Infosys award on January 10, 2018?

निम्नलिखित किस क्षेत्र में यमुना कृष्णन को नौवें इन्फोसिस पुरस्कार से 10 जनवरी, 2018 को सम्मानित किया गया?

**Options:**

- 1) Biological Sciences  
जीव विज्ञान
- 2) Social Science  
सामाजिक विज्ञान
- 3) Physical Sciences  
भौतिक विज्ञान
- 4) Mathematical Science  
गणित विज्ञान

**Correct Answer:** Physical Sciences  
भौतिक विज्ञान

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 85** - What is the official language of Nepal?

नेपाल की आधिकारिक भाषा क्या है?

**Options:**

- 1) Bhojpuri  
भोजपुरी
- 2) Tharu  
थारू
- 3) Hindi  
हिंदी
- 4) Nepali  
नेपाली

**Correct Answer:** Nepali  
नेपाली

**Candidate Answer:** Nepali  
नेपाली

**QID : 86** - Isotopes of an element have \_\_\_\_\_.

एक तत्व के समस्थानिकों में \_\_\_\_\_ होते/होती हैं।

**Options:**

- 1) Same physical properties  
समान भौतिक गुण
- 2) Different chemical properties  
भिन्न रासायनिक गुण
- 3) Different number of neutrons  
न्यूट्रॉनों की भिन्न-भिन्न संख्या
- 4) Different atomic number  
भिन्न परमाणु संख्या

**Correct Answer:** Different number of neutrons  
न्यूट्रॉनों की भिन्न-भिन्न संख्या

**Candidate Answer:** Same physical properties  
समान भौतिक गुण

**QID : 87** - Which of the following statements are **CORRECT**?

- I. The soap molecules form structures called micelles.
- II Soap micelles cannot scatter light.
- III. Oily dirt gets collected in the center of the micelle.

निम्नलिखित में से कौन से कथन **सही** हैं?

- I. साबुन के अणु मिसेली कहलाने वाली संरचना बनाते हैं।
- II. साबुन के मिसेल सूर्य के प्रकाश को प्रकीर्णित नहीं कर सकते।
- III. तैलीय मैल केवल मिसेली के केन्द्र में एकत्रित हो जाते हैं।

**Options:**

- 1) Both I and II  
I तथा II दोनों
- 2) Both I and III  
I तथा III दोनों
- 3) Both II and III  
II तथा III दोनों
- 4) All I, II and III  
I, II तथा III सभी

**Correct Answer:** Both I and III  
I तथा III दोनों

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 88** - Article 36 to Article 51 of Indian Constitutional mainly deals with Directive Principles of State Policy, given in \_\_\_\_\_ of Indian Constitution.

भारतीय संविधान के अनुच्छेद 36 से अनुच्छेद 51 मुख्यतः राज्य के नीति निर्देशक तत्व से संबंधित है, जो कि भारतीय संविधान के \_\_\_\_\_ में दिए हुए हैं।

**Options:**

- 1) Part II  
भाग II
- 2) Part III  
भाग III
- 3) Part IV  
भाग IV
- 4) Part V  
भाग V

**Correct Answer:** Part IV  
भाग IV

**Candidate Answer:** Part III  
भाग III

**QID : 89** - Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth comes under which category of Fundamental Rights in Indian Constitution?

धर्म, मूलवंश, जाति, लिंग अथवा जन्मस्थान के आधार पर विभेद के प्रतिषेध भारतीय संविधान के मौलिक अधिकारों के किस वर्ग में आता है?

**Options:**

- 1) Right to Freedom  
स्वतंत्रता का अधिकार
- 2) Right to Constitutional Remedies  
संवैधानिक उपचारों का अधिकार
- 3) Right to Equality  
समानता का अधिकार
- 4) Right to Freedom of Religion  
धार्मिक स्वतंत्रता का अधिकार

**Correct Answer:** Right to Equality  
समानता का अधिकार

**Candidate Answer:** Right to Equality  
समानता का अधिकार

**QID : 90** - Which type of epithelial tissue allows transportation of substances through a selective permeable surface in the lining of food vessels or lung alveoli?

किस प्रकार के एपिथीलियन ऊतक आहारनली के अस्तर अथवा फेफड़ों की कूपिका में वरणात्मक पारगम्य झिल्ली द्वारा पदार्थों के संवहन की अनुमति देते हैं?



**Options:**

- 1) Simple squamous epithelium  
सरल शल्की एपिथीलियम
- 2) Stratified squamous epithelium  
स्तरित शल्की एपिथीलियम
- 3) Ciliated columnar epithelium  
वक्ष्माभी स्तंभाकार एपिथीलियम
- 4) Cuboidal epithelium  
घनाकार एपिथीलियम

**Correct Answer:** Simple squamous epithelium  
सरल शल्की एपिथीलियम

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 91** - Bacteria, blue-green algae or cyanobacteria and mycoplasma are examples of organisms of which kingdom?

जीवाणु, नील-हरित शैवाल अथवा सायनोबैक्टीरिया तथा माइकोप्लाज्मा किस जगत के जीवों के उदाहरण हैं?

**Options:**

- 1) Plantae  
प्लांटी
- 2) Monera  
मोनेरा
- 3) Protista  
प्रोटिस्टा
- 4) Animalia  
एनिमेलिया

**Correct Answer:** Monera  
मोनेरा

**Candidate Answer:** Animalia  
एनिमेलिया

**QID : 92** - In November 2017, who launched the 'Deen Dayal SPARSH Yojana' for school children?

नवम्बर 2017 में, विद्यालय के बच्चों के लिए 'दीन दयाल स्पर्श योजना' को किसने लोकार्पित किया?

**Options:**

- 1) Jayant Sinha  
जयंत सिन्हा
- 2) Prakash Javadekar  
प्रकाश जावड़ेकर
- 3) Manoj Sinha  
मनोज सिन्हा
- 4) Arun Jaitley  
अरुण जेटली

**Correct Answer:** Manoj Sinha  
मनोज सिन्हा

**Candidate Answer:** Prakash Javadekar  
प्रकाश जावड़ेकर

**QID : 93** - Google and NASA have joined hands to identify which two new planets around Kepler 90?

गूगल तथा नासा ने केप्लर-90 के आसपास किन दो नए ग्रहों की पहचान के लिए हाथ मिलाया है?

**Options:**

- 1) Kepler 80i, kepler 90g  
केप्लर 80i, केप्लर 90g
- 2) Kepler 90g, kepler 80g  
केप्लर 90g, केप्लर 80g
- 3) Kepler 80g, kepler 90i  
केप्लर 80g, केप्लर 90i
- 4) Kepler 82i, kepler 90g  
केप्लर 82i, केप्लर 90g

**Correct Answer:** Kepler 80g, kepler 90i  
केप्लर 80g, केप्लर 90i

**Candidate Answer:** [ NOT ANSWERED ]

**QID : 94** - In April 2017, five associate banks and Bharatiya Mahila Bank were merged with the State Bank of India (SBI). What is the approximate Balance sheet size of SBI following the merger?

अप्रैल 2017 में, पाँच सहयोगी बैंक तथा भारतीय महिला बैंक, भारतीय स्टेट बैंक (एसबीआई) के साथ विलय कर दिए गए थे। विलय के पश्चात एसबीआई का बैलेंस शीट का मान लगभग क्या है?

**Options:**

- 1) Rs 41 lakh crore  
41 लाख करोड़ रु
- 2) Rs 55 lakh crore  
55 लाख करोड़ रु
- 3) Rs 65 lakh crore  
65 लाख करोड़ रु
- 4) Rs 75 lakh crore  
75 लाख करोड़ रु

**Correct Answer:** Rs 41 lakh crore  
41 लाख करोड़ रु

**Candidate Answer:** Rs 41 lakh crore  
41 लाख करोड़ रु

**QID : 95** - India was ranked at which place among emerging economies on Inclusive Development Index (IDI-2018) released by World Economic Forum (WEF)?

वर्ल्ड इकोनॉमिक फोरम (डब्ल्यूईएफ) द्वारा जारी समेकित विकास सूचकांक (आईडीआई-2018) पर उभरती हुई अर्थव्यवस्थाओं में भारत का क्या स्थान था?

**Options:**

- 1) 26<sup>th</sup>  
26 वाँ
- 2) 47<sup>th</sup>  
47 वाँ
- 3) 62<sup>nd</sup>  
62 वाँ
- 4) 81<sup>st</sup>  
81 वाँ

**Correct Answer:** 62<sup>nd</sup>  
62 वाँ

**Candidate Answer:** 62<sup>nd</sup>  
62 वाँ

**QID : 96** - Find the resistance (in mega  $\Omega$ ) of a wire of length 10 m, cross sectional area 1 cm<sup>2</sup> and made of a material of resistivity 100  $\Omega$ m.

किसी तार का प्रतिरोधक ज्ञात करें (मेगा $\Omega$  में) जिसकी लंबाई 10 मीटर, अनुप्रस्थ काट का क्षेत्रफल 1 वर्ग सेंटीमीटर है तथा यह तार जिस पदार्थ का बना है उसकी प्रतिरोधकता 100  $\Omega$ m है।

**Options:**

- 1) 1000
- 2) 20
- 3) 500
- 4) 10

**Correct Answer:** 10

**Candidate Answer:** 20

**QID : 97** - Any body kept in a fluid experiences an upward force called \_\_\_\_\_.

जब किसी वस्तु को तरल में रखा जाता है तो उस पर ऊपर की ओर बल लगता है जिसे \_\_\_\_\_ बल कहते हैं।

**Options:**

- 1) torque  
आघूर्ण
- 2) moment  
गुरुत्व
- 3) pressure  
दाब
- 4) upthrust  
उत्प्लावन

**Correct Answer:** upthrust  
उत्प्लावन

**Candidate Answer:** torque  
आघूर्ण

**QID : 98** - By volume, 21% of air is \_\_\_\_\_.

आयतन के अनुसार, वायु में 21% \_\_\_\_\_ है।

**Options:**

- 1) hydrogen  
हाइड्रोजन
- 2) oxygen  
ऑक्सीजन
- 3) nitrogen  
नाइट्रोजन
- 4) carbon dioxide  
कार्बन डाईऑक्साइड

**Correct Answer:** oxygen  
ऑक्सीजन

**Candidate Answer:** carbon dioxide  
कार्बन डाईऑक्साइड

**QID : 99** - Which of the statements given below are correct?

- A) Rafael Nadal won the Tennis 2017 Wimbledon Championships Men's Singles.
- B) Aryan Tari won the 2017 World Junior Chess Championship.
- C) Viktor Axelsen won the Men's Singles Badminton 2017 BWF World Championships.

निम्नलिखित में से कौन सा कथन सत्य है?

- A) रफ़ाएल नडाल ने टेनिस 2017 विम्बलडन चैम्पियनशिप में स्िंगल्स जीती।
- B) आर्यन तरी ने 2017 वर्ल्ड जूनियर शतरंज चैम्पियनशिप जीती।
- C) विक्टर एक्सेलसेन ने मेन्स सिंगल्स बैडमिन्टन 2017 बीडब्ल्यूएफ वर्ल्ड चैम्पियनशिप जीती।

**Options:**

- 1) Only A  
केवल A
- 2) Only B  
केवल B
- 3) Both B and C  
B और C दोनों
- 4) None of these  
इनमें से कोई नहीं

**Correct Answer:** Both B and C  
B और C दोनों

**Candidate Answer:** Only A  
केवल A

**QID : 100** - In Microsoft Word, \_\_\_\_\_ provides options to switch between Normal, Web Layout, Print Layout, Outline and Reading Views.

माइक्रोसॉफ्ट वर्ड में, \_\_\_\_\_ नोर्मल, वेब लेआउट, प्रिंट लेआउट, आउटलाइन और रीडिंग व्यू के बीच स्विच करने के लिए विकल्प उपलब्ध कराता है।

**Options:**

- 1) Standard tool bar  
स्टैण्डर्ड टूलबार
- 2) View Buttons  
व्यू बटन्स
- 3) Formatting tool bar  
फॉर्मेटिंग टूलबार
- 4) Tab stop  
टैब स्टॉप

**Correct Answer:** View Buttons  
व्यू बटन्स

**Candidate Answer:** Standard tool bar  
स्टैण्डर्ड टूलबार

# SSC CHSL 22 March 2018 Afternoon Shift

## Quant

### Instructions

For the following questions answer them individually

### Question 1

If  $\frac{196}{0.196} = \frac{19.6}{x}$  then what will be the value of  $x$ ?

- A 1.96
- B 10.96
- C 0.0196
- D 0.196

**Answer: C**

### Explanation:

$$\text{Expression: } \frac{196}{0.196} = \frac{19.6}{x}$$

$$\Rightarrow \frac{196}{196} \times 1000 = \frac{19.6}{x} \times \frac{1}{10}$$

$$\Rightarrow \frac{196}{x} = 10000$$

$$\Rightarrow x = \frac{196}{10000} = 0.0196$$

$\Rightarrow$  Ans - (C)

### Question 2

$\frac{1}{33}$  of  $\frac{1}{66}$  of  $\frac{1}{3}$  of  $\frac{1}{66}$  of 10000 of a number will be what percentage of that number ?

- A 2.32
- B 1.32
- C 0.232
- D 0.0232

**Answer: A**

### Explanation:

Let the number be  $x$

$$\Rightarrow \text{Required \%} = \frac{1}{33} \times \frac{1}{66} \times \frac{1}{3} \times \frac{1}{66} \times 10000 \times 100$$

$$= 2.318 \approx 2.32\%$$

=> Ans - (A)

### Question 3

What is value of  $(6x^2 - 5y^2)(6x^2 + 5y^2)$ , if  $x = \frac{1}{\sqrt{3}}$  and  $y = \frac{1}{\sqrt{5}}$  ?

A 2

B 3

C 4

D 5

**Answer: B**

#### Explanation:

Given :  $x = \frac{1}{\sqrt{3}}$  and  $y = \frac{1}{\sqrt{5}}$

=>  $x^2 = \frac{1}{3}$  and  $y^2 = \frac{1}{5}$

Again, squaring both terms, we get :  $x^4 = \frac{1}{9}$  and  $y^4 = \frac{1}{25}$  -----(i)

To find :  $(6x^2 - 5y^2)(6x^2 + 5y^2)$

Using,  $(a - b)(a + b) = a^2 - b^2$  and substituting values from equation (i),

$$= 36x^4 - 25y^4$$

$$= (36 \times \frac{1}{9}) - (25 \times \frac{1}{25})$$

$$= 4 - 1 = 3$$

=> Ans - (B)

### Question 4

If  $a \otimes b = (a + b)(a \times b)$ , then find the value of  $6 \otimes 5$

A 110

B 220

C 330

D 440

**Answer: C**

#### Explanation:

Given :  $a \otimes b = (a + b)(a \times b)$

To find :  $6 \otimes 5$

$$= (6 + 5)(6 \times 5)$$

$$= 11 \times 30 = 330$$

=> Ans - (C)

### Question 5

Angles of the triangle are in the ratio of 1:2:3. Choose the correct triangle for the given ratio.

- A Equilateral
- B Isosceles
- C Right angle
- D Obtuse angled

**Answer: C**

### Explanation:

Let the angles of the triangle be  $\theta$ ,  $2\theta$  and  $3\theta$

$$\text{Sum of angles of the triangle} = \theta + 2\theta + 3\theta = 180^\circ$$

$$\Rightarrow 6\theta = 180^\circ$$

$$\Rightarrow \theta = \frac{180^\circ}{6} = 30^\circ$$

$\therefore$  Angles of the triangle =  $30^\circ$ ,  $60^\circ$  and  $90^\circ$

Thus, it is a right angled triangle.

=> Ans - (C)

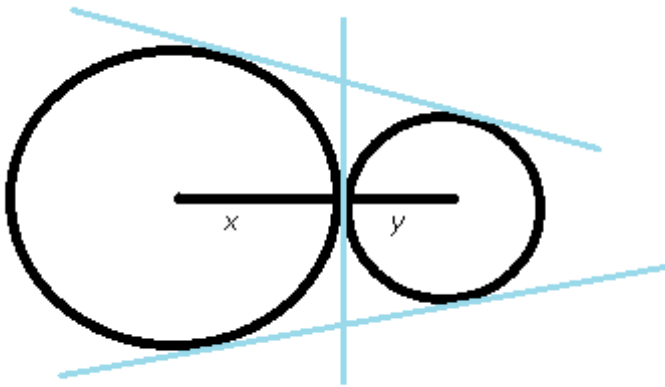
### Question 6

If the diameter of the two circles is 6 units and 10 units and a centre distance of 8 units. Calculate the number of common tangents that can be drawn to both the circle.

- A 2
- B 3
- C 4
- D Infinite

**Answer: B**

### Explanation:



Diameter of both circles is 6 units and 10 units

=> Radius of first circle =  $x = 5$  units and of second circle =  $y = 3$  units

Also, distance between their centres = 8 units

=> Both circles touch each other externally and as we can see, a total of 3 common tangents can be drawn.

=> Ans - (B)

#### Question 7

**A mixture of 240 litres of juice and water contains 15% water. How much more water (in litres) should be added to this so that the strength of water will become 25% in the new mixture?**

A 28

B 32

C 26

D 34

**Answer: B**

#### Explanation:

Total quantity of mixture = 240 litres

=> Quantity of water in it =  $\frac{15}{100} \times 240 = 36$  litres

Let  $x$  litres of water is added. According to ques,

$$\Rightarrow 36 + x = \frac{25}{100}(240 + x)$$

$$\Rightarrow 4(36 + x) = 240 + x$$

$$\Rightarrow 144 + 4x = 240 + x$$

$$\Rightarrow 4x - x = 240 - 144$$

$$\Rightarrow 3x = 96$$

$$\Rightarrow x = \frac{96}{3} = 32$$

∴ **32 litres** of water should be added to this so that the strength of water will become 25% in the new mixture.

=> Ans - (B)

### Question 8

The sum of the present ages of a father and his son is 126 years. 8 years ago their respective ages were in the ratio of 7 : 4. After 7 years what will be the ratio of ages of father and son?

A 23 : 19

B 17 : 11

C 27 : 20

D 34 : 23

**Answer: B**

### Explanation:

Sum of the present ages of a father and his son = 126 years

Sum of their ages 8 years ago =  $126 - 8(2) = 110$  years

=> Father's age at that time =  $\frac{7}{(7+4)} \times 110 = 70$  years

=> Son's age at that time =  $110 - 70 = 40$  years

Thus, present age of father =  $70 + 8 = 78$  years

=> Son's present age =  $40 + 8 = 48$  years

∴ Ratio of ages of father and son after 7 years =  $\frac{78+7}{48+7} = \frac{85}{55}$

= 17 : 11

=> Ans - (B)

### Question 9

The ratio of spirit and water in the two vessels is 5 : 1 and 3 : 7 respectively. In what ratio the liquid of both the vessels should be mixed such that a new mixture containing half spirit and half water is obtained?

A 3 : 5

B 5 : 7

C 1 : 1

D 4 : 7

**Answer: A**



**Explanation:**

$$\text{Spirit in 1 litre mixture of vessel 1} = \frac{5}{6}$$

$$\text{Spirit in 1 litre mixture of vessel 2} = \frac{3}{10}$$

$$\text{Spirit in 1 litre of the new mixture} = \frac{1}{2}$$

Let ratio of liquid from both vessels be  $x : y$

$$\Rightarrow \left(\frac{5}{6}x\right) + \left(\frac{3}{10}y\right) = \frac{1}{2}(x + y)$$

Multiply both sides by L.C.M. (6,10,2) = 30

$$\Rightarrow 25x + 9y = 15x + 15y$$

$$\Rightarrow 25x - 15x = 15y - 9y$$

$$\Rightarrow 10x = 6y$$

$$\Rightarrow \frac{x}{y} = \frac{6}{10} = \frac{3}{5}$$

$\therefore$  Liquid of both the vessels should be mixed in the ratio **3 : 5** such that a new mixture containing half spirit and half water is obtained.

$\Rightarrow$  Ans - (A)

**Question 10**

**10 Consecutive numbers are given. If the average of the two numbers given in the middle is 13.5, then what is the sum of the first 6 numbers?**

**A** 65

**B** 59

**C** 69

**D** 80

**Answer: C**

**Explanation:**

Average of two middle numbers = 13.5

$\Rightarrow$  The two middle numbers (at 5th and 6th positions) are 13 and 14.

Thus, the consecutive numbers are : 9,10,11,.....,18

$$\Rightarrow \text{Sum of first 6 numbers} = 9 + 10 + 11 + 12 + 13 + 14 = 69$$

$\Rightarrow$  Ans - (C)

### Question 11

A sum of Rs 4000 becomes Rs 7000 in 6 years at simple interest. If the rate of interest becomes double of itself, then what will be the amount (in Rs) after 6 years?

- A 8500
- B 9000
- C 8000
- D 10000

**Answer: D**

#### Explanation:

Principal sum = Rs. 4000 and time period = 6 years

=> Amount after simple interest = Rs. 7000

Thus, simple interest = Rs. (7000-4000) = Rs. 3000

Let rate of interest =  $r\%$

=> Simple interest =  $\frac{P \times R \times T}{100}$

=>  $\frac{4000 \times r \times 6}{100} = 3000$

=>  $240r = 3000$

=>  $r = \frac{3000}{240} = 12.5\%$

Now, if rate of interest becomes double of itself, =>  $r' = 12.5 \times 2 = 25\%$

∴ Amount after 6 years =  $P + \frac{P \times R \times T}{100}$

=  $4000 + \left(\frac{4000 \times 25 \times 6}{100}\right)$

=  $4000 + 6000 = Rs. 10,000$

=> Ans - (D)

### Question 12

If selling price of 39 articles is equal to the cost price of 42 articles, then what will be the profit percentage?

- A 8.33
- B 7.69
- C 9.09
- D 11.33

**Answer: B**

#### Explanation:

Let cost price of 1 article = Rs.  $x$  and selling price = Rs.  $y$

According to ques,  $\Rightarrow 39y = 42x$

$$\Rightarrow \frac{y}{x} = \frac{42}{39}$$

Let  $x = 39$  and  $y = 42$

Thus, profit % =  $\frac{(y-x)}{x} \times 100$

$$= \frac{(42-39)}{39} \times 100$$

$$= \frac{300}{39} = 7.69\%$$

$\Rightarrow$  Ans - (B)

### Question 13

The marked price of a trouser is twice of the cost price. To earn 36% profit, what should be the value of discount (in percentage)?

A 33

B 32

C 34

D 36

**Answer: B**

### Explanation:

Let cost price = Rs.  $100x$

$\Rightarrow$  Marked price =  $2 \times 100x = Rs. 200x$

Profit % = 36%

$\Rightarrow$  Selling price =  $100x + \left(\frac{36}{100} \times 100x\right) = Rs. 136x$

$\therefore$  Discount % =  $\frac{(200x-136x)}{200x} \times 100$

$$\Rightarrow \frac{64}{2} = 32\%$$

$\Rightarrow$  Ans - (B)

### Question 14

What is the simplified value of  $\frac{\sqrt{5}+\sqrt{4}}{\sqrt{5}-\sqrt{4}} + \frac{\sqrt{5}-\sqrt{4}}{\sqrt{5}+\sqrt{4}}$  ?

A 9

B 10

C 18

D 20

**Answer: C**

**Explanation:**

$$\text{Expression : } \frac{\sqrt{5}+\sqrt{4}}{\sqrt{5}-\sqrt{4}} + \frac{\sqrt{5}-\sqrt{4}}{\sqrt{5}+\sqrt{4}}$$

$$= \frac{(\sqrt{5}+\sqrt{4})^2 + (\sqrt{5}-\sqrt{4})^2}{(\sqrt{5}-\sqrt{4})(\sqrt{5}+\sqrt{4})}$$

$$= \frac{(5+4+2\sqrt{20}) + (5+4-2\sqrt{20})}{5-4}$$

$$= \frac{(9+9)}{1} = 18$$

=> Ans - (C)

**Question 15**

**P can make a table in 16 days while Q can make it in 20 days. Q started the work and did that work for 5 days. In how many days P can complete the remaining work?**

A 10

B 12

C 15

D 18

**Answer: B**

**Explanation:**

Let total number of work done = L.C.M. (16,20) = 80 units

P can make the table in 16 days, => P's efficiency =  $\frac{80}{16} = 5$  units/day

Q's efficiency =  $\frac{80}{20} = 4$  units/day

Now, Q worked alone for 5 days, => Work completed by Q =  $5 \times 4 = 20$  units

Thus, work left =  $80 - 20 = 60$  units

∴ Time taken by P to complete the remaining work =  $\frac{60}{5} = 12$  days

=> Ans - (B)

**Question 16**

**A boat covers a distance of 14 km upstream and 16 km downstream in 9 hours. It covers a distance of 12 km upstream and 40 km downstream in 11 hours. What is the speed (in km/hr) of the boat in still water?**

A 5

B 2

C 3

D 4

Answer: A

**Explanation:**

Let speed of boat in still water =  $x$  km/hr and speed of current =  $y$  km/hr

According to ques,

$$\Rightarrow \frac{16}{x+y} + \frac{14}{x-y} = 9 \text{ -----(i)}$$

$$\text{and } \frac{40}{x+y} + \frac{12}{x-y} = 11 \text{ -----(ii)}$$

Applying the operation :  $5 \times (i) - 2 \times (ii)$

$$\Rightarrow \frac{70}{x-y} - \frac{24}{x-y} = 45 - 22$$

$$\Rightarrow \frac{46}{x-y} = 23$$

$$\Rightarrow x - y = \frac{46}{23} = 2 \text{ -----(iii)}$$

Substituting it in equation (i),  $\Rightarrow \frac{16}{x+y} + \frac{14}{2} = 9$

$$\Rightarrow \frac{16}{x+y} = 9 - 7 = 2$$

$$\Rightarrow x + y = \frac{16}{2} = 8 \text{ -----(iv)}$$

Now, adding equations (iii) and (iv), we get :

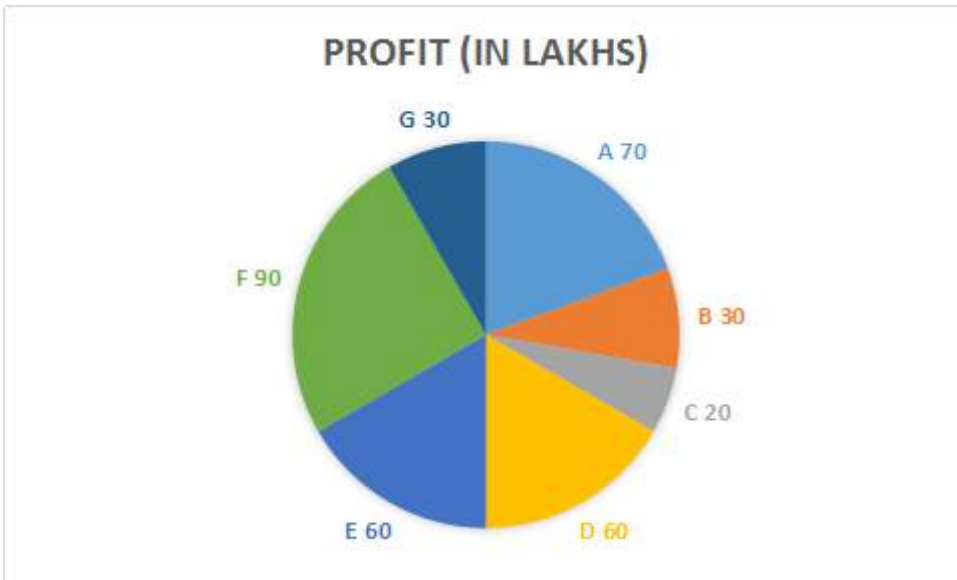
$$\Rightarrow 2x = 2 + 8 = 10$$

$$\Rightarrow x = \frac{10}{2} = 5$$

$\Rightarrow$  Ans - (A)

**Instructions**

The pie chart shows the share in profits of the year 2017 of seven partners in a business. Study the diagram and answer the following questions.



**Question 17**

Which partner got the second highest share in profits?

- A C
- B A
- C E
- D F

**Answer: B**

**Explanation:**

Partner **A** got the second highest share in profits = Rs. 70 lakhs

=> Ans - (B)

**Question 18**

What is the total Profit (in Rs lakhs) of the business of the year 2017?

- A 400
- B 300
- C 360
- D 350

**Answer: C**

**Explanation:**

Total Profit (in Rs lakhs) of the business of the year 2017

$$= 70 + 30 + 20 + 60 + 60 + 90 + 30$$

$$= 360$$

=> Ans - (C)

### Question 19

The measure of the central angle of the sector representing share in profits of partner E is \_\_\_\_\_ degrees.

A 30

B 60

C 45

D 90

**Answer: B**

#### Explanation:

Share in profits of partner E = 60

Total Profit (in Rs lakhs) of the business of the year 2017

$$= 70 + 30 + 20 + 60 + 60 + 90 + 30 = 360$$

$$\Rightarrow \text{Required central angle} = \frac{60}{360} \times 360^\circ = 60^\circ$$

=> Ans - (B)

### Question 20

If the business makes Rs 45 lakh profit which is distributed between the partners how much does C get (in Rs lakhs)?

A 3

B 2.5

C 4

D 2

**Answer: B**

#### Explanation:

Share in profits of partner C = 20

Total Profit (in Rs lakhs) of the business of the year 2017

$$= 70 + 30 + 20 + 60 + 60 + 90 + 30 = 360$$

$$\Rightarrow \text{Percentage of profit shared by C} = \frac{20}{360} \times 100 = \frac{50}{9}\%$$

Now, profit made = Rs. 45 lakhs

Thus, C will get  $\frac{50}{9}\%$  of Rs. 45 lakhs

$$= \frac{50}{9 \times 100} \times 45$$

$$= \frac{5}{2} = 2.5$$

=> Ans - (B)

### Instructions

For the following questions answer them individually

### Question 21

The length and breadth of a rectangle are 15 cm and 8 cm respectively. Calculate its perimeter (in cm).

A 46

B 92

C 35

D 70

Answer: A

### Explanation:

Length of rectangle,  $l = 15$  cm and breadth,  $b = 8$  cm

$$\text{Perimeter} = 2(l + b)$$

$$= 2 \times (15 + 8)$$

$$= 2 \times 23 = 46 \text{ cm}$$

=> Ans - (A)

### Question 22

If the area of a semi-circle is  $693\text{cm}^2$ , then find its radius (in cm).

A 42

B 27

C 21

D 54

Answer: C

### Explanation:

Let radius of the semi-circle =  $r$  cm

$$\Rightarrow \text{Area} = \frac{1}{2} \times \pi r^2 = 693$$



$$\Rightarrow \frac{1}{2} \times \frac{22}{7} \times r^2 = 693$$

$$\Rightarrow r^2 = 693 \times \frac{7}{11}$$

$$\Rightarrow r = \sqrt{63 \times 7} = 3 \times 7 = 21 \text{ cm}$$

$\Rightarrow$  Ans - (C)

### Question 23

Find the curved surface area ( $\text{in cm}^2$ ) of a right circular cone of diameter 28 cm and slant height 12 cm.

A 792

B 728

C 528

D 493

**Answer: C**

#### Explanation:

Radius of cone,  $r = 14$  cm and slant height,  $l = 12$  cm

Curved surface area of cone =  $\pi r l$

$$= \frac{22}{7} \times 14 \times 12$$

$$= 44 \times 12 = 528 \text{ cm}^2$$

$\Rightarrow$  Ans - (C)

### Question 24

$\Delta PQR$  is right angled at Q. If  $m\angle R = 30^\circ$ , then find the value of  $(\cos P - \frac{1}{3})$ .

A  $\frac{1}{6}$

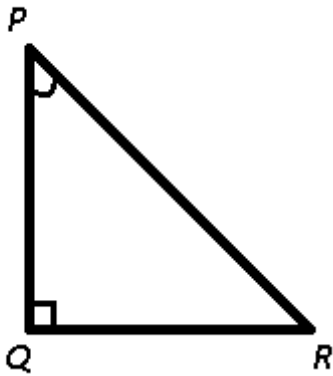
B  $\frac{2\sqrt{2}-1}{\sqrt{2}}$

C  $\frac{-1}{\sqrt{3}}$

D  $\frac{(\sqrt{3}-4)}{2\sqrt{3}}$

**Answer: A**

#### Explanation:



Sum of angles of  $\triangle PQR = \angle P + \angle Q + \angle R = 180^\circ$

$$\Rightarrow \angle P + 90^\circ + 30^\circ = 180^\circ$$

$$\Rightarrow \angle P = 180^\circ - 120^\circ = 60^\circ$$

To find:  $(\cos P - \frac{1}{3})$

$$= \cos(60^\circ) - \frac{1}{3}$$

$$= \frac{1}{2} - \frac{1}{3}$$

$$= \frac{1}{6}$$

$\Rightarrow$  Ans - (A)

#### Question 25

In  $\triangle ABC$  measure of angle B is  $90^\circ$ . If  $\cot A = 8/15$ , and  $AB = 0.8\text{cm}$ , then what is the length (in cm) of side BC?

A 1.7

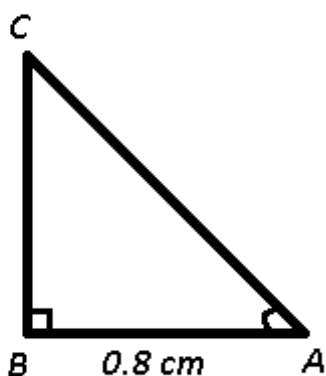
B 2

C 1.5

D 2.5

Answer: C

Explanation:



Given :  $AB = 0.8$  cm and  $\cot A = 8/15$

To find :  $BC = ?$

Solution : In right  $\triangle ABC$ ,

$$\Rightarrow \cot(A) = \frac{AB}{BC}$$

$$\Rightarrow \frac{8}{15} = \frac{0.8}{BC}$$

$$\Rightarrow BC = \frac{15}{8} \times 0.8 = 1.5 \text{ cm}$$

$\Rightarrow$  Ans - (C)

## Reasoning

### Instructions

For the following questions answer them individually

### Question 26

In the following question, select the related word pair from the given alternatives.

Circumference : Circle :: ? : ?

- A Cube : Volume
- B Square : Area
- C Sphere : Circle
- D Perimeter : Rectangle

**Answer:** D

### Explanation:

Expression = Circumference : Circle :: ? : ?

The first is the length of boundary of second figure, and sum of sides of rectangle is its perimeter.

$\Rightarrow$  Ans - (D)

### Question 27

In the following question, select the related number from the given alternatives.

13 : 23 :: 37 : ?

- A 40
- B 46

C 47

D 43

**Answer: C**

**Explanation:**

Expression =  $13 : 23 :: 37 : ?$

The numbers are of the form =  $n : n + 10$

Eg :-  $13 + 10 = 23$

Similarly,  $37 + 10 = 47$

=> Ans - (C)

**Question 28**

**In the following question, select the related letter/letters from the given alternatives.**

**ACE : KMO :: BDF : ?**

A LNO

B MPO

C LNP

D NPQ

**Answer: C**

**Explanation:**

Expression = ACE : KMO :: BDF : ?

The pattern followed is :

A	C	E
(+10)	(+10)	(+10)
K	M	O

Similarly, BDF : **LNP**

B	D	F
(+10)	(+10)	(+10)
L	N	P

=> Ans - (C)

**Question 29**

**In the following question, select the odd word pair from the given alternatives.**

A Vehicle - Car

**B** Scooter - Vehicle

**C** Truck - Vehicle

**D** Bus - Vehicle

**Answer: A**

**Explanation:**

The first is one of the types of second, Scooter, truck and bus are vehicles, hence **Vehicle - Car** is the odd one out, since its order is reversed.

=> Ans - (A)

**Question 30**

In the following question, four number pairs are given. The number on left side of (-) is related to the number on the right side of (-) with some Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

**A** 7 - 49

**B** 9 - 81

**C** 11 - 121

**D** 15 - 215

**Answer: D**

**Explanation:**

The second number is the square of the first number.

$$(7)^2 = 49$$

$$(9)^2 = 81$$

$$(11)^2 = 121$$

$$(15)^2 = 225 \neq 215$$

=> Ans - (D)

**Question 31**

In the following question, select the odd letter/letters from the given alternatives.

**A** ABDG

**B** PQSV

**C** JKMQ

**D** NOQT

**Answer: C**

**Explanation:**

(A) : A (+1 letter) = B (+2 letters) = D (+3 letters) = G

(B) : P (+1 letter) = Q (+2 letters) = S (+3 letters) = V

(C) : J (+1 letter) = K (+2 letters) = M (+4 letters) = Q

(D) : N (+1 letter) = O (+2 letters) = Q (+3 letters) = T

=> Ans - (C)

**Question 32**

**Arrange the given words in the sequence in which they occur in the dictionary.**

1. Peanut
2. Peaceful
3. Personal
4. Photograph
5. Picture

**A** 43125

**B** 21345

**C** 13245

**D** 32451

**Answer: B**

**Explanation:**

As per the order of dictionary :

= Peaceful -> Peanut -> Personal -> Photograph -> Picture

≡ 21345

=> Ans - (B)

**Question 33**

**In the following question, select the missing number from the given series.**

**9, 11, 14, 16, 19, 21, ?**

**A** 24

**B** 26

C 25

D 27

**Answer: A**

**Explanation:**

2 and 3 are alternatively added to each of the numbers.

$$9 + 2 = 11$$

$$11 + 3 = 14$$

$$14 + 2 = 16$$

$$16 + 3 = 19$$

$$19 + 2 = 21$$

$$21 + 3 = \mathbf{24}$$

=> Ans - (A)

**Question 34**

**A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.**

**AL, EP, IT, MX, ?**

A RC

B QB

C QV

D TV

**Answer: B**

**Explanation:**

Series : AL, EP, IT, MX, ?

The pattern followed in each letter of the terms is :

1st letter : A (+4 letters) = E (+4 letters) = I (+4 letters) = M (+4 letters) = Q

2nd letter : L (+4 letters) = P (+4 letters) = T (+4 letters) = X (+4 letters) = B

Thus, missing term = **QB**

=> Ans - (B)

**Question 35**

**Six books are kept one above the other. Hindi is just above Sanskrit. The English is between Mathematics and Science. Law is between Hindi and Mathematics. Which book is at the fourth position from top?**

A Mathematics

- B Law
- C Hindi
- D English

**Answer: B**

**Explanation:**

Hindi is just above Sanskrit and Law is between Hindi and Mathematics.

=> Law is just above Hindi and Mathematics is just above Law.

Also, The English is between Mathematics and Science, => There are 2 more books above Mathematics, hence Sanskrit book is at the end.

Thus, final arrangement is :

<b>Science</b>
<b>English</b>
<b>Mathematics</b>
<b>Law</b>
<b>Hindi</b>
<b>Sanskrit</b>

∴ **Law** book is at the fourth position from top.

=> Ans - (B)

**Question 36**

From the given alternatives, select the word which **CANNOT** be formed using the letters of the given word.  
**Abettor**

- A Bettor
- B Wrote
- C Rot
- D Abet

**Answer: B**

**Explanation:**

The word ABETTOR does not contain any 'W', thus the term **Wrote** cannot be formed.

=> Ans - (B)



### Question 37

In a certain code language, "TRAVEL" is written as "WVFYIQ". How is "TABLET" written in that code language?

- A EWOGYN
- B NYOGYW
- C YGWPQM
- D WEGOIY

**Answer:** D

#### Explanation:

"TRAVEL" is written as "WVFYIQ"

The pattern followed is :

T	R	A	V	E	L
(+3)	(+4)	(+5)	(+3)	(+4)	(+5)
W	V	F	Y	I	Q

Similarly, for TABLET :

T	A	B	L	E	T
(+3)	(+4)	(+5)	(+3)	(+4)	(+5)
W	E	G	O	I	Y

=> Ans - (D)

### Question 38

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

RIP, TLT, VOX, XRB, ?

- A ZTE
- B AUF
- C ZUF
- D ATE

**Answer:** C

#### Explanation:

Series : RIP, TLT, VOX, XRB, ?

The pattern followed in each letter of the terms is :

1st letter : R (+2 letters) = T (+2 letters) = V (+2 letters) = X (+2 letters) = Z

2nd letter : I (+3 letters) = L (+3 letters) = O (+3 letters) = R (+3 letters) = U

3rd letter : P (+4 letters) = T (+4 letters) = X (+4 letters) = B (+4 letters) = F

Thus, missing term = **ZUF**

=> Ans - (C)

### Question 39

In the following question, select the missing number from the given series.

**24, 26, 28, ?, 32, 34**

A 29

B 30

C 31

D 36

**Answer: B**

### Explanation:

2 is added to each of the numbers.

$$24 + 2 = 26$$

$$26 + 2 = 28$$

$$28 + 2 = \mathbf{30}$$

$$30 + 2 = 32$$

$$32 + 2 = 34$$

=> Ans - (B)

### Question 40

In the following question, four groups of three numbers are given. In each group the second and third number are related to the first number by a Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

A (4, 8, 16)

B (9, 18, 36)

C (6, 12, 24)

D (5, 10, 25)

**Answer: D**

**Explanation:**

The pattern followed is :  $(a, 2a, 4a)$

But,  $5 \times 4 = 20 \neq 25$

Thus,  $(5, 10, 25)$  is the odd one out.

=> Ans - (D)

**Question 41**

In a certain code language, '-' represents '+', '+' represents 'x', 'x' represents '÷' and '÷' represents '-'. Find out the answer to the following question.

$13 - 14 + 15 \times 70 \div 14 = ?$

A 4

B 2

C 47

D 6

**Answer: B**

**Explanation:**

Expression :  $13 - 14 + 15 \times 70 \div 14 = ?$

$\equiv 13 + 14 \times 15 \div 70 - 14$

$= 13 + \frac{15}{5} - 14$

$= 13 + 3 - 14 = 2$

=> Ans - (B)

**Question 42**

The following equation is incorrect. Which two signs should be interchanged to correct the equation?

$8 \div 2 - 50 \times 6 + 16 = 50$

A + and x

B - and +

C + and ÷

D ÷ and x

**Answer: A**

**Explanation:**

Expression :  $8 \div 2 - 50 \times 6 + 16 = 50$

(A) : + and x

$$\equiv 8 \div 2 - 50 + 6 \times 16 = 50$$

$$\text{L.H.S.} = \left(\frac{8}{2}\right) - 50 + (6 \times 16)$$

$$= 4 - 50 + 96 = 50 = \text{R.H.S.}$$

=> Ans - (A)

**Question 43**

If  $60\#40 = 10$ ,  $40\#20 = 6$  and  $60\#90 = 15$ , then find the value of  $40\#30 = ?$

A 15

B 12

C 18

D 7

**Answer: D**

**Explanation:**

Given :  $60\#40 = 10$ ,  $40\#20 = 6$  and  $60\#90 = 15$

If we replace '#' with '+', and divide the sum by 10, we get the desired result.

$$\text{Eg :- } \frac{60+40}{10} = 10$$

$$\text{and } \frac{40+20}{10} = 6 \text{ and } \frac{60+90}{10} = 15$$

$$\text{Similarly, } \frac{40+30}{10} = 7$$

=> Ans - (D)

**Question 44**

Which of the following terms follows the trend of the given list?

ZYXYXYXY, XWXYXYXY, XYZYXYXY, XYXWXYXY, XYXYZYXY, \_\_\_\_\_.

A XYXYXWXY

B XYXYXYXY

C ZYXYXYXY

D XWXYXYXY

**Answer: A**

**Explanation:**

Expression : ZYXYXYXY, XWXYXYXY, XYZYXYXY, XYXWXYXY, XYXYZYXY, \_\_\_\_\_.

The above series is a combination of 4 'XY', but in each alternative term starting from the left, X is replaced by Z and in the even number of terms, Y is replaced by W shifting one place to the right.

Thus, in the missing term (6th term), 3rd Y is replaced by W = **XYXYXWXY**

=> Ans - (A)

#### Question 45

**Two aeroplanes start from the same strip. Aeroplane P flies 65 miles North, then turns left flies 45 miles and lands. In the meanwhile aeroplane Q flies 80 miles West, then flies 40 miles South, then turns to its left, flies 35 miles and lands. Where is aeroplane Q with respect to aeroplane P?**

- A 25 miles South
- B 105 miles North
- C 25 miles North
- D 105 miles South

**Answer: B**

#### Question 46

**In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.**

**Statement I: All bins are baskets**

**Statement II: No buckets are bins**

**Conclusion I: All baskets are buckets**

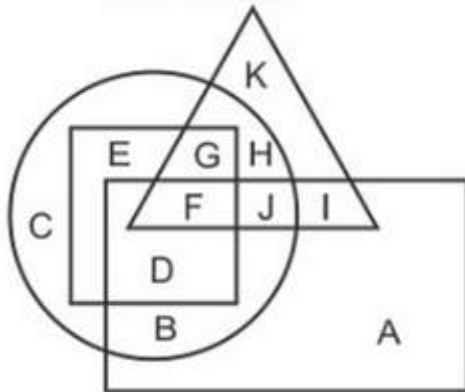
**Conclusion II: All buckets are baskets**

- A Only conclusion I follows
- B Only conclusion II follows
- C Both conclusions I and II follow
- D Neither conclusion I nor conclusion II follows

**Answer: D**

Question 47

In the following figure, rectangle represents Editors, circle represents Choreographers, triangle represents Jugglers and square represents Football players. Which set of letters represents Editors who are neither Jugglers nor Football players?

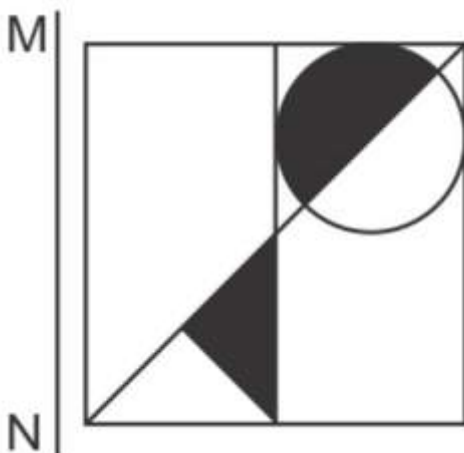


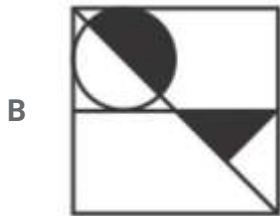
- A DF
- B FJI
- C DB
- D AB

Answer: D

Question 48

If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?  
137286

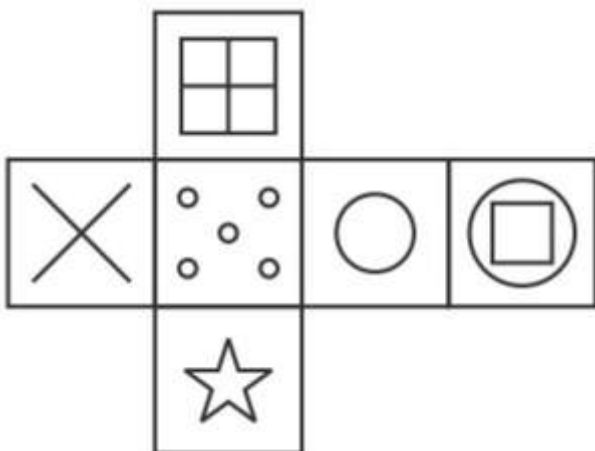


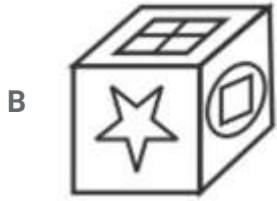
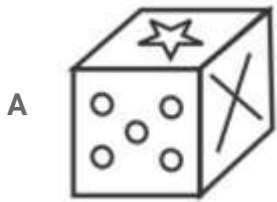


Answer: D

Question 49

Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?





Answer: B

Question 50

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, for example 'M' can be represented by 31, 43 etc and W can be represented by 78, 97 etc. Similarly, you have to identify the set for the word 'BODY'.

Matrix - I

	0	1	2	3	4
0	J	K	H	M	A
1	E	H	E	F	A
2	G	L	H	K	K
3	D	M	B	A	L
4	H	G	K	M	E

Matrix - II

	5	6	7	8	9
5	Z	T	X	S	R
6	O	O	U	Z	Q
7	T	Z	S	W	O
8	O	O	Y	S	P
9	Q	S	W	V	Q

A 41,77,14,89

B 11,67,34,67

C 13,75,42,67



D 32,65,30,87

Answer: D

**Explanation:**

(A) : 41,77,14,89 = GSAP

(B) : 11,67,34,67 = HULU

(C) : 13,75,42,67 = FTKU

(D) : 32,65,30,87 = **BODY**

=> Ans - (D)

## English

**Instructions**

For the following questions answer them individually

**Question 51**

In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

The few crowd (a) was not surprising (b)/ considering the publicity involved. (c) No error (d)

A a

B b

C c

D d

Answer: A

**Question 52**

In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

From the perspective of positive psychology, mental (a)/ health may include an individual's ability to create a balance (b)/ between life activities and efforts to achieve psychology resilience. (c)/ No error (d)

A a

**B** b

**C** c

**D** d

**Answer: C**

### **Question 53**

**In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.**

**He has not submitted his assignment \_\_\_\_\_.**

**A** now

**B** yet

**C** then

**D** until then

**Answer: B**

### **Question 54**

**In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.**

**God has created all human beings and \_\_\_\_\_ them with certain qualities.**

**A** disapproved

**B** rejected

**C** vested

**D** uncovered

**Answer: C**

### **Question 55**

**In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.**

**Consternation**

- A Dismay
- B Happiness
- C Composure
- D Assurance

**Answer: A**

#### **Question 56**

**In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.**

**Levity**

- A Gravity
- B Funniness
- C Beloved
- D Baleful

**Answer: B**

#### **Question 57**

**- In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.**

**Delectation**

- A Sorrow
- B Delight
- C Elation
- D Rapture

**Answer: A**

#### **Question 58**

**In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.**

**Analogous**

- A Similar
- B Parallel
- C Related
- D Disagreeing

**Answer: D**

#### **Question 59**

**Rearrange the parts of the sentence in correct order.**

**Most of**

**P: had urban backgrounds**

**Q: Ministers of Japan**

**R: the erstwhile Prime**

- A QPR
- B RQP
- C PQR
- D RPQ

**Answer: B**

#### **Question 60**

**A sentence has been given in Active/Passive Voice. Out of the four given alternatives, select the one which best expresses the same sentence in Passive/Active Voice.**

**They selected the red car.**

- A The red car is select.
- B The red car is chosen by them.
- C The red car by them is selected.
- D The red car was selected by them.

**Answer: D**

### Question 61

A sentence has been given in Direct/Indirect Speech. Out of the four given alternatives, select the one which best expresses the same sentence in Indirect/Direct Speech.

He replied, "I cannot do so."

- A He said he could not do so.
- B He replied that he could not do so.
- C He replied that he cannot did so.
- D He replied that he could never do so.

Answer: B

### Question 62

In the following question, a word has been written in four different ways out of which only one is correctly spelt. Select the correctly spelt word.

- A Promunciation
- B Prononciation
- C Pronunciation
- D Pronuncieation

Answer: C

### Instructions

In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

In a dynamic society everything is provided for by law and only a few things are \_\_\_\_\_ to politicians. The universe is governed \_\_\_\_\_ law. The inverse square law \_\_\_\_\_ the earth in its orbit and the law of atomic fusion keeps the sun shining \_\_\_\_\_ the whole earth. Likewise, the law should govern a nation where the judge, the police and the civil servant dispense \_\_\_\_\_ to the citizen.

### Question 63

a few things are \_\_\_\_\_ to politicians.

- A right
- B leave
- C with

**D** left

**Answer: D**

**Question 64**

The universe is governed \_\_\_\_\_ law.

**A** at

**B** to

**C** by

**D** so

**Answer: C**

**Question 65**

square law \_\_\_\_\_ the earth in its

**A** keep

**B** keeping

**C** keeps

**D** kept

**Answer: C**

**Question 66**

the sun shining \_\_\_\_\_ the whole earth.

**A** for

**B** of

**C** from

**D** form

**Answer: A**

**Question 67**

servant dispense \_\_\_\_\_ to the citizen.

- A justify
- B justly
- C justice
- D justifies

**Answer: C**

**Instructions**

For the following questions answer them individually

**Question 68**

**In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.**

**Heave a sigh of relief**

- A To suddenly feel very happy because something unpleasant has not happened or has ended.
- B Be exhausted after a gruelling physical task.
- C Get trapped in a tricky situation which you could have escaped easily.
- D Feel sad that the good times have ended.

**Answer: A**

**Question 69**

**In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.**

**A lot on your plate**

- A A greedy person will collect more food than he can eat.
- B A hungry person will devour if presented with food.
- C To have a large number of problems to deal with.
- D To be an expert in multi-tasking.

**Answer: C**

**Question 70**

**In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.**

**A person who moves stealthily about or loiters near a place with a view to committing a crime**

- A Scrupulous
- B Prowler
- C Veracious
- D Unfeigned

**Answer: B**

**Question 71**

**In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.**

**Carry out a task clumsily or incompetently**

- A Bungle
- B Adept
- C Apt
- D Adroit

**Answer: A**

**Question 72**

**In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement".**

**Many countries and States (is debating) a ban on plastic bags or taxing their use.**

- A are debating
- B are debated
- C is debated
- D no improvement



**Answer: A**

**Question 73**

In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement".

**My father (were standing) in the balcony, his face clenched in a storm of emotions.**

- A** was standing
- B** was stand
- C** was stood
- D** no improvement

**Answer: A**

**Question 74**

The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.

- So apart from having**
- A-colleagues would go out for tea at periodic intervals**
- B-the routine coffee served**
- C-from the cafeteria my**

- A** BAC
- B** BCA
- C** ACB
- D** ABC

**Answer: B**

**Question 75**

In the following question, four words are given out of which one word is correctly spelt. Select the correctly spelt word.

- A** intellijent
- B** intelligent

C intelligent

D intelijent

**Answer: B**

## General Awareness

### Instructions

For the following questions answer them individually

### Question 76

**Which of the following is necessary for a natural monopoly?**

A economies of scale

B a high proportion of the total cost as the cost of capital goods

C very small market

D All options are correct.

**Answer: D**

### Question 77

**In which area is the public sector most dominant in India?**

A Organised term lending financial instistutions

B Transport

C Commerical banking

D Steel production

**Answer: C**

### Question 78

**The deepest lake of the world is \_\_\_\_\_.**

A Aral Sea

**B** Caspian Sea

**C** Baikal

**D** Dead Sea

**Answer: C**

**Question 79**

**Which of the following is correctly matched?**

**A** Lonar - Madhya Pradesh

**B** Nakki - Gujarat

**C** Kolleru - Andhra Pradesh

**D** Pulicat - Kerala

**Answer: C**

**Question 80**

**Where is the tomb of Sher Shah located?**

**A** Sasaram

**B** Delhi

**C** Kalinger

**D** Sonargaon

**Answer: A**

**Question 81**

**Which of the following governor generals used to call himself as Bengal Tiger?**

**A** Lord Clive

**B** Warren Hastings

**C** Lord Cornwallis

**D** Lord Wellesley

**Answer: D**

**Question 82**

**Syadvada was the fundamental basis of which religion?**

- A Buddhism
- B Jainism
- C Vaishnavism
- D Shaivism

**Answer: B**

**Question 83**

**According to a latest report by UN Women and the UN Development Programme (UNDP), released in November 2017, which region has been ranked as the world's most violent region for women?**

- A Latin America and the caribbean countries
- B Sudan
- C Gulf Countries
- D South East Asian Countries

**Answer: A**

**Question 84**

**Syadvada was the fundamental basis of which religion?**

- A Stephanie Hill
- B Andrea Meza
- C Manushi Chhillar
- D Stephanie Del Valle

**Answer: C**

**Question 85**

**What is the national animal of Bangladesh?**

- A Royal Bengal Tiger
- B Python
- C Goat
- D Buffalo

**Answer: A**

#### **Question 86**

**In modern periodic table while going from top to bottom in a group \_\_\_\_\_.**

- A size of an atom increases
- B size of an atom decreases
- C ionisation energy of an atom increases
- D size and ionisation energy of an atom increases

**Answer: A**

#### **Question 87**

**Which of the following is NOT a compound?**

- A Ammonia
- B Milk
- C Sodiumchloride
- D Chalk

**Answer: B**

#### **Question 88**

**According to Article 75 of Indian Constitution, the ministers are collectively responsible to the Parliament in general and to the \_\_\_\_\_ in particular.**

- A People
- B Lok Sabha

**C** Rajya Sabha

**D** President

**Answer: B**

**Question 89**

**Which among the following comes under Concurrent List of Indian Constitution?**

**I. Marriage and Divorce**

**II. Electricity**

**III. Labour Welfare**

**A** Only I

**B** Only II

**C** Both I and II

**D** All I, II and III

**Answer: D**

**Question 90**

**Which are the special proteins in muscles that contract and relax to cause movement?**

**A** Contractile protein

**B** Receptor protein

**C** Structural protein

**D** Enzymatic protein

**Answer: A**

**Question 91**

**Plants having body that is differentiated into roots, stems and leaves and have specialized tissue for the conduction of water and other substances, fall in which group?**

**A** Bryophyta

**B** Thallophyta

**C** Pteridophyta

**D** All option are correct.

**Answer: C**

### **Question 92**

**In January 2018, 'Electoral Bonds' Scheme was launched. Under this scheme, the electoral bonds will be available at specified branches of \_\_\_\_\_.**

**A** Bank of Baroda

**B** State Bank of India

**C** Punjab National Bank

**D** Bank of India

**Answer: B**

### **Question 93**

**By using which foam the Researchers from Indian Institute of Technology - Bombay have made a low cost piezo resistive vibration sensor?**

**A** Only Polyurethane

**B** Only Polyethylene

**C** Both Polyurethane and Polyethylene

**D** Neither Poly urethane nor Polyethylene

**Answer: A**

### **Question 94**

**SEBI is evaluating whether ICO (Initial Coin Offerings) can be brought under its purview. ICO is related to \_\_\_\_\_.**

**A** Dollars

**B** Pounds

**C** Rupees

**D** Cyptocurrency

**Answer: D**

**Question 95**

What was India's rank in the Educational Attainment pillar as per the Global Gender Gap report 2017?

- A 139
- B 112
- C 141
- D 15

**Answer: B**

**Question 96**

A body is initially moving with a velocity of 10 m/s. It undergoes an acceleration of 2 m/s<sup>2</sup> for 5 seconds. Find the displacement (in m) of this body in these 5 seconds.

- A 25
- B 37.5
- C 50
- D 75

**Answer: D**

**Question 97**

1 watt is equal to 1 \_\_\_\_\_.

- A J s<sup>-1</sup>
- B J s
- C J s<sup>-2</sup>
- D J s<sup>2</sup>

**Answer: A**



**Question 98**

**Air \_\_\_\_\_ are the substances which contaminate the air.**

- A** Reactants
- B** Irritants
- C** Resistants
- D** Pollutants

**Answer: D**

**Question 99**

**Which of the statements given below are correct?**

- A) Rafael Nadal won the Tennis 2017 French Open Men's Singles.**
- B) In 2017, Valentino Rossi raced in MotoGP for Ducati.**
- C) In 2017, Marc Márquez raced in MotoGP for Honda.**

- A** Only A
- B** Only B
- C** Both A and C
- D** A, B and C

**Answer: C**

**Question 100**

**In HTML, \_\_\_\_\_ is at the bottom of the page and usually contains disclaimers, copyright information etc.**

- A** Header area
- B** Menu bar
- C** Body of the page
- D** Footer area

**Answer: D**

# SSC CHSL 22 March 2018 Evening Shift

## Quant

### Instructions

For the following questions answer them individually

### Question 1

Find the square root of 1471369.

A 1213

B 1223

C 1203

D 1233

Answer: A

### Explanation:

Among the given options, only the square of 1213 will end in 69

$$\Rightarrow (1213)^2 = 1471369$$

$$\Rightarrow \text{Square root of } 1471369 = \sqrt{1471369} = 1213$$

$\Rightarrow$  Ans - (A)

### Question 2

Calculate the total numbers of prime factors in the expression  $(9)^{11} \times (5)^7 \times (7)^5 \times (3)^2 \times (17)^2$

A 35

B 36

C 37

D 38

Answer: D

### Explanation:

$$\text{Expression : } (9)^{11} \times (5)^7 \times (7)^5 \times (3)^2 \times (17)^2$$

$$\text{Prime factorization} = (3)^{22} \times (5)^7 \times (7)^5 \times (3)^2 \times (17)^2$$

$$= (3)^{24} \times (5)^7 \times (7)^5 \times (17)^2$$

Now, there are 4 distinct factors = 3, 5, 7, 17

Total number of prime factors =  $24 + 7 + 5 + 2 = 38$

=> Ans - (D)

### Question 3

Find the y-intercept of the line joining two points (1, 3) and (3, 5).

A -2

B 0

C 2

D 4

Answer: C

### Explanation:

Equation of line joining points  $(x_1, y_1)$  and  $(x_2, y_2)$  is :  $(y - y_1) = \frac{y_2 - y_1}{x_2 - x_1}(x - x_1)$

Points (1, 3) and (3, 5)

=> Equation :  $(y - 3) = \frac{5-3}{3-1}(x - 1)$

=>  $y - 3 = x - 1$

=>  $y = x - 1 + 3$

=>  $y = x + 2$

Comparing with equation  $y = mx + c$ ,  $m$  is the slope and  $c$  is the y-intercept.

∴ y-intercept of the line joining two points (1, 3) and (3, 5) = 2

=> Ans - (C)

### Question 4

The two equations are  $4x + 4ky - 6 = 0$  and  $x + 6y - 12 = 0$ . Find the value of  $k$  for the pair of two linear equations represents the parallel lines.

A 2

B 6

C 8

D 10

Answer: B

### Explanation:

Equations :  $4x + 4ky - 6 = 0$

and  $x + 6y - 12 = 0$

Slopes of two parallel lines is equal, and slope of an equation is defined as the negative ratio of coefficient of  $x$  to the coefficient of  $y$ .

=> Slope of equation (i) = Slope of equation (ii)

$$\Rightarrow \frac{-4x}{4k} = \frac{-1}{6}$$

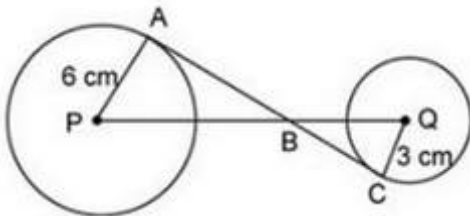
$$\Rightarrow \frac{1}{k} = \frac{1}{6}$$

$$\Rightarrow k = 6$$

=> Ans - (B)

### Question 5

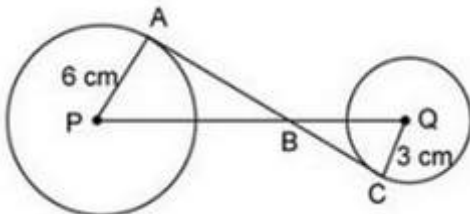
The two circles with radii 6 cm and 3 cm centered at the point P and Q respectively. A transverse common tangent AC to the both circles cuts line joining P and Q at the point B such that AB = 8 cm. Calculate the length (in cm) of PQ.



- A 5
- B 10
- C 15
- D 20

Answer: C

Explanation:



Given :  $AP = r_1 = 6$  cm ,  $CQ = r_2 = 3$  cm and  $AB = 8$  cm

To find :  $PQ = d = ?$

Solution : In right  $\triangle APB$  right angled at A,

$$\Rightarrow (PB)^2 = (AP)^2 + (AB)^2$$

$$\Rightarrow (PB)^2 = (6)^2 + (8)^2$$

$$\Rightarrow (PB)^2 = 36 + 64 = 100$$

$$\Rightarrow PB = \sqrt{100} = 10 \text{ cm} \text{ -----(i)}$$

$$\text{Similarly, in } \triangle BCQ, \Rightarrow (BQ)^2 - (BC)^2 = 9 \text{ -----(ii)}$$

Also, AC is transverse common tangent,

$$\Rightarrow (AC)^2 = d^2 - (r_1 + r_2)^2$$

$$\Rightarrow (8 + BC)^2 = (10 + BQ)^2 - (6 + 3)^2$$

$$\Rightarrow 64 + (BC)^2 + 16(BC) = 100 + (BQ)^2 + 20(BQ) - 81$$

$$\Rightarrow 16(BC) - 20(BQ) = 19 - 64 + (BQ)^2 - (BC)^2$$

Using value from equation (ii), we get :

$$\Rightarrow 16(BC) - 20(BQ) = 19 - 64 + 9$$

$$\Rightarrow 16(BC) - 20(BQ) = -36$$

$$\Rightarrow 5(BQ) - 4(BC) = 9 \text{ -----(iii)}$$

Solving equations (ii) and (iii), we get :  $BQ = 5 \text{ cm}$  and  $BC = 4 \text{ cm}$

$$\therefore PQ = 10 + 5 = 15 \text{ cm}$$

$\Rightarrow$  Ans - (C)

### Question 6

The circle of radius 4 cm and centre O has a tangent PR. If  $\angle POR = 90^\circ$  and  $OR = 7 \text{ cm}$  and  $OP = 24 \text{ cm}$ . Calculate the length (in cm) of PR.

A 20

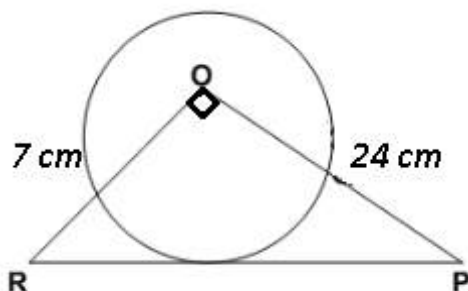
B 24

C 25

D 35

Answer: C

Explanation:



Given :  $\angle POR = 90^\circ$  and  $OR = 7 \text{ cm}$  and  $OP = 24 \text{ cm}$

To find :  $PR = ?$

Solution : In right  $\triangle OPR$ ,

$$\Rightarrow (PR)^2 = (OP)^2 + (OR)^2$$

$$\Rightarrow (PR)^2 = (24)^2 + (7)^2$$

$$\Rightarrow (PR)^2 = 576 + 49 = 625$$

$$\Rightarrow PR = \sqrt{625} = 25 \text{ cm}$$

$\Rightarrow$  Ans - (C)

### Question 7

In an election between two candidates, the winning candidate got 70% of the valid votes and won by a majority of 9000 votes. If out of total votes polled 90% votes are valid, then what is the total number of votes polled?

A 30000

B 25000

C 22500

D 27000

**Answer: B**

### Explanation:

Let total number of votes polled =  $100x$

$$\Rightarrow \text{Number of valid votes} = \frac{90}{100} \times 100x = 90x$$

% of valid votes received by winning candidate = 70%,  $\Rightarrow$  By losing candidate = 30%

$$\text{Difference between votes} = \frac{40}{100} \times 90x = 9000$$

$$\Rightarrow 36x = 9000$$

$$\Rightarrow x = \frac{9000}{36} = 250$$

$$\therefore \text{Total number of votes polled} = 100 \times 250 = 25000$$

$\Rightarrow$  Ans - (B)

### Question 8

If  $(\frac{3}{2})X = (\frac{5}{7})Y = (\frac{6}{5})Z$ , then what is X:Y:Z ?

A 105 : 50 : 84

B 24 : 25 : 32

C 15 : 21 : 25

D 20 : 42 : 25

**Answer: D**

**Explanation:**

$$\text{Let } \left(\frac{3}{2}\right)X = \left(\frac{5}{7}\right)Y = \left(\frac{6}{5}\right)Z = k$$

$$\Rightarrow X = \frac{2k}{3}, Y = \frac{7k}{5} \text{ and } Z = \frac{5k}{6}$$

$$\Rightarrow X : Y : Z = \frac{2k}{3} : \frac{7k}{5} : \frac{5k}{6}$$

Multiplying the terms by L.C.M. (3,5,6) = 30

$$\Rightarrow 30\left(\frac{2}{3} : \frac{7}{5} : \frac{5}{6}\right)$$

$$= 20 : 42 : 25$$

$\Rightarrow$  Ans - (D)

**Question 9**

7 litres mixture of milk and water contains 30% water. 3.5 litres of milk is added to this mixture. What is the percentage of water in the new mixture?

A 10

B 15

C 20

D 25

**Answer: C**

**Explanation:**

Quantity of mixture = 7 litres

$$\text{Quantity of water in it} = \frac{30}{100} \times 7 = 2.1 \text{ litres}$$

$$\Rightarrow \text{Quantity of milk} = 7 - 2.1 = 4.9 \text{ litres}$$

If 3.5 litres of milk is added to this mixture,  $\Rightarrow$  Total mixture =  $7 + 3.5 = 10.5$  litres

$$\therefore \text{Percentage of water in the new mixture} = \frac{2.1}{10.5} \times 100$$

$$= \frac{100}{5} = 20\%$$

$\Rightarrow$  Ans - (C)

**Question 10**

If the average of 31, x, 42, 39, 56, 78, 83 and 91 is 58.5, then what is the value of x?

A 26

B 34

C 58

D 48

**Answer: D**

**Explanation:**

Number of terms = 8

$$\text{Sum of terms} = 31 + x + 42 + 39 + 56 + 78 + 83 + 91 = (x + 420)$$

$$\text{Average} = \frac{x+420}{8} = 58.5$$

$$\Rightarrow x + 420 = 58.5 \times 8$$

$$\Rightarrow x = 468 - 420 = 48$$

$\Rightarrow$  Ans - (D)

**Question 11**

The difference between simple interest on a certain sum at the rate of 6% per annum for 5 years and 6 years is 25.8. What is the sum (in Rs)?

A 480

B 430

C 258

D 516

**Answer: B**

**Explanation:**

Let the sum be = Rs.  $100x$

Rate of interest = 6%

$$\Rightarrow \text{Simple interest} = \frac{P \times R \times T}{100}$$

According to ques,

$$\Rightarrow \left( \frac{100x \times 6 \times 6}{100} \right) - \left( \frac{100x \times 6 \times 5}{100} \right) = 25.8$$

$$\Rightarrow 36x - 30x = 25.8$$

$$\Rightarrow x = \frac{25.8}{6} = 4.3$$

$$\therefore \text{Sum} = 100 \times 4.3 = \text{Rs. } 430$$

$\Rightarrow$  Ans - (B)



### Question 12

The ratio of the cost price and selling price of a shirt is 32 : 37. What is the profit percentage

- A 15.625
- B 13.51
- C 17.21
- D 14.44

**Answer:** A

#### **Explanation:**

Ratio of cost price to the selling price = 32 : 37

Let Cost price =  $x = 32$  and selling price =  $y = 37$

$$\Rightarrow \text{Profit \%} = \frac{(y-x)}{x} \times 100$$

$$= \frac{(37-32)}{32} \times 100$$

$$= \frac{500}{32} = 15.625\%$$

$\Rightarrow$  Ans - (A)

### Question 13

Ashopkeeper offers the following 3 schemes. Which scheme has the lowest discount percentage (all articles have same marked price)?

- I. Two successive discounts of 10% and 10%
- II. Buy 7 get 8
- III. Buy 9 get 1 free

- A Only II
- B Only III
- C Only II and III
- D All are equal.

**Answer:** B

#### **Explanation:**

Let marked price = Rs. 100

Scheme I : After 1st discount of 10%, effective price =  $100 - \left(\frac{10}{100} \times 100\right) = \text{Rs. } 90$

Similarly, after 2nd discount, effective price = Rs. 81

$$\Rightarrow \text{Discount offered} = \frac{(100-81)}{100} \times 100 = 19\%$$

---

Scheme II : Marked price of 8 = Rs. 800 and selling price of 7 = Rs. 700

$$\Rightarrow \text{Discount \%} = \frac{(800-700)}{800} \times 100 = 12.5\%$$

Scheme III : Marked price of 10 = Rs. 1000 and selling price of 9 = Rs. 900

$$\Rightarrow \text{Discount \%} = \frac{(1000-900)}{1000} \times 100 = 10\%$$

$\therefore$  **Scheme III** has the lowest discount percentage.

$\Rightarrow$  Ans - (B)

#### Question 14

If  $x = \frac{\sqrt{2}+1}{\sqrt{2}-1}$  and  $y = \frac{\sqrt{2}-1}{\sqrt{2}+1}$ , then what is the value of  $x+y$  ?

A 6

B  $\sqrt{2}$

C 3

D  $3\sqrt{2}$

**Answer: A**

#### Explanation:

$$\text{Given : } x = \frac{\sqrt{2}+1}{\sqrt{2}-1} \text{ and } y = \frac{\sqrt{2}-1}{\sqrt{2}+1}$$

$$\text{To find : } x + y = \frac{\sqrt{2}+1}{\sqrt{2}-1} + \frac{\sqrt{2}-1}{\sqrt{2}+1}$$

$$= \frac{(\sqrt{2}+1)^2 + (\sqrt{2}-1)^2}{(\sqrt{2}-1)(\sqrt{2}+1)}$$

$$= \frac{(2+1+2\sqrt{2}) + (2+1-2\sqrt{2})}{2-1}$$

$$= \frac{(3+3)}{1} = 6$$

$\Rightarrow$  Ans - (A)

#### Question 15

X can complete  $\frac{5}{7}$  part of a work in 10 days and Y can complete  $\frac{3}{4}$  part of the same work in 9 days. In how many days will both complete  $\frac{13}{21}$  part of the total work?

A 6

B 4

C 3

D 12

Answer: B

**Explanation:**

Let total work to be done = 1 unit

X complete  $\frac{5}{7}$  work in 10 days,  $\Rightarrow$  X's efficiency =  $\frac{5}{7 \times 10} = \frac{1}{14}$  units/day

Similarly, Y's efficiency =  $\frac{3}{4 \times 9} = \frac{1}{12}$  units/day

Thus, (X+Y)'s 1 day's work =  $\frac{1}{14} + \frac{1}{12} = \frac{13}{84}$  units/day

Now,  $\frac{13}{21}$  part of total work =  $\frac{13}{21}$  units

$\Rightarrow$  Time taken =  $\left(\frac{13}{21}\right) \div \left(\frac{13}{84}\right)$

=  $\frac{13}{21} \times \frac{84}{13} = 4$  days

$\Rightarrow$  Ans - (B)

**Question 16**

A train starts from a place A at 8:00 a.m. and arrives at another place B at 1:30 p.m. on the same day. If the speed of the train is 30 km/hr, then what will be the distance (in km) covered by the train?

A 165

B 175

C 150

D 135

Answer: A

**Explanation:**

Speed of train = 30 km/hr

Time taken to reach place B from 8:00 a.m. to 1:30 p.m. = 5.5 hours

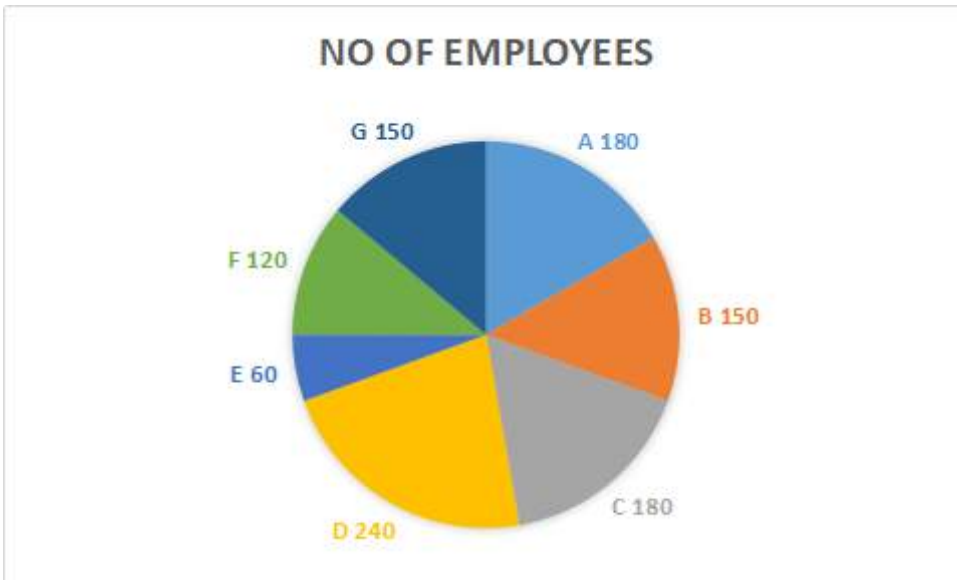
Using, distance = speed  $\times$  time

=  $30 \times 5.5 = 165$  km

$\Rightarrow$  Ans - (A)

**Instructions**

The HR department of a company prepared a report. The pie chart represents all the employees of the company and to which state they belong to. Study the diagram and answer the following questions.



**Question 17**

The least number of employees are from which state?

- A F
- B G
- C A
- D E

**Answer: D**

**Explanation:**

The least number of employees are from state **E = 60**

=> Ans - (D)

**Question 18**

What is the total number of employees of the company?

- A 1020
- B 960
- C 1080
- D 920

**Answer: C**

**Explanation:**

Total number of employees of the company

$$= 180 + 150 + 180 + 240 + 60 + 120 + 150$$

= 1080

=> Ans - (C)

### Question 19

The measure of the central angle of the sector representing state B is \_\_\_\_\_ degrees.

A 80

B 60

C 75

D 50

**Answer:** D

#### **Explanation:**

Number of employees from State B = 150

Total number of employees of the company

= 180 + 150 + 180 + 240 + 60 + 120 + 150 = 1080

=> Required central angle =  $\frac{150}{1080} \times 360^\circ$

=  $\frac{150}{3} = 50^\circ$

=> Ans - (D)

### Question 20

If the average monthly salary of the employees of this company is Rs 25,000 then what is the total of the salaries (in Rs lakhs) paid to all the employees of this company?

A 27

B 270

C 36

D 360

**Answer:** B

#### **Explanation:**

Total number of employees of the company

= 180 + 150 + 180 + 240 + 60 + 120 + 150 = 1080

Average monthly salary of the employees of this company = Rs 25,000

Total of the salaries (in Rs lakhs) paid to all the employees of this company =  $1080 \times 0.25 = 270$

=> Ans - (B)

### Instructions

For the following questions answer them individually

### Question 21

The side of an equilateral triangle is 10 cm. Find its area ( $in\text{cm}^2$ )

A  $25\sqrt{3}$

B  $36\sqrt{3}$

C  $25\sqrt{2}$

D  $36\sqrt{2}$

Answer: A

### Explanation:

Side of equilateral triangle = 10 cm

$$\text{Area of equilateral triangle} = \frac{\sqrt{3}}{4}(s)^2$$

$$= \frac{\sqrt{3}}{4} \times (10)^2$$

$$= 25\sqrt{3}\text{ cm}^2$$

=> Ans - (A)

### Question 22

If the measure of the interior angle of a regular polygon is  $108^\circ$  then how many sides does it have?

A 6

B 8

C 9

D 5

Answer: D

### Explanation:

Let number of sides of the polygon =  $n$

$$\text{Sum of interior angles of a regular polygon} = (n - 2) \times 180^\circ$$

$$\Rightarrow (n - 2) \times 180 = 108n$$

$$\Rightarrow 180n - 360 = 108n$$

$$\Rightarrow 180n - 108n = 72n = 360$$

$$\Rightarrow n = \frac{360}{72} = 5$$

$\Rightarrow$  Ans - (D)

### Question 23

The curved surface area and the diameter of a right circular cylinder are  $660\text{cm}^2$  and 21 cm respectively. Find its height (in cm).

A 9

B 10

C 12

D 8

**Answer:** B

#### Explanation:

Let height of cylinder =  $h$  cm and radius,  $r = \frac{21}{2}$  cm

$$\text{Curved surface area} = 2\pi rh = 660$$

$$\Rightarrow 2 \times \frac{22}{7} \times \frac{21}{2} \times h = 660$$

$$\Rightarrow 22 \times 3 \times h = 660$$

$$\Rightarrow h = \frac{660}{66} = 10 \text{ cm}$$

$\Rightarrow$  Ans - (B)

### Question 24

What is the value of  $(\frac{1}{\sqrt{3}} + \cos 60^\circ)$  ?

A  $\frac{(2+2\sqrt{3})}{\sqrt{3}}$

B  $\frac{(2+\sqrt{3})}{2\sqrt{3}}$

C  $\frac{7}{3}$

D  $\frac{(\sqrt{2}+1)}{\sqrt{2}}$

**Answer:** B

#### Explanation:

$$\text{Expression : } (\frac{1}{\sqrt{3}} + \cos 60^\circ)$$

$$= \frac{1}{\sqrt{3}} + \frac{1}{2}$$

$$= \frac{(2+\sqrt{3})}{2\sqrt{3}}$$

=> Ans - (B)

### Question 25

$\triangle ABC$  is right angled at B. If  $\cos A = \frac{8}{17}$ , then what is the value of  $\cot C$  ?

A  $\frac{15}{8}$

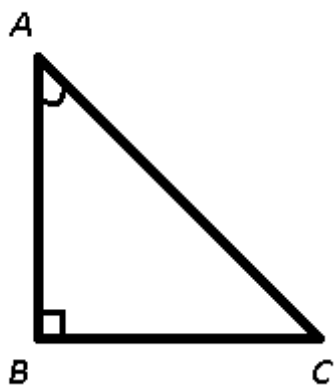
B  $\frac{15}{17}$

C  $\frac{8}{17}$

D  $\frac{17}{15}$

Answer: A

Explanation:



Given :  $\cos A = \frac{8}{17}$

Also,  $\cos A = \frac{AB}{AC} = \frac{8}{17}$

Let  $AB = 8$  cm and  $AC = 17$  cm

Thus, in  $\triangle ABC$ ,

$$\Rightarrow (BC)^2 = (AC)^2 - (AB)^2$$

$$\Rightarrow (BC)^2 = (17)^2 - (8)^2$$

$$\Rightarrow (BC)^2 = 289 - 64 = 225$$

$$\Rightarrow BC = \sqrt{225} = 15 \text{ cm}$$

To find :  $\cot C = \frac{BC}{AB}$

$$= \frac{15}{8}$$

=> Ans - (A)



# Reasoning

## Instructions

For the following questions answer them individually

### Question 26

In the following question, select the related word pair from the given alternatives.

River : Krishna :: ? : ?

- A Planet : Sun
- B Mountain : K2
- C Moon : Satellite
- D Earth : Grass

**Answer:** B

### Explanation:

Expression = River : Krishna :: ? : ?

The second comes under the category of first, i.e. Krishna is a river, similarly K2 is a mountain.

=> Ans - (B)

### Question 27

In the following question, select the related number pair from the given alternatives.

43 : 27 :: ? : ?

- A 77 : 65
- B 91 : 87
- C 65 : 49
- D 69 : 55

**Answer:** C

### Explanation:

Expression = 43 : 27 :: ? : ?

The difference between the numbers =  $43 - 27 = 16$

Similarly, only the difference between  $65 - 49 = 16$

=> Ans - (C)

### Question 28

In the following question, select the related letter pair from the given alternatives.

APX : BQY :: ? : ?

- A JRA : KTB
- B JLM : KMP
- C CSN : DTO
- D AXP : BZR

**Answer: C**

#### Explanation:

Expression = APX : BQY :: ? : ?

The pattern followed is :

A	P	X
(+1)	(+1)	(+1)
B	Q	Y

Similar pattern is observed only in = **CSN : DTO**

C	S	N
(+1)	(+1)	(+1)
D	T	O

=> Ans - (C)

### Question 29

In the following question, select the odd word pair from the given alternatives.

- A Net - Badminton
- B Boxing - Gloves
- C Players - Chess
- D Ball - Cricket

**Answer: B**

#### Explanation:

First is the requirement to play the sport in second, net is used in badminton, players in chess and ball in cricket, hence **Boxing - Gloves** is the odd one out, since its order is reversed.

=> Ans - (B)

### Question 30

In the following question, four number pairs are given. The number on left side of (-) is related to the number on the right side of (-) with some Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the

A 13 - 14

B 15 - 16

C 24 - 25

D 19 - 21

**Answer:** D

#### **Explanation:**

The difference between the numbers is 1.

$$14-13 = 16-15 = 25-24 = 1$$

$$\text{But } 21-19 = 2$$

=> Ans - (D)

### Question 31

In the following question, select the odd letter/letters from the given alternatives.

A GMS

B KQW

C JPV

D NTY

**Answer:** D

#### **Explanation:**

(A) : G (+6 letters) = M (+6 letters) = S

(B) : K (+6 letters) = Q (+6 letters) = W

(C) : J (+6 letters) = P (+6 letters) = V

(D) : N (+6 letters) = T (+5 letters) = Y

=> Ans - (D)

### Question 32

Arrange the given words in the sequence in which they occur in the dictionary.

1. Throttle
2. Tight
3. Time
4. Tier
5. Thrust

A 12435

B 54123

C 15423

D 25413

**Answer: C**

#### Explanation:

As per the order of dictionary :

= Throttle -> Thrust -> Tier -> Tight -> Time

≡ 15423

=> Ans - (C)

### Question 33

In the following question, select the missing number from the given series.

964, ?, 241, 120.5, 60.25

A 482

B 384

C 396

D 424

**Answer: A**

#### Explanation:

All the numbers are divided by 2.

$$964 \div 2 = 482$$

$$482 \div 2 = 241$$

$$241 \div 2 = 120.5$$

$$120.5 \div 2 = 60.25$$

=> Ans - (A)

#### Question 34

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

D, I, N, S, ?

A Z

B V

C W

D X

**Answer:** D

#### Explanation:

Series : D, I, N, S, ?

The pattern followed is :

D (+5 letters) = I (+5 letters) = N (+5 letters) = S (+5 letters) = X

=> Ans - (D)

#### Question 35

Ganga leaves from her college at 10:00 a.m. She starts walking towards north and covers a distance of 14 km. She turns right and walks 20 km to reach point K. She turns left and walk 16 km. She again turns left and walks 10 km. How far (in km) and in which direction is she now from point K?

A  $3\sqrt{33}$ , North-West

B  $2\sqrt{89}$ , North-West

C  $3\sqrt{33}$ , North-East

D  $2\sqrt{89}$ , North-East

**Answer:** B

#### Question 36

From the given alternatives, select the word which CANNOT be formed using the letters of the given word.  
Countermand

- A Dam
- B Term
- C Rout
- D Main

**Answer:** D

**Explanation:**

The word COUNTERMAND does not contain any 'l', thus the term **Main** cannot be formed.

=> Ans - (D)

**Question 37**

In a certain code language, "NOTES" is written as "141520519" and "MAKAR" is written as "13111118". How is "LOFTS" written in that code language?

- A 206191316
- B 121562019
- C 12150219
- D 1515121119

**Answer:** B

**Explanation:**

The letters are numbered based on their position according to the English alphabetical order. A=1 , B=2 , C=3 , D=4 and so on.

Eg :- NOTES = 14,15,20,5,19 -> 141520519

MAKAR = 13,1,11,1,18 -> 13111118

Similarly, LOFTS = 12,15,6,20,19 -> **121562019**

=> Ans - (B)

**Question 38**

In a certain code language, 'x' represents '+', '÷' represents 'x', '-' represents '÷' and '+' represents '-'. Find out the answer to the following question.

$$18 \times 12 \div 5 - 10 + 10 = ?$$

- A 14
- B 6
- C 39

D 2

Answer: A

**Explanation:**

Expression :  $18 \times 12 \div 5 - 10 + 10 = ?$

$$\equiv 18 + 12 \times 5 \div 10 - 10$$

$$= 18 + \frac{60}{10} - 10$$

$$= 8 + 6 = 14$$

=> Ans - (A)

**Question 39**

The following equation is incorrect. Which two signs should be interchanged to correct the equation?

$$10 + 14 \times 20 - 7 \div 10 = 40$$

A - and  $\div$

B  $\div$  and  $\times$

C - and +

D  $\times$  and +

Answer: A

**Explanation:**

Expression :  $10 + 14 \times 20 - 7 \div 10 = 40$

(A) : - and  $\div$

$$\equiv 10 + 14 \times 20 \div 7 - 10 = 40$$

$$\text{L.H.S.} = 10 + \left(\frac{14}{7} \times 20\right) - 10$$

$$= 10 + 40 - 10 = 40 = \text{R.H.S.}$$

=> Ans - (A)

**Question 40**

If  $12@18 = -3$ ,  $18@6 = 6$  and  $16@8 = 4$ , then find the value of  $6@10 = ?$

A -10

B 8

C 4

D -2

Answer: D

**Explanation:**

Given :  $12@18 = -3$ ,  $18@6 = 6$  and  $16@8 = 4$

If we replace '@' with '-', and divide the difference by 2, we get the desired result.

Eg :-  $\frac{12-18}{2} = -3$

and  $\frac{18-6}{2} = 6$  and  $\frac{16-8}{2} = 4$

Similarly,  $\frac{6-10}{2} = -2$

=> Ans - (D)

**Question 41**

Which of the following terms follows the trend of the given list?

XYXYXYZZ, XYXYXZZY, XYXYZZXY, XYXZZYXY, XYZZXYXY, \_\_\_\_\_.

A XZZYXYXY

B ZZXYXYXY

C XYXYXYZZ

D XYXYXZZY

Answer: A

**Explanation:**

Expression : XYXYXYZZ, XYXYXZZY, XYXYZZXY, XYXZZYXY, XYZZXYXY, \_\_\_\_\_.

The pattern followed is that in each term there are 3 combinations of 'XY' and in each term, there are 2 consecutive Z's starting from last position and shifting one place to the left.

Thus, in the missing term, the second and third terms will be ZZ = **XZZYXYXY**

=> Ans - (A)

**Question 42**

Two lady cyclists A and B start from the same point. A cycles 3.5 km West, then turns to her right and cycles 7 km. B cycles 1 km East, then turns North and cycles 7 km, then turns to her left and cycles 2 km. Where is B with respect to A now?

A 5.5 km East

B 2.5 km West



C 2.5 km East

D 5.5 km West

Answer: B

### Question 43

In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

Statement I: All napkins are towels

Statement II: All rags are napkins

Conclusion I: Some towels are rags

Conclusion II: All rags are towels

A Only conclusion I follows

B Only conclusion II follows

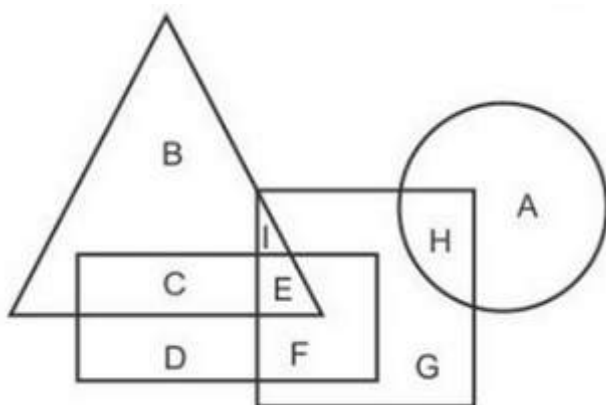
C Both conclusions I and II follow

D Neither conclusion I nor conclusion II follows

Answer: C

### Question 44

In the following figure, rectangle represents Pharmacists, circle represents Lyricists, triangle represents Cooks and square represents Fathers. Which set of letters represents Pharmacists who are either Fathers or Cooks?



A EFG

B E

C IEF

D CEF

Answer: D

#### Question 45

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

DEW, ZAS, VWO, RSK, ?

A MPH

B NOG

C LME

D PQI

Answer: B

#### Explanation:

Series : DEW, ZAS, VWO, RSK, ?

The pattern followed in each letter of the terms is :

1st letter : D (-4 letters) = Z (-4 letters) = V (-4 letters) = R (-4 letters) = N

2nd letter : E (-4 letters) = A (-4 letters) = W (-4 letters) = S (-4 letters) = O

3rd letter : W (-4 letters) = S (-4 letters) = O (-4 letters) = K (-4 letters) = G

Thus, missing term = **NOG**

=> Ans - (B)

#### Question 46

In the following question, select the missing number from the given series.

1, 3, 5, 7, ?

A 9

B 11

C 10

D 12

Answer: A

#### Explanation:

'2' is added to all the numbers.

$$1 + 2 = 3$$

$$3 + 2 = 5$$

$$5 + 2 = 7$$

$$7 + 2 = 9$$

=> Ans - (A)

#### Question 47

In the following question, four groups of three numbers are given. In each group the second and third number are related to the first number by a Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

A (31, 34, 37)

B (43, 45, 48)

C (39, 42, 45)

D (7, 10, 13)

Answer: B

#### Explanation:

The numbers are of the form :  $(x, x + 3, x + 6)$

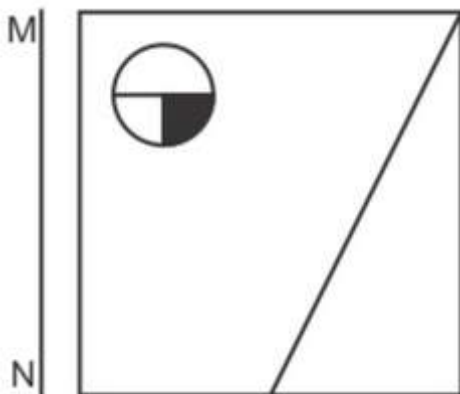
But in the third option, we have  $= 43 + 3 = 46 \neq 45$  and  $43 + 6 = 49 \neq 48$

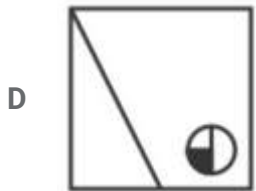
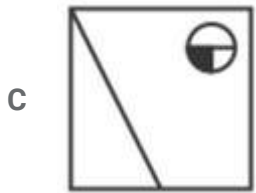
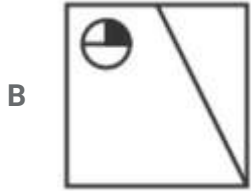
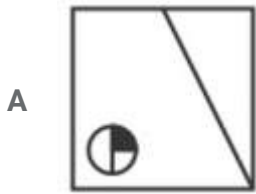
Thus, (43, 45, 48) is the odd one out.

=> Ans - (B)

#### Question 48

If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?

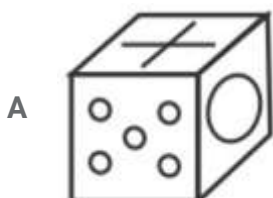
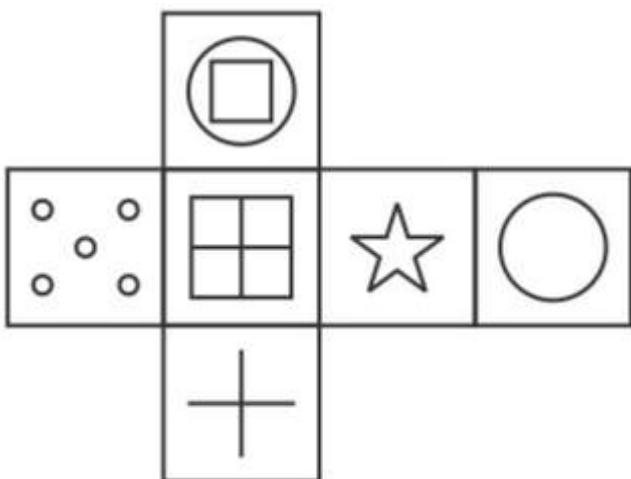


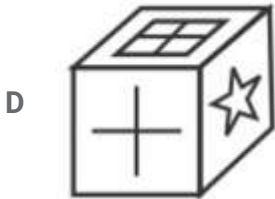
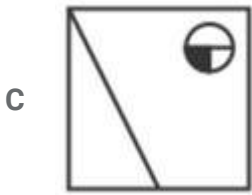
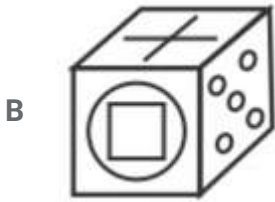


Answer: C

Question 49

Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?





Answer: B

Question 50

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix-I, are numbered from 0 to 4 and that of Matrix-II are numbered from S to 9. A letter from these matrices can be represented first by its row and next by its column, for example 'A' can be represented by 31, 43 etc and 'U' can be represented by 85, 96 etc. Similarly, you have to identify the set for the word 'SINE'.

Matrix - I

	0	1	2	3	4
0	A	I	L	L	K
1	I	F	B	A	F
2	M	F	H	E	D
3	B	A	L	G	F
4	D	G	C	A	K

Matrix - II

	5	6	7	8	9
5	S	O	T	R	Z
6	R	S	Q	N	Q
7	P	S	U	V	Y
8	U	Z	X	O	N
9	Q	U	Y	W	P

A 21,99,31,85

B 12,87,11,78

C 31,65,14,76

D 76,10,68,23

Answer: D

Explanation:

(A) : 21,99,31,85 = FPAU

(B) : 12,87,11,78 = BXFV

(C) : 31,65,14,76 = ARFS

(D) : 76,10,68,23 = **SINE**

=> Ans - (D)

## English

### Instructions

For the following questions answer them individually

### Question 51

In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

She has a (a)/ kind eyes (b)/ with a beautiful face. (c)/ No error (d)

A a

B b

C c

D d

Answer: A

### Question 52

In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

Experts have predict that (a) within ten years ethanol will emerge (b) as the primary automatic fuel in the world. (c)/ No error (d)

A a

B b

C c

D d

Answer: A

### Question 53

In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.

Sapna \_\_\_\_\_ with all of the chocolates.

- A have ran
- B has been running
- C has run off
- D was run off

Answer: C

### Question 54

In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.

We can never compare the importance \_\_\_\_\_ the money with the importance of love.

- A for
- B with
- C of
- D about

Answer: C

### Question 55

In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.

**Reprove**

- A Praise
- B Laud
- C Scold

**D** Commend

**Answer:** C

**Question 56**

**In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.**

**Jubilant**

**A** Happy

**B** Aggressive

**C** Ancient

**D** Defeat

**Answer:** A

**Question 57**

**In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.**

**Secede**

**A** Quit

**B** Resign

**C** Withdraw

**D** Unite

**Answer:** D

**Question 58**

**In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.**

**Cozen**

**A** Cheat

**B** Catch



**C** Burn

**D** Honest

**Answer: D**

**Question 59**

**Rearrange the parts of the sentence in correct order.**

**The orbital motion**

**P : of the earth**

**Q : uncertain rates**

**R : can have**

**A** QPR

**B** QRP

**C** RQP

**D** PRQ

**Answer: D**

**Question 60**

**A sentence has been given in Active/Passive Voice. Out of the four given alternatives, select the one which best expresses the same sentence in Passive/Active Voice.**

**She handed him a bag.**

**A** A bag was hand to him.

**B** A bag is handed by her.

**C** A bag handed to him by her.

**D** A bag was handed to him by her.

**Answer: C**

**Question 61**

**A sentence has been given in Direct/Indirect Speech. Out of the four given alternatives, select the one which best expresses the same sentence in Indirect/Direct Speech.**

**The Queen was deeply affected, and said to the old woman, "What can I do for you?"**

- A The Queen asked the old woman if she could do something for her.
- B The Queen was deeply affected and asked the old woman what she could do for her.
- C The Queen was deeply affected so she asked the old woman what her majesty could do for her.
- D The Queen asked the old woman if she could help her as she was deeply affected.

**Answer: B**

### Question 62

**In the following question, a word has been written in four different ways out of which only one is correctly spelt. Select the correctly spelt word.**

- A Maintenance
- B Maintainence
- C Maintanance
- D Mainteinance

**Answer: A**

### Instructions

In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

People are now either exposed to the very best of their inner circle and the world, \_\_\_\_\_ to the worst – articles that look to shock, to provoke rage and put a lens on everything that is wrong \_\_\_\_\_ the world. Imperceptibly, it goes unsaid that often \_\_\_\_\_ pieces of ‘news’ fail to actually provide a constructive solution. The effect of such a disparity \_\_\_\_\_ to the same effect as news of TV and newspapers – a feeling that what we see does not \_\_\_\_\_ our lives.

### Question 63

**and the world, \_\_\_\_\_ to the worst**

- A nor
- B or
- C and
- D but

**Answer: B**

**Question 64**

that is wrong \_\_\_\_\_ the world.

A at

B to

C with

D into

**Answer: C**

**Question 65**

unsaid that often \_\_\_\_\_ pieces of 'news'

A this

B that

C the

D these

**Answer: D**

**Question 66**

such a disparity \_\_\_\_\_ to the same effect

A leads

B lead

C leading

D leaded

**Answer: A**

**Question 67**

we see does not \_\_\_\_\_ our lives.

- A reflects
- B reflective
- C reflection
- D reflect

**Answer: D**

### **Instructions**

For the following questions answer them individually

### **Question 68**

**In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.**

#### **Come to terms with something**

- A To become friends with your opponents.
- B Accept that you are a loser even though you have potential.
- C Become unnecessarily depressed.
- D To gradually accept a sad situation.

**Answer: D**

### **Question 69**

**In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.**

#### **Under the weather**

- A Become a bit unpredictable like the weather.
- B Slightly unwell or in low spirits.
- C Feel optimistic simply because the weather is good.
- D Feel depressed because you expect bad weather.

**Answer: B**

### Question 70

In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.

**Relating to or involved in crime**

- A Chaste
- B Impeccant
- C Licit
- D Felonious

**Answer: D**

### Question 71

In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.

**A person or thing that is a perfect example of a particular quality or type**

- A Epitome
- B Abase
- C Libertine
- D Profligate

**Answer: A**

### Question 72

In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement".

I (had been) a unique case of slow learning.

- A has been
- B am been
- C had being
- D no improvement

**Answer: D**

### Question 73

In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement".

You (will being surprised) to learn that some leading philosophers have supported immoral views.

- A will be surprised
- B will be surprise
- C will be surprising
- D no improvement

Answer: A

### Question 74

The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.

The smoke rises and  
A-chokes my apartment  
B-gets trapped in the  
C-tree-tops and

- A BAC
- B ACB
- C BCA
- D ABC

Answer: C

### Question 75

In the following question, four words are given out of which one word is correctly spelt. Select the correctly spelt word.

- A constituet
- B iliterate
- C conctituet

D constitute

**Answer: D**

## General Awareness

### Instructions

For the following questions answer them individually

### Question 76

**An increase in the money supply will cause interest rates to \_\_\_\_\_.**

A rise

B fall

C remain unchanged

D No option is correct.

**Answer: B**

### Question 77

**For which one of the following items Tiruppur is well known as a huge exporter to many parts of the world?**

A Gems and Jewellery

B Leather goods

C Knitted garments

D Handicrafts

**Answer: C**

### Question 78

**What is measured with the Nephometer?**

A volume of rainfall

B Cloud volume and speed

- C Salinity of Sea
- D All options are correct.

**Answer: B**

**Question 79**

**The "Loktak" lake is located in which state of India?**

- A Meghalaya
- B Manipur
- C Mizoram
- D Tripura

**Answer: B**

**Question 80**

**During whose reign did Timur invaded India?**

- A Allauddin Khilji
- B Bahlol Lodi
- C Firoz Tughlaq
- D Nasiruddin Mahmud Shah

**Answer: D**

**Question 81**

**Which of the following movements was headed by Sitaram Raju?**

- A Kuka Movement
- B Rampa Movement
- C Pabna Agitation
- D Bardoli Satyagraha

**Answer: B**



**Question 82**

**In which city is India's oldest European church?**

- A Cochin
- B Goa
- C Chennai
- D Kolkata

**Answer: A**

**Question 83**

**Which country has been started world's first carbon capture plant in October 2017?**

- A China
- B Italy
- C Japan
- D Iceland

**Answer: D**

**Question 84**

**Who among the following is a recipient of V. Shantaram Lifetime Achievement Award at the Mumbai International Film Festival (MIFF) in year 2018?**

- A Dharmendra
- B Mahesh Bhatt
- C Shyam Benegal
- D Gulzar

**Answer: C**

**Question 85**

**The national Temple of Bangladesh is \_\_\_\_\_.**

- A Jagannath Temple, Pabna
- B Boro Kali Bari Temple, Mymensingh
- C Dhakeshwari Temple, Dhaka
- D Sugandha Shaktipeeth, Barisal

**Answer: C**

**Question 86**

**Which of the following group is NOT Dobereiner triads?**

- A Li, Na, K
- B N, P Au
- C Cl, Br, I
- D Ca, Sr, Ba

**Answer: B**

**Question 87**

**Which of the following is a metal?**

- A Sulphur
- B Nitrogen
- C Oxygen
- D No option is correct.

**Answer: D**

**Question 88**

**Which Schedule of Indian Constitution has provisions relating to disqualification of Member of Parliament on the ground of defection?**

- A Seventh Schedule
- B Eighth Schedule

**C** Ninth Schedule

**D** Tenth Schedule

**Answer: D**

**Question 89**

**Election of the President of India and its manner can be amended by \_\_\_\_\_.**

**A** Simple Majority of Parliament

**B** Special Majority of Parliament

**C** Special Majority of Parliament and consent of States

**D** No option is correct.

**Answer: C**

**Question 90**

**Yeast and mushrooms are the examples of organisms of which kingdom?**

**A** Fungi

**B** Monera

**C** Plantae

**D** Protista

**Answer: A**

**Question 91**

**In October 2017, which two ministries jointly launched 'SAATHI' (Sustainable and Accelerated Adoption of efficient Textile technologies to help small Industries) initiative?**

**A** Commerce and Textile Ministries

**B** Power and Textile ministries

**C** Finance and Textile ministries

**D** No option is correct.

**Answer: B**

**Question 92**

**What is the name of event caused by the 3200 Phaethon asteroid around 15 December of every year?**

- A** Geminid Meteor display
- B** Perseid Meteor display
- C** Draconid Meteor display
- D** Lyrid Meteor display

**Answer: A**

**Question 93**

**On January 3, 2018, RBI initiated 'PCA' against the Allahabad Bank. How many public sector banks have been covered under 'PCA'?**

- A** 18
- B** 17
- C** 11
- D** 15

**Answer: C**

**Question 94**

**The Cabinet Committee on Economic Affairs (CCEA) has approved expansion of "Beti Bachao Beti Padhao" yojana for a pan India coverage from 2017 - 2018 to \_\_\_\_.**

- A** 2018-2019
- B** 2019-2020
- C** 2020-2021
- D** 2021-2022

**Answer: B**

**Question 95**

**On January 16, 2018 the Supreme Court ruled the attacks and interference on adults opting for inter-caste marriage as 'absolutely illegal' in the petition filed by which NGO in 2010?**

- A** PRATHAM
- B** Shakti Vahini
- C** Goonj
- D** Sammaan

**Answer: B**

**Question 96**

**Due to an acceleration of  $1 \text{ m/s}^2$  the velocity of a body increases from  $5 \text{ m/s}$  to  $10 \text{ m/s}$  in a certain period. Find the displacement (in m) of the body in that period.**

- A** 125
- B** 37.5
- C** 62.5
- D** 75

**Answer: B**

**Question 97**

**As an object falls freely its \_\_\_\_\_.**

- A** kinetic energy gets converted into potential energy
- B** potential energy gets converted into kinetic energy
- C** momentum gets converted into gravitational force
- D** gravitational force gets converted into momentum

**Answer: B**

**Question 98**

**Methane contributes towards global warming so it is called a \_\_\_\_\_ gas.**

- A poisonous
- B carcinogenic
- C infectious
- D greenhouse

**Answer: D**

#### **Question 99**

**Which of the statements given below are correct?**

- A) In 2017 Pro Kabaddi League, Sandeep Narwal played for Bengaluru Bulls.
- B) In 2017, Dani Pedrosa raced in MotoGP for Honda.
- C) In 2017, Glenn Maxwell captained the IPL team Kolkata Knight Riders.

- A Only B
- B Both A and B
- C Both A and C
- D A, B and C

**Answer: A**

#### **Question 100**

**In Microsoft Excel , Ctrl+ down arrow key leads to \_\_\_\_\_ cell movement on spreadsheet.**

- A End of column
- B End of row
- C One cell Left
- D One cell right

**Answer: A**