

1. निम्नलिखित चार में से तीन एक निश्चित तरीके से एक-समान हैं और एक भिन्न है। विषम पद ज्ञात करें।

- A. शिष्टाचार
- B. व्यवधान
- C. अतिभोग
- D. परोपकार

Ans. B

Sol.

Courtesy, Indulgence and Benevolence have the same meaning which is being kind or helpful.

But **hindrance** means an obstacle which is different in compare to them.

So the odd one out option is (b)

2. यदि FLOWER को 14 के रूप में तथा DISTASTE को 18 के रूप में कूटबद्ध किया गया है, तो BUREAUCRAT को किस प्रकार कूटबद्ध किया जाएगा?

- A. 20
- B. 22
- C. 28
- D. 18

Ans. B

Sol.

The code for FLOWER - 14 and DISTASTE - 18

The pattern of code is (total no. of letters + 1) × 2

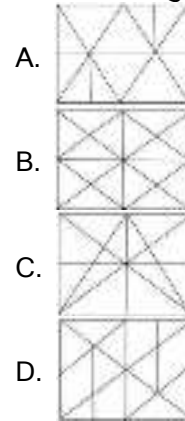
i.e. flower = (6(total letters)+1) × 2 = 14

So, the code for BUREAUCRAT = (10 + 1) × 2 = 11 × 2 = 22

3. उस विकल्प का चयन करें जिसमें दी गई आकृति अंतर्निहित है।



रोटेशन की अनुमति नहीं है



Ans. A

Sol.

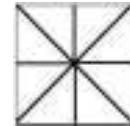


We can clearly see that the above figure is embedded only in option (a). which is mentioned below-



Hence, option (a) is the right answer.

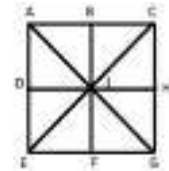
4. निम्नलिखित आकृति में कितने त्रिभुज हैं?



- A. 18
- B. 14
- C. 12
- D. 16

Ans. D

Sol.



In the above figure, the triangles formed are -> **ACG, CGE, GEA, EAC, ACI, CGI, GEI, AEI, ABI, BCI, CHI, GHI, GFI, EFI, DEI, ADI.**

Thus, the total number of triangles is **16**.

5. उस शब्द-युग्म का चयन करें जिसमें दो शब्द उसी प्रकार संबंधित हैं जैसे कि निम्नलिखित शब्द-युग्म में दो शब्द संबंधित हैं।

भ्रूभंग : अप्रसन्नता

- A. मुस्कान : परमानंद
- B. शोक : दुःख
- C. पागलपन : रोग
- D. हसना : कॉमेडी

Ans. A

Sol.

FROWN: DISPLEASURE

Frown is an expression of displeasure or disapproval. In other words, frown is a state of mind and displeasure is a feeling.

Similarly, Smile is an expression and ecstasy is a feeling.

But in other word-pair, both the words expresses feeling.

That's why, the correct ans. (a)

6. निम्नलिखित चार शब्दों में से तीन एक निश्चित तरीके से एक-समान हैं और एक शब्द भिन्न है। शेष विकल्पों में से भिन्न शब्द ज्ञात करें।

- A. बांग्लादेश: टका
- B. मलेशिया : रिंगित
- C. दक्षिण कोरिया: रुपया
- D. रूस : रूबल

Ans. C

Sol.

A. Bangladesh: Taka

B. Malaysia: Ringgit

C. South Korean: Rupiya

D. Russia: Ruble

In the above options, we can see that they are the pair of **country: its currency**

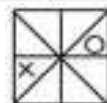
And so we know that the currency of **South Korea** is **seoul**.

Hence, option (c) is odd one.

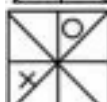
7. उस आकृति का चयन करें जो आकृति श्रृंखला में अगली आकृति होगी।



A.



B.



C.



D.



Ans. A

Sol.



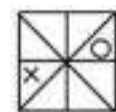
X is rotating in **clockwise direction** in each step in a following given manner-

In 1st step, it is just placed **immediate left** of the original position

In 2nd step, there is a gap of **one triangle** and at last there is a gap of **two**.

The same sequence followed by O but in **anti-clockwise direction**.

Therefore, the next figure that will come in the series is-



Hence, the correct figure is option (a)

8. निम्नलिखित चार संख्याओं में से तीन एक निश्चित तरीके से समान हैं और एक भिन्न है। शेष विकल्पों में से भिन्न संख्या ज्ञात करें।

- A. 789
- B. 123
- C. 567
- D. 457

Ans. D

Sol.

789, 123, and 567 → they all are divisible by 3.

But 457 is not divisible by 3

So the option (d) is different.

9. उस विकल्प का चयन करें जो तीसरे पद से उसी प्रकार संबंधित है जिस प्रकार दूसरा पद पहले पद से संबंधित है।

29 : 13 :: 37 : ?

A. 17

B. 14

C. 15

D. 21

Ans. A

Sol.

29 : 13 :: 37 : ?

$13 \times 2 = 26 + 3 = 29$

$17 \times 2 = 34 + 3 = 37$

Hence, the correct answer is option (a).

10. निम्नलिखित समीकरण का मान क्या होगा यदि ÷ का अर्थ जोड़, + का अर्थ घटा, - का अर्थ गुणा और × का अर्थ भाग है?

$54 \times 6 - 7 \div 8 + 2 = ?$

A. 57

B. 69

C. 63

D. 61

Ans. B

Sol.

Symbol	÷	+	-	×
Meaning	+	-	×	÷

$54 \times 6 - 7 \div 8 + 2 = ?$

After changing the symbols,

$54 \div 6 \times 7 + 8 - 2$

(Applying BODMAS rule)

$\Rightarrow 9 \times 7 + 8 - 2$

$\Rightarrow 63 + 8 - 2$

$\Rightarrow 71 - 2$

$\Rightarrow 69$

Hence, option (b) is correct.

11. एक पासे की दो घुमाई गई (रोटेटीड) स्थितियां नीचे दी गई हैं। यदि '3' सबसे नीचे है तो कौन सी संख्या सबसे ऊपर होगी?

प्रतीक	+	+	-	×
अर्थ	+	-	×	÷



A. 4

B. 6

C. 2

D. 1

Ans. C

Sol.



Moving in the clockwise direction,

Cube 1 : 2 1 4

Cube 2 : 2 5 6

Clearly, 3 will be opposite to 2.

Hence, option (c) is correct.

12. निम्नलिखित शब्दों को एक तार्किक और सार्थक क्रम में व्यवस्थित करें।

1) वेतन

2) भर्ती

3) शिक्षा

4) संवर्धन

5) विद्यालय

6) रोज़गार

A. 5, 3, 2, 6, 4, 1

B. 3, 5, 4, 2, 6, 1

C. 5, 3, 2, 6, 1, 4

D. 5, 3, 4, 1, 2, 6

Ans. C

Sol.

Correct sequence of a life career is :

5. School

3. Education

2. Recruitment

6. Employment

1. Salary
4. Promotion

Hence, correct sequence = 5, 3, 2, 6, 1, 4

13. निम्नलिखित चार अक्षर-समूहों में से तीन एक निश्चित तरीके से एक जैसे हैं और एक भिन्न है। विषम का पता लगाएं।

- A. MNPS
- B. DEGJ
- C. PQTX
- D. TUWZ

Ans. C

Sol.

The sequence follow in below letter-clusters is first two letters are come together and there is a gap of 2 letters in last two letters according to English dictionary.

MNPS, DEGJ, TUWZ

But option (c) PQTX doesn't belong to this group as there is a gap of 3 letters in last two letters.

14. वेन आरेख का चयन करें जो निम्नलिखित वर्गों के बीच के संबंध को सबसे अच्छी तरह से दिखाता है।

स्नातक, साक्षर, मेहनती

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

Ans. B

Sol.

Graduates, Literates, Hardworking.

All Graduates are Literates and some of them (graduates + literates) are

Hardworking. So the correct diagram that depicts its true meaning is option (b)



15. उस सेट का चयन करें जिसमें संख्याएँ उसी तरह से संबंधित हैं जैसे कि निम्नलिखित सेट की संख्याएँ संबंधित हैं।

(9, 15, 27)

- A. (6, 9, 18)
- B. (15, 25, 35)
- C. (21, 35, 56)
- D. (12, 20, 36)

Ans. D

Sol.

$$\begin{array}{ccccc} 9 & \rightarrow & 15 & \rightarrow & 27 \\ & +6 & & +12 & \\ & \times 2 & & & \end{array}$$

Likewise, the above pattern is followed only in option (d).

$$\begin{array}{ccccc} 12 & \rightarrow & 20 & \rightarrow & 36 \\ & +8 & & +16 & \\ & \times 2 & & & \end{array}$$

So the correct answer is (d)

16. दो कथनों के बाद तीन निष्कर्ष I, II और III दिए गए हैं, कथनों को सत्य मानते हुए, भले ही वे सामान्यतः ज्ञात तथ्यों के साथ भिन्नता रखते हों, यह निर्णय लें कि कौन सा निष्कर्ष तार्किक रूप कथनों का अनुसरण करता है।

कथन:

कुछ मोबाइल इंस्ट्रूमेंट्स हैं।

सभी इंस्ट्रूमेंट्स हैवी आइटम हैं।

निष्कर्ष:

I. कुछ मोबाइल हैवी आइटम हैं।

II. कोई मोबाइल हैवी आइटम नहीं है।

III. कुछ हैवी आइटम इंस्ट्रूमेंट्स हैं।

A. सभी निष्कर्ष अनुसरण करते हैं।

B. केवल निष्कर्ष I अनुसरण करता है

C. केवल निष्कर्ष I और III अनुसरण करते हैं

D. केवल निष्कर्ष III और या तो निष्कर्ष I या II

अनुसरण करते हैं

Ans. C

Sol.



Conclusions:-

I. Some mobiles are heavy items. - True - as some mobiles are instruments

II. No mobile is a heavy item. - False - as the above diagram clearly shows that some mobiles are heavy items as well.

III. Some heavy items are instruments. - True - As all instruments are heavy items.

Hence, Opt. (c) only conclusion I and III follows is correct.

17. निम्नलिखित चार अक्षर-समूहों में से तीन एक निश्चित तरीके से एक जैसे हैं और एक भिन्न है। विषम का चयन करें।

- A. IVHU
- B. KXJW
- C. MZLY
- D. GESO

Ans. D

Sol.

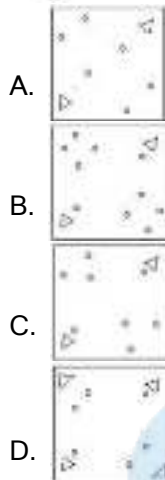
(A) IVHU (B) KXJW (C) MZLY

In the above three letter-clusters, 3rd and 1st letter comes together, so as 4th and 2nd letter according to english alphabetical series

But in GESO, the above pattern is not followed.

Hence, option (d) is different.

18. वर्गाकार कागज के एक टुकड़े को मोड़ने का क्रम (आकृति X और Y) तथा जिस तरीके से मुड़े हुए कागज को काटा गया है (आकृति Z) नीचे दर्शाए गए हैं। कागज खोले जाने पर कैसा दिखाई देगा?



Ans. B

Sol.



When the above paper (z) unfold, it appears as mentioned below :-

STEP-1

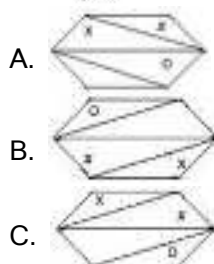
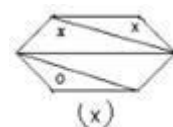


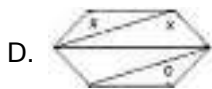
STEP-2



So, the correct figure is option (b)

19. दी गई आकृति की सही दर्पण छवि का चयन करें जब दर्पण को आकृति की दाईं ओर स्थापित किया जाता है।

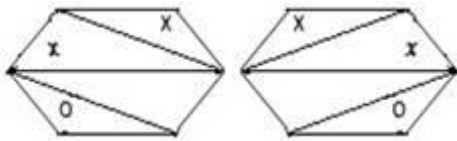




Ans. C

Sol.

In a plane mirror, a mirror image is a reflected duplication of an object that appears almost identical, but it is reversed in the direction perpendicular to the mirror surface. As an optical effect it results from reflection of substances such as a mirror or water.



Opt.(c)

Option (c) is correct.

20. एक निश्चित कूट भाषा में यदि FRIDGE को GTLHLK के रूप में लिखा जाता है, तो उसी भाषा में शब्द KETTLE को कैसे लिखा जाएगा?

- A. GLXWQK
- B. LGWXQK
- C. WQLGXK
- D. XKWQLG

Ans. B

Sol.

F	R	I	D	G	E	Similarly, K	E	T	T	L	E
+1	+2	+3	+4	+5	+6	+1	+2	+3	+4	+5	+6
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
G	T	L	H	L	K	L	G	W	X	Q	K

Hence, the correct answer is (C).

21. एक निश्चित कूट भाषा में यदि SUNDAY को DNUAYS के रूप में लिखा जाता है, तो उसी भाषा में MOTHER को कैसे लिखा जाएगा?

- A. HOTERM
- B. THEORM
- C. HTOERM
- D. HTEOMR

Ans. C

Sol.

1. **SUNDAY** code is **DNUAYS**.

2nd, 3rd and 4th letter written in reverse order.

5th and 6th letter written as it is followed by the first letter

Similarly, the code for **MOTHER** will be **HTOERM**.

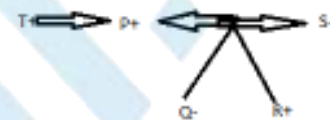
Option (C) is correct.

22. P, Q का पिता है और R, S का पुत्र है। T, P का भाई है। Q, R की बहन है। S, T से किस प्रकार संबंधित है?

- A. भाई
- B. पुत्री
- C. सिस्टर-इन-लॉ
- D. ब्रदर-इन-लॉ

Ans. C

Sol.



Hence, from the above diagram it is clear that **S** is sister-in-law of **T**.

So, the correct option is (c)

23. अक्षरों के उस संयोजन का चयन करें जो दी गई अक्षर श्रृंखला के अंतराल में क्रमिक रूप से रखे जाने पर श्रृंखला को पूरा करेंगे।

cb_db_cba_bc_bad_c

- A. cabdc
- B. acdcb
- C. acbcd
- D. dcbcb

Ans. B

Sol. cb_db_cba_bc_bad_c

The pattern follow in the above equation is- cba and dbc respectively.

I.e. cbadbccbadbccbadbc

24. उस विकल्प का चयन करें जो तीसरे अक्षर-समूह से उसी प्रकार से संबंधित है जिस प्रकार से दूसरा अक्षर-समूह पहले अक्षर-समूह से संबंधित है।

DKFM : FIHK : : BLOP : ?

- A. DNER
- B. DJIN
- C. CKHO
- D. ZNEN

Ans. B

Sol. DKFM: FIHK: BLOP:?

D ___+2___F, K___-2___I,

F___+2___H, M___-2___K

Similarly,

B ___+2___D, L___-2___J,

O___+2___Q, P___-2___N

So, the correct option is (b) DJQN

25. निम्नलिखित समीकरण में किन दो चिन्हों को परस्पर बदला जाना चाहिए ताकि निम्नलिखित समीकरण सही हो सके?

$$15 - 9 \div 6 \times 10 + 5 = 25$$

- A. + और ÷
- B. × और -
- C. + और -
- D. × और ÷

Ans. C

Sol. $15 - 9 \div 6 \times 10 + 5 = 25$

According to the question,

If we interchange the + and - sign the above equation become correct.

$$15 + 9 \div 6 \times 10 - 5$$

$$\Rightarrow 15 + 15 - 5$$

$$\Rightarrow 30 - 5 \Rightarrow 25$$

Hence, option (c) is the correct answer.

26. निम्नलिखित में से कौन एक संक्रामक रोग है?

- A. मधुमेह
- B. दमा
- C. खसरा
- D. स्कर्वी

Ans. C

Sol.

• **Measles is a highly communicable disease.**

- It is a serious childhood disease caused by a virus.

- It is easily spread by coughing, sneezing or even talking to an infected person. Measles begins with a fever, runny nose and cough.

27. भारत में राज्य उच्च न्यायालय की पहली महिला मुख्य न्यायाधीश कौन थी?

- A. लीला सेठ
- B. रुमा पाल
- C. सैयदा ताहिरा
- D. फातिमा बीबी

Ans. A

Sol.

- **Leila Seth was the first woman judge** on the Delhi High Court.

- She became the first woman to become Chief Justice of a state High Court on 5 August 1991.

28. बागलीहार बांध किस नदी पर बनाया गया है?

- A. सिंधु
- B. चिनाब
- C. सतलुज
- D. रावी

Ans. B

Sol.

- **Baglihar Dam is built on Chenab River** in the Doda district of Jammu & Kashmir.

- The hydro power project 'Baglihar Hydroelectric Power Project', is a run-of-the-river power project on the Chenab River.

- This project was conceived in 1992, approved in 1996 and construction began in 1999.

29. मई 2019 तक, अभिनेता राज बब्बर किस राजनीतिक पार्टी से हैं?

- A. बहुजन समाज पार्टी
- B. भारतीय राष्ट्रीय कांग्रेस

C. भारतीय जनता पार्टी

D. समाजवादी

Ans. B

Sol.

- Raj Babbar is a Hindi and Punjabi film actor and politician belonging to **Indian National Congress**.

- He has been a three-time member of the [Lok Sabha](#) and a two-time member of the [Upper House of the Indian Parliament](#). He is the President of [Uttar Pradesh Congress Committee](#).

30. 2019 में, कजाकिस्तान ने अपनी राजधानी अस्ताना का नाम बदलकर _____ कर दिया।

A. नूर्सुल्ता

B. नूरनजर

C. नजरबायेव

D. नूरबायेव

Ans. A

Sol.

- **Kazakhstan has renamed its capital Astana as Nur-Sultan** in honour of the country's longtime president who resigned in a surprise move.

- The order to change the capital city's name was issued on Saturday by Kazakhstan's newly sworn-in interim President Kassym-Jomart Tokayev.

31. स्थायी ऊर्जा समाधान की दिशा में योगदान के लिए चौथा कारनोट पुरस्कार 2018 किसने प्राप्त किया?

A. हरदीप पुरी

B. अरुण जेटली

C. हर्षवर्धन

D. पीयूष गोयल

Ans. D

Sol.

- **Piyush Goyal to receive Carnot prize** for his contribution towards sustainable energy solutions.

- The Carnot Prize is the Kleinman Center's annual recognition of distinguished contributions to energy policy through scholarship or practice.

32. डिफेन्डिंग चैंपियन _____ ने 2019 में 85 वां रणजी ट्रॉफी खिताब जीता।

A. मुंबई

B. कर्नाटक

C. सौराष्ट्र

D. विदर्भ

Ans. D

Sol.

- **Vidarbha were the defending champions.**

- The 2018-19 Ranji Trophy was the 85th season of the [Ranji Trophy](#), the premier [first-class cricket](#) tournament that took place in India between November 2018 and February 2019.

- The final took place between Vidarbha and [Saurashtra](#), starting on 3 February 2019. Vidarbha defeated Saurashtra by 78 runs in the final, to become the sixth team in the tournament's history to retain their title.

33. 'मिथुन', एक मवेशी की नस्ल _____ में पाई जाती है।

A. अरुणाचल प्रदेश

B. महाराष्ट्र

C. केरल

D. तमिलनाडु

Ans. A

Sol.

- Mithun is a cattle breed is found in **Arunachal Pradesh**.

- Mithun is also known as 'Cattle of Mountain' .

- It is an important bovine species of north-eastern hill region of India and also of China, Myanmar, Bhutan and Bangladesh.
- This magnificent massive bovine is presently reared under free-range condition in the hill forests at an altitude of 1000 to 3000 m above mean sea level.

34. आंख में प्रवेश करने वाले प्रकाश की मात्रा को _____ द्वारा नियंत्रित और व्यवस्थित किया जा सकता है।

- A. प्यूपल
- B. आइरिस
- C. कॉर्निया
- D. रेटिना

Ans. A

Sol.

- The amount of light entering into eye can be controlled and regulated by **Pupil**.
- In low-light conditions, the pupil dilates so more light can reach the retina to improve night vision. In bright conditions, the pupil constricts to limit how much light enters the eye (too much light can cause glare and discomfort, and it may even damage the lens and retina).

35. भारतीय संविधान के किस भाग में केंद्र-राज्य संबंधों का उल्लेख किया गया है?

- A. भाग XI (अनुच्छेद 245 से 255)
- B. भाग IV (अनुच्छेद 227 से 234)
- C. भाग X (अनुच्छेद 234 से 240)
- D. भाग XII (अनुच्छेद 265 से 277)

Ans. A

Sol.

- In **Part XI (Article 245 to 255)** of the Indian Constitution are centre-state relations mentioned.
- The centre-state relations are divided into three parts, which are mentioned below:
(A) Legislative Relations (Article 245-255)

(B) Administrative Relations (Article 256-263)

(C) Financial Relations (Article 268-293)

36. कौन सा हार्मोन स्तन से दूध निकालने में मदद करता है, जब बच्चा स्तन से दूध निकालने की कोशिश करता है?

- A. प्रोजेस्टेरोन
- B. प्रोलैक्टिन
- C. एस्ट्रोजेन
- D. ऑक्सीटोसिन

Ans. B

Sol.

- **Prolactin** is a hormone that promotes milk production (lactation) in mammals in response to the suckling of young after birth.
- Production of prolactin takes place in the pituitary gland.

37. मारबत और बदगयस का त्योहार _____ में मनाया जाता है प्रत्यक्ष रूप से सामाजिक बुराइयों का विरोध करते हैं और पुतलों के साथ जुलूस के माध्यम से अपने अपराधियों की निंदा करते हैं।

- A. हैदराबाद
- B. जबलपुर
- C. नागपुर
- D. पणजी

Ans. C

Sol.

- On Bhadrapada Shukla Pratipada of the Indian lunar calendar, a unique festival, **popularly known as Marabat**, is celebrated in the eastern part of Vidarbha.
- In the evening a festival of toy bulls, called 'Tanha Pola', is celebrated by children.
- Marabat and Badgyas are female and male representations respectively.

• Nagpurians have a novel way of wishing away everything that troubles society, in the form of the Marbat.

38. निम्नलिखित में से कौन सी आर्थिक गतिविधि भारत में अधिकतम लोगों को रोजगार देती है?

- A. पर्यटन
- B. कृषि
- C. खनन
- D. विनिर्माण

Ans. B

Sol.

• **Agriculture sector employs maximum no. of people** in india, whereas it has least contribution in GDP.

• The opposite scenario is due to lack of technological upgradation in agriculture, disguise employment, land fragmentation and low agriculture input.'

39. राजतरंगिणी" पुस्तक के लेखक कौन हैं?

- A. सोमदेव
- B. कालिदास
- C. बाणभट्ट
- D. कल्हन

Ans. D

Sol.

• **Kalhan** was son of a Kashmiri minister Carpaka.

• He was most probably a Brahmin who wrote the Rajtarangini.

• Kalhan's father Carpaka is speculated to have served as a "dwarpati"(commandant) with the King Harsa of the Lohara dynasty.

40. 21 मार्च 2019 को संयुक्त राष्ट्र द्वारा विश्व डाउन सिंड्रोम दिवस के रूप में मनाया गया और थीम _____ थी।

- A. "लिव एंड लेट लिव"
- B. "लीव नो वन बिहाइंड"
- C. "ओल इज़ वेल"

D. "दूगेदर वि गो"

Ans. B

Sol.

• **World Down Syndrome Day** is celebrated on 21st March 2019.

• World Down Syndrome Day 2019 theme was "Leave no one behind".

• It is a global event organized to advocate the rights of people or children suffering from "Down Syndrome" and to send a message that they too can live a happy and normal life.

41. भारत के इतिहास में _____ के बीच की अवधि को दिल्ली सल्तनत काल के रूप में जाना जाता है।

- A. 1206 AD और 1526 AD
- B. 745 AD और 1245 AD
- C. 1105 AD और 1445 AD
- D. 1456 AD और 1675 AD

Ans. A

Sol.

• Period between **1206-1526** is considered as Delhi Sultanate.

• The kingdoms of Delhi Sultanate are as follow-

- a) Slave dynasty 1206 - 1290
- b) Khilji dynasty 1290 - 1320
- c) Tughlaq dynasty 1321 - 1413
- d) Sayyid dynasty 1414 - 1450
- e) Lodhi dynasty 1451 - 1526

42. नंदा देवी शिखर _____ में स्थित है।

- A. सिक्किम
- B. उत्तराखंड
- C. जम्मू और कश्मीर
- D. असम

Ans. B

Sol.

• Nanda Devi Peak is the **second highest mountain in India**.

- It is the 23rd-highest peak in the world.
- It is part of the Garhwal Himalayas, and is located in Chamoli district of **Uttarakhand**.

43. वर्ष 1978 में, _____ संशोधन ने संपत्ति के अधिग्रहण, धारण और निपटान के अधिकार को मौलिक अधिकार के रूप में समाप्त कर दिया।

- A. 41वें
- B. 42वें
- C. 43वें
- D. 44वें

Ans. D

Sol.

- In 1978, **44th amendment** eliminated the right to acquire, hold and dispose of property as a fundamental right.
- It was made legal right instead of fundamental one.
- Article 19(1)(f), which guarantees the citizens the right to acquire, hold and dispose of property and article 31 relating to compulsory acquisition of property have been omitted.

44. निम्नलिखित में से किसमें प्रति ग्राम प्रोटीन की मात्रा सबसे अधिक है?

- A. सेब
- B. मूंगफली
- C. सोयाबीन
- D. गेहूं

Ans. C

Sol.

Soyabean is one of the richest source of protein. The nutrition facts for 3.5 ounces (100 grams) of boiled soybeans are -

- a) Protein: 16.6 grams
- b) Carbs: 9.9 grams
- c) Sugar: 3 grams
- d) Fiber: 6 grams
- e) Fat: 9 grams

45. मिहिर भोज _____ के शासक थे।

- A. चोल
- B. राष्ट्रकुट
- C. चालुक्य
- D. प्रतिहार

Ans. D

Sol.

• Mihira Bhoja was a ruler of the **Gurjara-Pratihara** dynasty of **India**.

- He succeeded his father **Ramabhadra**.
- Bhoja was a devotee of **Vishnu** and adopted the title of Adivaraha which is inscribed on some of his coins.
- One of the outstanding political figures of India in ninth century, he ranks with **Dhruva Dharavarsha** and **Dharmapala** as a great general and empire builder.

46. हमारे शरीर की कौन सी कोशिकाएँ प्रायः "मानव शरीर के सैनिक" कहलाती हैं?

- A. लाल रक्त कोशिकाएँ
- B. ईअसिनफिल
- C. बेसोफिल
- D. सफेद रक्त कोशिकाएँ

Ans. D

Sol.

• **WBCs are also known as Soldiers of human body.**

- White blood cells are part of the body's immune system. They help the body fight infection and other diseases.
- Types of white blood cells are granulocytes (neutrophils, eosinophils, and basophils), monocytes, and lymphocytes (T cells and B cells).

47. विक्रमशिला विश्वविद्यालय की स्थापना _____, एक पाल राजा द्वारा की गई थी।

- A. धर्मपाल
- B. मिहिर भोज

- C. राजेंद्र चोल
D. पुलकेशिन प्रथम

Ans. A

Sol.

• **Vikramashila was founded by Pala king Dharmapala** in the late 8th or early 9th century.

- It is one of the top center of education not only for Indians but also for foreigners.
- It prospered for about four centuries before it was destroyed by Bakhtiyar Khilji along with the other major centres of Buddhism in India around 1193.

48. यदि वस्तुओं और सेवाओं की आपूर्ति की तुलना में धन की आपूर्ति में कमी है, तो संभावित परिणाम _____ होगा।

- A. अति स्फीति
B. मुद्रास्फीति
C. अपस्फीति
D. अवमूल्यन

Ans. C

Sol.

- **Deflation** is the decline in the prices for goods and services that occur when the rate of inflation falls below 0%.
- It will take place naturally, if and when the money supply of an economy is limited.
- It indicates deteriorating conditions.
- It is normally linked with significant unemployment and low productivity levels of goods and services.

49. _____ ने 2019 में नवउद्घाटित प्रो वॉलीबॉल लीग (PVL) खिताब जीता।

- A. कालीकट हीरोज
B. अहमदाबाद के डिफेंडर्स
C. चेन्नई स्पार्टन्स
D. कोच्चि ब्लू स्पाइकर्स

Ans. C

Sol.

• **Chennai Spartans** defeated Calicut Heroes 3-0 to win the inaugural edition of the Pro Volleyball League in the inaugural Pro Volleyball League (PVL) title in 2019.

• League's top scorer and best spiker Rudy Verhoeff scored 13 points (11 spikes and 2 blocks) for the winners.

50. 1857 के भारतीय विद्रोह के दौरान कुंवर सिंह की उपलब्धियों को सम्मानित करने के लिए वीर कुंवर सिंह जयंती को _____ में मनाया जाता है।

- A. उत्तराखंड
B. बिहार
C. उत्तर प्रदेश
D. हिमाचल प्रदेश

Ans. B

Sol.

• Kunwar Singh was a **notable leader** during the Indian Rebellion of 1857.

• He belonged to a royal house of Jagdispur, **Bihar**.

• At the age of 80, he led a select band of armed soldiers against the troops under the command of the British East India Company.

51. एक व्यक्ति प्रकाशक से एक पुस्तक की 100 प्रतियां खरीदता है और उसे 25% की छूट मिलती है। वह थोक विक्रेता से 10% की छूट पर 50 प्रतियां खरीदता है। उन्हें कुल छूट मिली:

- A. 20%
B. 35%
C. 17.5%
D. 16.5%

Ans. A

Sol.

Let the price of one copy of book is Rs. 100
Price of 100 copies

$$= 100 \times 100 = 10000$$

Discounted price of 100 copies

$$= 10000 \times \frac{75}{100} = 7500$$

$$\text{Price of 50 copies} = 50 \times 100 = 5000$$

Discounted price of 50 copies

$$= 5000 \times \frac{90}{100} = 4500$$

$$\text{Total price of 150 copies} = 15000$$

$$\text{The man paid a total of} = 7500 + 4500 = 12000.$$

$$\text{Overall discount} = \frac{15000 - 12000}{15000} \times 100 = \frac{3000}{150} = 20\%$$

52. यदि x को 12, 28, 21 और 45 प्रत्येक में जोड़ा जाता है, तो इस क्रम में प्राप्त संख्याएं, समानुपात में हैं। $(X + 3)$ और $(4x + 1)$ के बीच मध्यानुपात हैं?

A. 15

B. 18

C. 10

D. 12

Ans. A

Sol.

A/Q,

$$\frac{12 + x}{28 + x} = \frac{21 + x}{45 + x}$$

$$x^2 + 57x + 12 \times 45 = x^2 + 49x + 21 \times 28$$

$$8x = 21 \times 28 - 12 \times 45$$

$$x = 4 \times \frac{3}{8} (7 \times 7 - 3 \times 15) = \frac{3}{2} \times 4 = 6$$

$$\text{Mean proportion} = \sqrt{(x + 3)(4x + 1)} \\ = \sqrt{(6 + 3)(4 \times 6 + 1)} = 3 \times 5 = 15$$

53. तीन संख्याएँ इस प्रकार से हैं कि यदि उनमें से किसी दो का औसत तीसरी संख्या में जोड़ा जाता है, तो प्राप्त योग क्रमशः 168, 174 और 180 है। तीनों मूल संख्याओं का औसत क्या है?

A. 84

B. 87

C. 89

D. 86

Ans. B

Sol.

Let the numbers are x , y and z . Then A/Q,

$$\frac{x + y}{2} + z = 168 \dots (i)$$

$$\frac{y + z}{2} + x = 174 \dots (ii)$$

$$\frac{x + z}{2} + y = 180 \dots (iii)$$

Adding (i), (ii) and (iii) we get

$$\frac{2(x + y + z)}{2} + (x + y + z) = 522$$

$$2(x + y + z) = 522$$

$$x + y + z = 261$$

$$\frac{x + y + z}{3} = 87$$

54. यदि $(27x^3 - 343y^3) \div (3x - 7y) = Ax^2 + By^2 + 7Cxy$, तब $(4A - B + 5C)$ का मान है:

A. 2

B. 3

C. 1

D. 0

Ans. A

Sol.

$$\frac{27x^3 - 343y^3}{3x - 7y} = Ax^2 + By^2 + 7Cxy$$

$$\frac{(3x - 7y)(9x^2 + 21xy + 49y^2)}{3x - 7y} = Ax^2 + By^2 + 7Cxy$$

$$9x^2 + 21xy + 49y^2 = Ax^2 + 7Cxy + By^2$$

$$A = 9, B = 49, 7C = 21 \Rightarrow C = 3$$

$$4A - B + 5C = 36 - 49 + 15 = 2$$

55. ₹25,000 पर 12% की वार्षिक दर से 2 वर्ष के चक्रवृद्धि ब्याज (₹1 के निकटतम) क्या होगा, यदि ब्याज 8 मासिक रूप से संयोजित हैं।

A. ₹ 6.349

B. ₹ 6,439

C. ₹ 6,394

D. ₹ 6,493

Ans. D

Sol.

2 years = 24 months = 3 times compounded 8-monthly.

Rate of CI for 12 months = 12%

Rate of CI for 8 months = $12 \times \frac{8}{12} = 8\%$

$$A = 25000 \left(1 + \frac{8}{100}\right)^3$$

$$A = 25000 \left(\frac{27}{25}\right)^3$$

$$A = 25000 \times \frac{19683}{15625} = 1.6 \times 19683 = 31492.8$$

$$CI = A - P = 31492.8 - 25000 = 6492.8$$

$$CI \approx \text{Rs. } 6493$$

56. एक घनाभ के तीन आसन्न फलकों के क्षेत्रफल 32 सेमी², 24 सेमी² और 48 सेमी² हैं। घनाभ का आयतन क्या है?

A. 288 सेमी³

B. 256 सेमी³

C. 192 सेमी³

D. 128 सेमी³

Ans. C

Sol.

Let length, breadth and height of cuboid are respectively l, b and h . Then,

$$lb = 48 \dots \dots (i)$$

$$bh = 24 \dots \dots (ii)$$

$$lh = 32 \dots \dots (iii)$$

$$(lb)(bh)(lh) = 48 \times 24 \times 32$$

$$l^2 b^2 h^2 = 48 \times 24 \times 32$$

$$lbh = \sqrt{48 \times 24 \times 32}$$

$$= 4\sqrt{3} \times 2\sqrt{3}\sqrt{2} \times 4\sqrt{2}$$

$$= 192 \text{ cm}^3$$

57. θ का मान होगा, जब

$$\sqrt{3} \cos \theta + \sin \theta = 1 \quad (0^\circ \leq \theta \leq 90^\circ), \text{ है:}$$

A. 90°

B. 30°

C. 60°

D. 0°

Ans. A

Sol.

$$\sqrt{3} \cos \theta + \sin \theta = 1$$

$$3 \cos^2 \theta = (1 - \sin \theta)^2$$

$$3(1 - \sin^2 \theta) = (1 - 2 \sin \theta + \sin^2 \theta)$$

$$4 \sin^2 \theta - 2 \sin \theta - 2 = 0$$

$$2 \sin^2 \theta - \sin \theta - 1 = 0$$

$$2 \sin^2 \theta - 2 \sin \theta + \sin \theta - 1 = 0$$

$$(2 \sin \theta + 1)(\sin \theta - 1) = 0$$

$$\sin \theta = -\frac{1}{2} \text{ or } 1$$

$$\theta = 240^\circ \text{ or } 90^\circ \text{ since, } 0^\circ \leq \theta \leq 90^\circ,$$

$$\text{therefore } \theta = 90^\circ$$

58. $\triangle ABC$ में, भुजा AB और AC को क्रमशः P और Q तक बढ़ाया जाता है। $\angle PBC$ और $\angle QCB$ के समद्विभाजक एक बिंदु R पर प्रतिच्छेद करते हैं। यदि $\angle R = 66^\circ$, तब $\angle A$ का माप होगा:

A. 24°

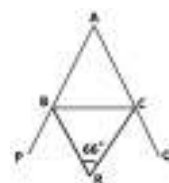
B. 48°

C. 72°

D. 36°

Ans. B

Sol.



Using

formula,

$$\angle R = 90^\circ - \frac{1}{2} \angle A$$

$$\angle A = 180^\circ - 2\angle R$$

$$\angle A = 180^\circ - 2 \times 66^\circ$$

$$\angle A = 180^\circ - 132^\circ = 48^\circ$$

59. यदि $x + y = 1$ और $xy (xy - 2) = 12$, तब $x^4 + y^4$ का मान होगा:

A. 23

B. 25

C. 19

D. 20

Ans. B

Sol.

$$(x + y)^2 = 1$$

$$2xy = 1 - x^2 - y^2 \text{ Now,}$$

$$xy(xy - 2) = 12$$

$$x^2y^2 - 2xy = 12$$

$$\frac{(1 - x^2 - y^2)^2}{4} - (1 - x^2 - y^2) = 12$$

$$1 + x^4 + y^4 - 2x^2 - 2x^2y^2 - 2y^2 - 4 + 4x^2 + 4y^2 = 48$$

$$x^4 + y^4 + 2(x^2 + y^2) + 2x^2y^2 = 51$$

$$x^4 + y^4 + 2[(x + y)^2 - 2xy] + 2x^2y^2 = 51$$

$$x^4 + y^4 + 2(1)^2 - 4xy + 2x^2y^2 = 51$$

$$x^4 + y^4 + 2xy(xy - 2) = 51 - 2$$

$$x^4 + y^4 + 2(12) = 49$$

$$x^4 + y^4 = 49 - 24 = 25$$

60. यदि $a^2 + b^2 + 64c^2 + 16c + 3 = 2(a + b)$, तब $4a^7 + b^7 + 8c^2$ का मान है:

A. $3\frac{7}{8}$

B. $4\frac{1}{8}$

C. $5\frac{1}{8}$

D. $4\frac{7}{8}$

Ans. C

Sol.

$$a^2 + b^2 + 64c^2 + 16c + 3 = 2(a + b)$$

$$a^2 - 2a + 1 + b^2 - 2b + 1 + 64c^2 + 16c + 1 = 0$$

$$(a - 1)^2 + (b - 1)^2 + (8c + 1)^2 = 0$$

$$a = 1, b = 1, c = -\frac{1}{8}$$

$$4a^7 + b^7 + 8c^2 = 4(1)^7 + 1^7 + 8\left(-\frac{1}{8}\right)^2 = 5\frac{1}{8}$$

61. ₹800 में एक वस्तु को बेचने पर, एक व्यक्ति को इसके विक्रय मूल्य के 20% की हानि होती है। उसे इसके क्रय मूल्य पर 25% लाभ प्राप्त करने के लिए इसे किस कीमत पर बेचना चाहिए?

A. ₹ 1,152

B. ₹ 1,280

C. ₹ 1,250

D. ₹ 1,200

Ans. D

Sol.

$$CP = SP + \text{Loss} = 800 \times \frac{120}{100} = 960$$

$$\text{Required SP} = 960 \times \frac{125}{100} = \text{Rs. 1200}$$

62. A की आय B की तुलना में 25% अधिक है और C की आय A और B की आय के योग से 65% कम है। C की आय A की आय से कितने प्रतिशत कम है?

A. 32

B. 28

C. 35

D. 37

Ans. D

Sol.

Let income of B = 100, then income of A

= 125 and income of C

$$= (100 + 125) \times \frac{35}{100} = 225 \times \frac{35}{100} = \frac{315}{4}$$

Required %

$$= \frac{125 - \frac{315}{4}}{125} \times 100 = \frac{500 - 315}{5 \times 4} \times 4 = 37$$

63. तालिका विभिन्न प्रकार की कारों के उत्पादन को दर्शाती है। (हजारों में)

वर्ष	2014	2015	2016	2017	2018
A	64	56	57	63	70
B	48	54	63	64	72
C	33	42	48	57	64
D	25	45	40	55	35
E	40	48	52	61	60

2015 में C प्रकार की और 2018 में E प्रकार की कारों के कुल एक साथ उत्पादन, 2014 और 2017 में कुल कारों के उत्पादन का कितना प्रतिशत होगा?

A. 20

B. 22

C. 27

D. 25

Ans. A

Sol.

The total production of type C cars in 2015 and type E cars in 2018 = 42 + 60 = 102

Total production of cars in 2014 and 2017 = (64 + 48 + 33 + 25 + 40) + (63 + 64 + 57 + 55 + 61) = 210 + 300 = 510

Required percent = $\frac{102}{510} \times 100 = 20\%$

64. यदि $a^2 + b^2 + c^2 = 21$, और $a + b + c = 7$, तब $(ab + bc + ca)$ बराबर है:

A. 14

B. 8

C. 28

D. 12

Ans. A

Sol.

$$(a + b + c)^2 = a^2 + b^2 + c^2 + 2(ab + bc + ca)$$

$$7^2 = 21 + 2(ab + bc + ca)$$

$$ab + bc + ca = \frac{49 - 21}{2} = \frac{28}{2} = 14$$

65. यदि $\sec \theta - \tan \theta = P$, तब $\operatorname{cosec} \theta = ?$

A. $\frac{2P}{1+P^2}$

B. $\frac{1-P^2}{1+P^2}$

C. $\frac{P^2+1}{1-P^2}$

D. $\frac{2P}{1-P^2}$

Ans. C

Sol.

$$\sec^2 \theta - \tan^2 \theta = 1$$

$$(\sec \theta - \tan \theta)(\sec \theta + \tan \theta) = 1$$

$$\sec \theta + \tan \theta = \frac{1}{P}$$

$$\sec \theta = \frac{P + \frac{1}{P}}{2} = \frac{P^2 + 1}{2P}$$

$$\tan \theta = \frac{\frac{1}{P} - P}{2} = \frac{1 - P^2}{2P}$$

$$\sin \theta = \frac{1 - P^2}{2P} \cos \theta = \frac{1 - P^2}{2P} \times \frac{2P}{1 + P^2} = \frac{1 - P^2}{1 + P^2}$$
$$\operatorname{cosec} \theta = \frac{1 + P^2}{1 - P^2}$$

66. तालिका विभिन्न प्रकार की कारों के उत्पादन को दर्शाती है। (हजारों में)

वर्ष कार	2014	2015	2016	2017	2018
A	64	56	57	63	70
B	48	54	63	64	72
C	33	42	48	57	64
D	25	45	40	55	35
E	40	48	52	61	60

2015 से 2017 के दौरान D प्रकार की कारों का कुल उत्पादन, 2014, 2015, 2016 और 2018 के दौरान E प्रकार की कारों के कुल उत्पादन की तुलना में कितना प्रतिशत कम है?

A. 35

B. 28

C. 32

D. 30

Ans. D

Sol.

The total production of type D cars during

2015 to 2017 = 45 + 40 + 55 = 140

Total production of type E cars during 2014, 2015, 2016 and 2018 = 40 + 48 + 52 + 60 = 200.

Required percent

$$= \frac{200 - 140}{200} \times 100 = \frac{60}{2} = 30\%$$

67. यदि 8-अंकीय संख्या $179x091y$, 88 से विभाज्य है, $(5x - 8y)$ का मान है:

A. 4

B. 7

C. 9

D. 5

Ans. A

Sol.

Since, the number is divisible by 88, it must be divisible by 11, 8 and 4 also. So, last

two digit must be divisible by 4. So, the possible values of y are 2 and 6. Now last three digit must be divisible by 8. So, only for $y = 2$, the number 912 is divisible by 8. Hence, $y = 2$. Now, the number is divisible by 11. Therefore, $(-1 + 7 - 9 + x - 0 + 9 - 1 + y) = (5 + x + y) = (5 + x + 2) = (7 + x)$ must be divisible by 11. For $x = 4$, it is divisible by 11. $(5x - 8y) = 20 - 16 = 4$

68. A, B और C की क्षमता का अनुपात 7: 5: 4 है। एक साथ काम करने पर, वे 35 दिनों में एक काम पूरा कर सकते हैं। A और B एक साथ 28 दिनों के लिए काम करते हैं, तो शेष कार्य C द्वारा अकेले (दिनों में) पूरा किया जाएगा:

- A. 60
B. 63
C. 56
D. 49

Ans. C

Sol.

$$A:B:C = 7:5:4$$

$$(A+B+C):(A+B) = 16:12 = 4:3$$

$$\frac{M_1 D_1}{W_1} = \frac{M_2 D_2}{W_2}$$

$$\frac{4 \times 35}{1} = \frac{3 \times 28}{W_2}$$

$W_2 = \frac{3}{5}$ A and B together finish $3/5^{\text{th}}$ of the work in 28 days. Remaining work = $2/5$.

Now,

$$(A+B+C):C = 16:4 = 4:1$$

$$\frac{4 \times 35}{1} = \frac{1 \times D}{\frac{2}{5}}$$

$$D = 4 \times 35 \times \frac{2}{5} = 56$$

69.

$$2\frac{7}{8} \div \left(3\frac{5}{6} \div \frac{2}{7} \text{ of } 2\frac{1}{3}\right) \times$$

$$\left[\left(2\frac{6}{7} \text{ of } 4\frac{1}{5} \div \frac{2}{3}\right) \times \frac{5}{9}\right] \text{ का मान होगा:}$$

- A. 5
B. $\frac{1}{4}$
C. 4
D. $\frac{1}{23}$

Ans. A

Sol.

$$2\frac{7}{8} \div \left(3\frac{5}{6} \div \frac{2}{7} \text{ of } 2\frac{1}{3}\right) \times \left[\left(2\frac{6}{7} \text{ of } 4\frac{1}{5} \div \frac{2}{3}\right) \times \frac{5}{9}\right]$$

$$= \frac{23}{8} \div \left[\frac{23}{6} \div \left(\frac{2}{7} \times \frac{7}{3}\right)\right] \times \left[\left\{\left(\frac{20}{7} \times \frac{21}{5}\right) \div \frac{2}{3}\right\} \times \frac{5}{9}\right]$$

$$= \frac{23}{8} \div \left[\frac{23}{6} \times \frac{3}{2}\right] \times \left[\left\{12 \times \frac{3}{2}\right\} \times \frac{5}{9}\right]$$

$$= \frac{23}{8} \div \frac{23}{4} \times \left[18 \times \frac{5}{9}\right]$$

$$= \frac{23}{8} \times \frac{4}{23} \times 10$$

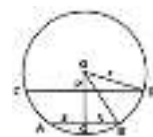
$$= 5$$

70. AB और CD एक वृत्त की दो समानांतर जीवा इस प्रकार हैं कि $AB = 6$ सेमी और $CD = 2 AB$ हैं। दोनों जीवा वृत्त के केंद्र के एक ही तरफ हैं। यदि उनके बीच की दूरी, CD की लंबाई के एक-चौथाई के बराबर है, तो वृत्त की त्रिज्या है:

- A. $4\sqrt{5}$ cm
B. $3\sqrt{5}$ cm
C. $5\sqrt{3}$ cm
D. $4\sqrt{3}$ cm

Ans. B

Sol.



$AB = 6$, $CD = 2AB = 12$, $PQ = CD/4 = 3$.

Since, $OQ \perp AB$ and $OP \perp CD$, $CP =$

$$PD = 6, \quad AQ = QB = 3.$$

$$OD = OB = r$$

$$OD^2 = OB^2$$

$$OP^2 + PD^2 = OQ^2 + QB^2$$

$$OP^2 + 6^2 = (OP + 3)^2 + 3^2$$

$$OP^2 + 36 = OP^2 + 6OP + 9 + 9$$

$$6OP = 18$$

$$OP = 3$$

$$r = \sqrt{OP^2 + PD^2} = \sqrt{9 + 36} = 3\sqrt{5}$$

71. तालिका विभिन्न प्रकार की कारों के उत्पादन को दर्शाती है। (हजारों में)

कार वर्ष	2014	2015	2016	2017	2018
A	64	56	57	63	70
B	48	54	63	64	72
C	33	42	48	57	64
D	25	45	40	55	35
E	40	48	52	61	60

2015 में A प्रकार की और 2014 में B प्रकार की कारों के कुल एक साथ उत्पादन का, 2017 में C प्रकार की और 2018 में E प्रकार की कुल कारों के उत्पादन के साथ अनुपात है:

A. 4 : 5

B. 8 : 9

C. 34 : 39

D. 16 : 19

Ans. B

Sol.

Total production of A type cars in 2015 and B type cars in 2014 = 56 + 48 = 104

Total production of type C cars in 2017 and type E cars in 2018 = 57 + 60 = 117

Required ratio = 104:117 = 8:9

72. अनु एक वस्तु के अंकित मूल्य पर 20% की छूट देती हैं और फिर भी 25% का लाभ कमाती है। यदि वह वस्तु की बिक्री पर 44.80 रुपये प्राप्त करती है, तो वस्तु का लागत मूल्य है:

A. ₹ 179.20

B. ₹ 188.80

C. ₹ 184.20

D. ₹ 192.80

Ans. A

Sol.

25% of CP = Rs. 44.80

$$100\% \text{ of CP} = 44.80 \times \frac{100}{25} = 179.2$$

73. निम्नलिखित तालिका विभिन्न प्रकार की कारों के उत्पादन को दर्शाती है। (हजारों में)

कार वर्ष	2014	2015	2016	2017	2018
A	64	56	57	63	70
B	48	54	63	64	72
C	33	42	48	57	64
D	25	45	40	55	35
E	40	48	52	61	60

D प्रकार की कारों के उत्पादन से संबंधित आंकड़ों को वृत्त चित्र द्वारा दर्शाया गया है, तब 2015 में कारों के उत्पादन को दर्शाने वाले खंड का केन्द्रीय कोण होगा:

A. 63°

B. 99°

C. 72°

D. 81°

Ans. D

Sol.

Required angle

$$= \frac{\text{prod. Of D in 2015}}{\text{Total prod. Of D}} \times 360^\circ$$

$$= \frac{45}{25 + 45 + 40 + 55 + 35} \times 360^\circ$$

$$= \frac{200}{45} \times 360^\circ$$

$$= 81^\circ$$

74. ABCD एक चक्रीय चतुर्भुज हैं जिसमें $\angle A = 67^\circ$ और $\angle B = 92^\circ$ हैं। $\angle C$ और $\angle D$ के माप में अंतर क्या होगा?

- A. 19°
- B. 27°
- C. 29°
- D. 25°

Ans. D

Sol.

Since, ABCD is cyclic quadrilateral,
 $\angle C = 180^\circ - \angle A = 180^\circ - 67^\circ = 113^\circ$
 $\angle D = 180^\circ - \angle B = 180^\circ - 92^\circ = 88^\circ$
 $\angle C - \angle D = 113^\circ - 88^\circ = 25^\circ$

75. एक त्रिभुज का क्षेत्रफल 15 से.मी.² हैं और इसके अंतः वृत्त की त्रिज्या 3 से. मी हैं, इसका परिमाप होगा:

- A. 12 से. मी
- B. 5 से. मी
- C. 10 से. मी
- D. 20 से. मी

Ans. C

Sol.

Let A is the area, r is the inradius and s is the semi perimeter of triangle ABC, then

$$A = sr$$

$$s = \frac{A}{r} = \frac{15}{3} = 5$$

$$2s = 10 \text{ cm}$$

76. |||Common||| Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select No Improvement. |||End|||

She read that novel since she got up in the morning.

- A. No improvement
- B. reads that novel
- C. has been reading that novel
- D. has read that novel

Ans. C

Sol.

The past perfect continuous tense (also known as the past perfect progressive tense) shows that an action that started in the past continued up until another time. The past perfect continuous tense is constructed using had been + the verb's present participle (root + -ing). Hence, **option C** is the correct answer.

77. |||Common||| In the sentence identify the segment which contains the grammatical error. |||End|||

Torrential rains and winds of up to 170 km per hour swept away roads, homes and bridges and knocking down power and communication lines.

- A. homes and bridges
- B. winds of up to
- C. knocking down
- D. swept away roads

Ans. C

Sol.

The given sentence is in the past tense. Therefore, 'knocking' is grammatically incorrect. It should be 'knocked' to form a grammatically correct sentence. Hence, **option C** is the correct answer.

78. |||Common||| Select the word which means the same as the group of words given. |||End|||

A person who draws or produces maps

- A. lexicographer
- B. choreographer
- C. cartographer
- D. calligrapher

Ans. C

Sol.

The meanings of the words are:

Lexicographer: a person who compiles dictionaries.

Choreographer: a person who composes the sequence of steps and moves for a performance of dance.

Cartographer: a person who draws or produces maps.

Calligrapher: a person who is skilled at the art of calligraphy (producing beautiful writing, often with a special pen or brush).

Therefore, **option C** is the correct answer.

79. Select the wrongly spelt word.

- A. exercise
- B. exite
- C. exclaim
- D. exchange

Ans. B

Sol.

'Excite' meaning 'cause (someone) to feel very enthusiastic and eager' is incorrectly spelt as 'exite'. Hence, **option B** is the correct answer.

80. |||Common||| In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Eager to control the South Atlantic, the British Navy had tasked Admiral Byron (###Q1###) settling an island off the South American coast (###Q2###) ships could resupply, and then finding an alternative (###Q3###) to the East Indies. After rounding the tip of South America, Admiral Byron confronted the world's (###Q4###) body of water: the endless Pacific Ocean. After a month of empty blue horizon, a tiny island (###Q5###). Byron joyously described the island's "beautiful appearance

- surrounded by a beach of the finest white sand - and covered with tall trees."

|||End|||

Select the most appropriate option for blank No. (###Q5###). A. showed

- B. appeared
- C. stood up
- D. came out

Ans. B

Sol.

The sentence implies that a tiny island became visible after a month of blue horizon. '**Appear**' meaning 'come into sight; become visible or noticeable, especially without apparent cause' is the apt fit for the blank. Hence, **option B** is the correct answer.

81. Select the most appropriate option for blank No. (###Q4###).

- A. more larger
- B. larger
- C. large
- D. largest

Ans. D

Sol.

The superlative form of the adjective 'large' i.e. '**largest**' is required for the blank. Hence, **option D** is the correct answer.

82. Select the most appropriate option for blank No. (###Q3###).

- A. road
- B. route
- C. means
- D. path

Ans. B

Sol.

The British Navy had asked Admiral Byron to find an alternative way to East Indies.

'Route' meaning 'a way or course taken in getting from a starting point to a destination' is the apt fit for the blank.

Hence, **option B** is the correct answer.

83. |||Common||| In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Eager to control the South Atlantic, the British Navy had tasked Admiral Byron (###Q1###) settling an island off the South American coast (###Q2###) ships could resupply, and then finding an alternative (###Q3###) to the East Indies. After rounding the tip of South America, Admiral Byron confronted the world's (###Q4###) body of water: the endless Pacific Ocean. After a month of empty blue horizon, a tiny island (###Q5###). Byron joyously described the island's "beautiful appearance - surrounded by a beach of the finest white sand - and covered with tall trees."

|||End|||

Select the most appropriate option for blank No. (###Q2###). A. where

B. wherever

C. when

D. there

Ans. A

Sol.

An adverb having the meaning 'to what place or position' is required in the blank.

'Where' meaning 'at, in, or to which (used after reference to a place or situation)' is the correct answer.

Hence, **option A** is the correct answer.

84. |||Common||| In the following passage some words have been deleted. Fill in the

blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Eager to control the South Atlantic, the British Navy had tasked Admiral Byron (###Q1###) settling an island off the South American coast (###Q2###) ships could resupply, and then finding an alternative (###Q3###) to the East Indies. After rounding the tip of South America, Admiral Byron confronted the world's (###Q4###) body of water: the endless Pacific Ocean. After a month of empty blue horizon, a tiny island (###Q5###). Byron joyously described the island's "beautiful appearance - surrounded by a beach of the finest white sand - and covered with tall trees."

|||End|||

Select the most appropriate option for blank No. (###Q1###).

A. for

B. with

C. of

D. from

Ans. B

Sol.

We use the preposition 'with' after the verb 'tasked'. Therefore, **'with'** should fill in the blank.

Hence, **option B** is the correct answer.

85. |||Common||| Select the word which means the same as the group of words given. |||End|||

A cylindrical container bulging out in the middle, traditionally made of wooden staves for keeping oil, beer etc.

A. bin

B. barrel

C. bale

D. bushel

Ans. B

Sol.

The meanings of the words are:

Bin: a receptacle in which to deposit rubbish.

Barrel: a cylindrical container bulging out in the middle, traditionally made of wooden staves with metal hoops round them.

Bale: a large wrapped or bound bundle of paper, hay, or cotton.

Bushel: a measure of capacity equal to 8 gallons (equivalent to 36.4 litres), used for corn, fruit, liquids, etc.

Therefore, **option B** is the correct answer.

86. |||Common||| Select the correct passive form of the given sentence. |||End|||

Please show me my son's Mathematics notebook.

A. I will please be shown my son's Mathematics notebook.

B. My son may please be shown the Mathematics notebook.

C. My son's Mathematics notebook was please shown to me.

D. I may please be shown my son's Mathematics notebook.

Ans. D

Sol.

The following rules should be considered while changing active form to passive voice:

* The places of subject and object will be interchanged in the sentence.

* Only 3rd form of the verb or Past Participle will be used as a main verb in the Passive Voice.

Therefore, **option D** correctly provides the passive form of the given sentence.

87. |||Common||| Select the synonym of the given word. |||End|||

INEPT

A. fit

B. strong

C. clumsy

D. capable

Ans. C

Sol.

The meanings of the words are:

Inept: having or showing no skill; clumsy.

Fit: of a suitable quality, standard, or type to meet the required purpose.

Strong: having the power to move heavy weights or perform other physically demanding tasks.

Clumsy: awkward in movement or in handling things.

Capable: having the ability, fitness, or quality necessary to do or achieve a specified thing.

Therefore, **option C** is the correct answer.

88. |||Common||| Select the antonym of the given word. |||End|||

EXCEPTIONAL

A. uncommon

B. unimaginable

C. unthinkable

D. unremarkable

Ans. D

Sol.

The meanings of the words are:

Exceptional: unusual; not typical.

Uncommon: out of the ordinary; unusual.

Unimaginable: difficult or impossible to imagine or comprehend.

Unthinkable: (of a situation or event) too unlikely or undesirable to be considered a possibility.

Unremarkable: not particularly interesting or surprising.

Therefore, **option D** is the correct answer.

89. |||Common||| Select the most appropriate word to fill in the blank. |||End|||
A number of Indian goods face a _____ competition from Chinese goods in terms of prices and looks.

- A. powerful
- B. bold
- C. fierce
- D. angry

Ans. C

Sol.

The sentence implies that a powerful competition is faced by Indian goods from Chinese goods. 'Fierce' meaning 'powerful and destructive' is the apt fit for the blank. Hence, **option C** is the correct answer.

90. |||Common||| Given below are four jumbled sentences. Select the option that gives their correct order. |||End|||

- A) An estimated 70% of this plastic which enters the sea sinks.
- B) This is a problem that stretches far beyond India.
- C) Eight million tonnes of plastic ends up in the world's oceans every year, causing damage to the fragile ecosystem.
- D) And much of it is not biodegradable.

- A. ABDC
- B. CDBA
- C. CADB
- D. ADBC

Ans. C

Sol.

The sentence C is the first sentence of the passage as it introduces the subject i.e. 'water pollution caused due to plastic'. 'AD'

is a mandatory pair because it mentions that the plastic which enters the sea is not biodegradable. Hence, the rearranged order is **option C** i.e. **CADB**.

91. |||Common||| Select the correct active form of the given sentence. |||End|||

The crop was adversely affected by the inadequate rainfall.

- A. The inadequate rainfall adversely affected the crop.
- B. The adversely rainfall has affected the inadequate crop.
- C. The inadequate rainfall was adversely affecting the crop.
- D. The inadequate crop adversely affected the rainfall.

Ans. A

Sol.

The following rules should be considered while changing passive form to active voice:

- Identify the subject of the sentence - who is doing an action?
- Rewrite the sentence so the subject is performing the action.

Therefore, **option B** correctly provides the active form of the given sentence.

92. Select the wrongly spelt word.

- A. commission
- B. committee
- C. comparable
- D. consceine

Ans. D

Sol.

Option D has the incorrectly spelt word. The correct spelling is 'conscience' and it means 'a person's moral sense of right and wrong, viewed as acting as a guide to one's behavior'.

93. |||Common||| Given below are four jumbled sentences. Select the option that gives their correct order. |||End|||

A) And 844 million don't have access to clean water close to home, according to the latest report by WaterAid.

B) Around 4 billion people in the world live in physically water-scarce areas.

C) It is because globally we use six times as much water today as we did 100 years ago.

D) The world's water crisis is getting worse.

A. BDCA

B. BADC

C. CADB

D. DACB

Ans. B

Sol.

The sentence B is the first sentence of the passage as it introduces the subject i.e. 'people living in water-scarce areas'. The sentence B gives the number of people living in water-scarce areas. 'And' in the sentence A further adds on the fact that 844 million don't have access to clean water close to home. Therefore, sentence A becomes the second sentence. DC is the mandatory pair as it gives the problem and the reason of water crisis. Hence, the rearranged order is **option B** i.e. **BADC**.

94. |||Common||| In the sentence identify the segment which contains the grammatical error. |||End|||

She lost a big order from a known showroom in case of her own carelessness.

A. She lost a big order

B. her own carelessness

C. in case of

D. from a known showroom

Ans. C

Sol.

The phrase 'in case' means 'as a provision against something happening or being true'. The sentence requires a conjunction which is used to introduce a clause expressing an explanation or reason. 'Because' meaning 'for the reason that; since' should be used instead of 'in case'. Hence, **option C** is the correct answer.

95. |||Common||| Select the antonym of the given word. |||End|||

PARDON

A. kindness

B. grace

C. punish

D. mercy

Ans. C

Sol.

The meanings of the words are:

Pardon: the action of forgiving or being forgiven for an error or offence.

Kindness: the quality of being friendly, generous, and considerate.

Grace: smoothness and elegance of movement.

Punish: inflict a penalty or sanction on (someone) as retribution for an offence, especially a transgression of a legal or moral code.

Mercy: compassion or forgiveness shown towards someone whom it is within one's power to punish or harm.

Therefore, **option C** is the correct answer.

96. |||Common||| Select the synonym of the given word. |||End|||

INARTICULATE

A. eloquent

B. incoherent

C. fluent

D. inevitable

Ans. B

Sol.

The meanings of the words are:

Inarticulate: unable to express one's ideas or feelings clearly or easily.

Eloquent: fluent or persuasive in speaking or writing.

Incoherent: (of spoken or written language) expressed in an incomprehensible or confusing way; unclear.

Fluent: able to express oneself easily and articulately.

Inevitable: certain to happen; unavoidable.

Therefore, **option B** is the correct answer.

97. |||Common||| Select the most appropriate word to fill in the blank. |||End||| Many items made of ivory were _____ from a dealer in antiques by the custom authorities at the Delhi airport.

A. confiscated

B. hijacked

C. annexed

D. appropriated

Ans. A

Sol.

The sentence implies that the custom authorities seized many items made of ivory.

'Confiscate' means 'take or seize (someone's property) with authority'. This word fits best in the sentence.

Therefore, **option A** is the correct answer.

98. |||Common||| Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select No Improvement. |||End|||

If I have money, I purchase this house.

A. I will purchase

B. I have purchased

C. I purchased

D. No improvement

Ans. A

Sol.

The sentence is an example of first conditional sentences.

The first conditional has the present simple after 'if', then the future simple in the other clause:

if + present simple, ... will + infinitive

It's used to talk about things which might happen in the future.

Therefore, **option A** is the correct answer.

99. |||Common||| Select the most appropriate meaning of the given idiom. |||End|||

'Pull someone's leg' A. trust someone

B. tell someone a secret

C. get upset with someone

D. joke with someone

Ans. D

Sol.

The phrase 'pull someone's leg' means 'to joke with someone playfully; to tease someone'.

For example: I love pulling my sister's leg— it's almost too easy to annoy her.

Therefore, **option D** is the correct answer.

100. |||Common||| Select the most appropriate meaning of the given idiom. |||End|||

Actions speak louder than words

A. what you do is more important than what you say

B. look for solutions in the wrong place

C. take up a task that you cannot finish

D. do something without planning

Ans. A

Sol.

The phrase 'actions speak louder than words' means that people are more likely to believe what you do rather than what you say.

For example: Julie always says she'll donate to the school, and she never does, so I doubt she will this year. Actions speak louder than words, after all.

Therefore, **option A** is the correct answer.