Once upon a time, there lived a washerman in a village. He had a donkey by the name of Udhata. He used to carry loads of clothes to the river bank and back home everyday. The donkey was not satisfied with the food, that was given to him by his master to eat. So he wandered into the nearby fields stealthily and ate the crops growing there. Once, the donkey, while wandering around, happened to meet a fox. Soon, both of them became friends and began to wander together in search of delicious food. One night, the donkey and the fox were eating water-melons in a field. The water-melons were so tasty, that the donkey ate in a large quantity. Having eaten to his appetite, the donkey became so happy that he was compelled by an intense desire to sing. He told the fox that he was in such a good mood that he had to express his happiness in a melodious tone. ‘Don’t be a fool. If you sing, the people sleeping in and around this field will wake up and beat us black and blue with sticks,’ said the fox worriedly. ‘You are a dull fellow’, the donkey said hearing the words of fox. ‘Singing makes one happy and healthy. No matter what comes. I’ll definitely sing a song.” The fox became worried to see the donkey adamant to sing a song in the midst of the field, while the owner was still sleeping only a little distance away. Seeing his adamance, he said to the donkey, ‘Friend, wait a minute before you start first, let me jump over to the other side of the fence for my safety.’ Saying so the fox jumped over to the other side of the fence without losing a moment. The donkey began in his so-called melodious tone. Hearing, suddenly, a donkey braying in the field, the owner woke up from his sleep. He picked up his stick lying by his side and ran towards the donkey who was still braying happily. The owner of the field looked around and saw the loss caused by the donkey. He became very angry and beat him so ruthlessly that the donkey was physically incapacitated temporarily. He, somehow, managed to drag himself out of the field with great difficulty. The fox looked at the donkey and said in a sympathetic tone, T m sorry to see you in this pitiable condition. I had already warned you, but you didn’t listen to my advice.’ The donkey too realised his folly and hung his head in shame.
1. Why did donkey want to sing?
   (1) Donkey was so happy that he was compelled by an intense desire to sing.
   (2) He wanted to wake up the people sleeping around.
   (3) Fox told the donkey to sing a song.
   (4) He wanted to prove that he was a good singer.
   (5) None of the above
   
   **Solution:** 1

2. What was donkey’s reaction when fox suggested him not to sing a song?
   (1) Donkey agreed with fox and did not sing a song.
   (2) Donkey chose to dance instead of singing a song.
   (3) Donkey became angry and did not talk to fox after that.
   (4) Donkey didn’t pay attention to fox’s words and sang a song.
   (5) None of the above
   
   **Solution:** 4

3. What happened when donkey sang a song?
   (1) The fox clapped for the donkey.
   (2) The villagers praised donkey and gave him a gift.
   (3) The fox started dancing.
   (4) The owner woke up and beat the donkey ruthlessly.
   (5) None of the above
   
   **Solution:** 4

4. How did donkey came to know the fox?
   (1) Both were childhood friends.
   (2) Donkey happened to meet the fox in the field while wandering around in the search of delicious food.
   (3) They used to work together for the washerman from the starting.
   (4) Fox once saved donkey’s life.
   (5) None of the above
   
   **Solution:** 2

5. Which of the following statement is false according to the passage?
   (1) The donkey realised his mistake in the end.
   (2) The donkey was not satisfied with the food given to him by his master.
   (3) Donkey didn’t want to sing but he was compelled to do that.
   (4) The owner of the field woke LIP after hearing to the donkey’s voice.
   (5) None of the above
   
   **Solution:** 3
Directions (6-8) : Choose the word/group of words which is most similar in meaning to the word/group of words as used in the passage.

6.  **STEALTHILY**
   (1) Superstitiously
   (2) Secretly
   (3) Honestly
   (4) Openly
   (5) Overtly

   **Solution : 2**

7.  **COMPELLED**
   (1) Discouraged
   (2) Delayed
   (3) Suspended
   (4) Forced
   (5) Demanded

   **Solution : 4**

8.  **ADAMANCE**
   (1) Easy going
   (2) Yielding
   (3) Flexible
   (4) Mischievous
   (5) Rigid

   **Solution : 5**

Directions (9-10) : Choose the word/group of words which is most opposite in meaning of the word/group of words as used in the passage.

9.  **FOLLY**
   (1) Stupidity
   (2) Madness
   (3) Advanceness
   (4) Sageness
   (5) Sharpness

   **Solution : 3**

10. **PITIABLE**
Directions (11-15) : Rearrange the following six sentences A, B, C, D, E and F in the proper sequence to form a meaningful paragraph and then answer the questions given below.

A. Anything that you touch will turn into gold. The king was delighted with his good fortune.
B. Even though he was very rich, he always craved for more and more.
C. Everything he touched turned into gold. He turned trees, grass, tables, chairs, flowers, and vases into gold.
D. One day, he called his court magician and commanded, find me a spell that can get me more treasures than I already have.
E. King Midas was a very greedy king.
F. The magician said, Your Majesty, I can give you a power that no one else in this world has.

11. Which of the following should be the FIRST sentence after rearrangement ?
   (1) F
   (2) E
   (3) B
   (4) A
   (5) C

   Solution : 2

12. Which of the following should be the SECOND sentence after rearrangement ?
   (1) A
   (2) B
   (3) C
   (4) E
   (5) D

   Solution : 2

13. Which of the following should be the THIRD sentence after rearrangement ?
   (1) E
14. Which of the following should be the FOURTH sentence after rearrangement?

(1) A
(2) B
(3) F
(4) E
(5) C

Solution: 3

15. Which of the following should be the LAST (SIXTH) sentence after rearrangement?

(1) C
(2) A
(3) B
(4) D
(5) F

Solution: 1

Directions (16-20): Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is 'No error', the answer is (5). (Ignore errors of punctuation, if any.)

16. Harsh Vardhan said he was looking for*ard/(1) to serve his roots, as he had spend/(2) the first 15 years of his life/(3) in the streets of old Delhi.(4) No error (5)

Solution: 2

17. A family office has to/(1) execute all tasks related to/(2) manage the wealth of/(3) the upper-rich family. (4) No error (5)

Solution: 3

18. Service providers in the financial industry, specially private banks/(1) and wealth
management firms, are increasingly forced to standardise products to optimise profit. (4) No error (5)  

Solution: 5

19. Social or impact funds are private equity-like funds that pool money from investors and put it to work in a portfolio of ventures that meet the funds objective. (4) No error (5)

Solution: 1

20. While residential land purchases have benefitted many investors buying land can be risky especially for a NRI. (4) No error (5)

Solution: 4

Directions (21-25): In each question below, four words printed in bold type are given. These are indicated as (1), (2), (3) and (4). One of these words printed in bold may either be wrongly spelt or inappropriate in the context of the sentence. Find out the word that is inappropriate or wrongly spelt, if any. The number of that word is your answer. If all the words printed in bold are correctly spelt and appropriate in the context of the sentence then mark (5) i.e. All correct, as your answer.

21. All the competitors completed the race with just one exception. (4) All correct (5)

Solution: 4

22. Poor posture can lead to muscular problems in later life. All correct (5)

Solution: 5

23. The pump shut off as a result of a mechanical failure. All correct (5)

Solution: 4

24. The Principal gave a very pompous speach about ‘The portals of learning’. (4) All correct (5)

Solution: 3

25. Copeing with her mother’s long illness was a heavy load to bear. (4)
Directions (26-30): In the following passage, some of the words have been left out. Each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningfully complete.

A camel and a jackal were-friends. One day, the jackal ...(26)… his friend to a big sugarcane farm. It was on the opposite side of a river. After a ...(27)… meal, the jackal began to howl loudly. The frightened camel pleaded ...(28)… the jackal not to do so. The Jackal said, “Friend, I have this habit after every meal. I cannot help it.” Soon the farmers arrived and gave a sound thrashing to the camel. When the camel crossed the river, the jackal joined him on his back. In the midstream, the camel took a deliberate dip ...(29)… the water. When the jackal cried out in terror, the camel said casually “I have the habit of rolling in the water after every meal.” The poor jackal was ...(30)…

26. (1) brought
   (2) bought
   (3) took
   (4) taken
   (5) invites

   Solution : 3

27. (1) daily
   (2) desirous
   (3) delicacy
   (4) dinner
   (5) sumptuous

   Solution : 5

28. (1) to
   (2) for
   (3) on
   (4) with
   (5) before

   Solution : 4

29. (1) onto
(2) in  
(3) within  
(4) down  
(5) on  

**Solution**: 2

30.  
(1) sank  
(2) sinking  
(3) drowning  
(4) drowned  
(5) wetting  

**Solution**: 4
NUMERICAL ABILITY

Directions (1-5) : What should come in the place of question mark (?) in the following questions ?

1. \( \frac{7}{5} \) of 58 + \( \frac{3}{8} \) of 139.2 = ?
   (1) 133.4
   (02) 137.2
   (3) 127.8
   (4) 131.6
   (5) None of these

Solution : 1
\[
\frac{7}{5} \times 58 + \frac{3}{8} \times 139.2 = ?
\]
\[
11.6 \times 7 + 17.4 \times 3 = ?
\]
\[
81.2 + 52.2 = ?
\]
\[
? = 133.4
\]

2. 12% of 555 + 15% of 666 = ?
   (1) 166.5
   (2) 167.5
   (3) 168.5
   (4) 169.5
   (5) None of these

Solution : 1
\[
12 \% \times 555 + 15 \% \times 666 = ?
\]
\[
\frac{555 \times 12}{100} + \frac{666 \times 15}{100} = ?
\]
\[
\frac{6660}{100} + \frac{999}{100} = ?
\]
\[
\frac{16650}{100} = ?
\]
\[
\therefore ? = 166.5
\]
3. \[ 84368 + 65466 - 72009 - 13964 = ? \]
   (1) 61481  
   (2) 62921  
   (3) 63861  
   (4) 64241  
   (5) None of these  
   
   **Solution:** 3  
   (3) \[ ? = 84368 + 65466 - 72009 - 13964 \]  
   \[ ? = 149834 - 85973 \]  
   \[ ? = 63861 \]  

4. \[ (33)^{7.8} \times (33)^{1.2} \div (33)^5 = 33 \times (33)^? \]
   (1) 2.8  
   (2) 3  
   (3) 3.2  
   (4) 4  
   (5) 6  
   
   **Solution:** 2  
   (2) \[ (33)^{7.8} \times (33)^{1.2} \div (33)^5 = 33 \times (33)^? \]  
   \[ (33)^9 - 5 = (33)^? + 1 \]  
   \[ ? + 1 = 4 \]  
   \[ ? = 3 \]  

5. \[ \frac{?}{529} = \frac{329}{?} \]
   (1) 404  
   (2) 408  
   (3) 410  
   (4) 414  
   (5) 416  
   
   **Solution:** 5
Directions (6-10) : Study the following table carefully and answer the given questions.

The number of various crimes, as supplied by national crime record, reported in different states in the year 2012-13

<table>
<thead>
<tr>
<th>District</th>
<th>Stalking</th>
<th>Assault</th>
<th>Theft</th>
<th>Murder</th>
<th>Criminal Trespass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bihar</td>
<td>352</td>
<td>496</td>
<td>265</td>
<td>132</td>
<td>332</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>376</td>
<td>225</td>
<td>216</td>
<td>125</td>
<td>115</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>85</td>
<td>125</td>
<td>53</td>
<td>56</td>
<td>57</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>10545</td>
<td>3652</td>
<td>12224</td>
<td>354</td>
<td>10128</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>445</td>
<td>225</td>
<td>252</td>
<td>173</td>
<td>154</td>
</tr>
<tr>
<td>Delhi</td>
<td>473</td>
<td>576</td>
<td>675</td>
<td>764</td>
<td>852</td>
</tr>
<tr>
<td>Haryana</td>
<td>245</td>
<td>256</td>
<td>257</td>
<td>261</td>
<td>263</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>273</td>
<td>276</td>
<td>278</td>
<td>252</td>
<td>353</td>
</tr>
</tbody>
</table>

6. The total number of various crimes in Himachal Pradesh is :
   (1) 37803
   (2) 38903
   (3) 37903
   (4) 36903
   (5) 37003

   Solution : 4
   (4) ; Required number
   \[= 10545 + 3652 + 12224 + 354 + 10128\]
   \[= 36903\]

7. Find the ratio of stalking and assault in Uttar Pradesh to theft and criminal
tresspass in Haryana.

(1) 28 : 51
(2) 21 : 52
(3) 52 : 21
(4) 14 : 55
(5) 55 : 14

Solution : 2
(2) : Required ratio = \(\frac{85 + 125}{257 + 263}\)
\[= \frac{210}{520} = 21 : 52\]

8. Find the approximate average of murder and theft in all the eight states together.

(1) 1141
(2) 1132
(3) 1311
(4) 941
(5) 1021

Solution : 5
(5) : Average of murders
\[= \frac{132 + 125 + 56 + 354 + 173 + 764 + 261 + 252}{8}\]
\[= \frac{2117}{8} = 264.625\]

Average of thefts
\[= \frac{265 + 216 + 53 + 12224 + 252 + 675 + 257 + 278}{8}\]
\[= \frac{14220}{8} = 1777.5\]

:. Required average = \(\frac{(264.625 + 1777.5)}{2}\)
\[= \frac{2042.12}{2}\]
\[= 1021.06 \approx 1021\]

9. The total number of assaults and murders together in Bihar is what percent of the total number of crimes in that state?

(1) 29.82%
(2) 39.82%
(3) 25%
(4) 21.82%
(5) 25.5%

Solution: 2
(2); Number of assaults and murders
\[ = 496 + 132 = 628 \]
Total number of crimes
\[ = 352 + 496 + 265 + 132 + 332 \]
\[ = 1577 \]
\[ \therefore \text{Required percentage} = \frac{628}{1577} \times 100 = 39.82\% \]

10. Find the difference between the number of various crimes committed in Bihar and that in Rajasthan.
(1) 105
(2) 98
(3) 145
(4) 139
(5) 104

Solution: 3
(3); Total number of crimes in Bihar = 1577
and the total number of crimes in Rajasthan
\[ = 273 + 276 + 278 + 252 + 353 = 1432 \]
\[ \therefore \text{Required difference} = 1577 - 1432 = 145 \]

Directions (11-15): What should come in the place of question marks (?) in the following questions?

11. \[ 4376 + 3209 - 1784 + 97 = 3125 + ? \]
(1) 2713
(2) 2743
(3) 2773
(4) 2793
(5) 2737

Solution: 3
(3); \[ 4376 + 3209 - 1784 + 97 = 3125 + ? \]
\[ 7682 - 1784 = 3125 + ? \]
\[ 5898 - 3125 = ? \]
\[ \therefore ? = 2773 \]
12. \( \sqrt{?} + 14 = \sqrt{2601} \)
   (1) 1521
   (2) 1369
   (3) 1225
   (4) 961
   (5) 1296

Solution: 2
(2) \( \sqrt{?} + 14 = \sqrt{2601} \)
    \( \sqrt{?} + 14 = 51 \)
    \( \sqrt{?} = 37 \)
    \( ? = (37)^2 \)
    \( ? = 1369 \)

13. 85% of 420 + ? % of 1080 = 735
   (1) 25
   (2) 30
   (3) 35
   (4) 40
   (5) 45

Solution: 3
(3) \( 420 \times \frac{85}{100} + 1080 \times \frac{?}{100} = 735 \)
    \( 1080 \times \frac{?}{100} = 735 - 357 \)
    \( ? = \frac{378 \times 100}{1080} \)
    \( ? = 35 \)

14. \( \frac{7}{3} \) of \( \frac{5}{4} \) of 3024 = ?
   (1) 8920
   (2) 8940
   (3) 8960
   (4) 8820
   (5) 8640

Solution: 4
15. $30\%$ of $1225 - 64\%$ of $555 = ?$
(1) 10.7
(2) 12.3
(3) 13.4
(4) 17.5
(5) None of these

Solution:
\[
2 \times \left( \frac{30}{100} \times 1225 - \frac{64}{100} \times 555 \right) = ?
\]
\[
367.5 - 355.2 = ?
\]
\[
? = 12.3
\]

16. How many litres of water should be added to a 30 litre mixture of milk and water containing milk and water in the ratio of $7 : 3$ such that the resultant mixture has 40% water in it?
(1) 5 litre
(2) 2 litre
(3) 3 litre
(4) 8 litre
(5) 7 litre

Solution:
\[
1
\]
(1) Let the quantity of added water = x litre
Quantity of milk in the mixture
\[= 30 \times \frac{7}{10} = 21 \text{ litre}\]
Quantity of water in the mixture
\[= 30 \times \frac{3}{10} = 9 \text{ litre}\]
According to question,
\[
\frac{9 + x}{30 + x} = \frac{40}{100}
\]
\[
\frac{9 + x}{30 + x} = \frac{2}{5}
\]
\[
45 + 5x = 60 + 2x
\]
\[
x = 15
\]
\[x = 5 \text{ litre}\]

17. The SI on certain sum of money for 15 months at rate of 7.5% per annum exceed the SI on same sum at 12.5% per annum for 8 months by Rs. 3,250/-, find the sum.
(1) Rs.1,60,000/-
(2) Rs.20,000/-
(3) Rs.1,70,000/-
(4) Rs.18,000/-
(5) Rs. 3,12,000/-

Solution : 5
(5) Let the sum be ₹P.
According to question,
\[
\frac{P \times 7.5 \times 15}{100 \times 12} - \frac{P \times 12.5 \times 8}{100 \times 12} = 3250
\]
\[
112.5P - 100P = 3250 \times 1200
\]
\[
12.5P = 3250 \times 1200
\]
\[
P = \frac{3250 \times 1200}{12.5}
\]
\[P = ₹3,12,000/-\]

18. 4 men and 3 women finish a job in 6 days, and 5 men and 7 women can do the same job in 4 days. How long will 1 man and 1 woman take to do the work?
(1) 22 2/7 days
(2) 25 1/2 days
(3) 5 1/7 days
(4) 12 7/22 days
(5) None of these

Solution : 1
(1): Let the time taken to complete the work = x days

According to question,
\[(4 \text{ Men} + 3 \text{ Women}) \times 6 = (5 \text{ Men} + 7 \text{ Women}) \times 4\]
\[12 \text{ Men} + 9 \text{ Women} = 10 \text{ Men} + 14 \text{ Women}\]
\[2 \text{ Men} = 5 \text{ Women}\]
\[4 \text{ Men} = 10 \text{ Women}\]

Again according to question,
\[(10 + 3) \times 6 = \left(\frac{5}{2} + 1\right) \times x\]
\[78 = \frac{7}{2} \times x\]
\[x = \frac{156}{7}\]
\[x = 22\frac{2}{7} \text{ days}\]

19. A and B started a business with initial investments in the ratio 5 : 7. If after one year their profits were in the ratio 1 : 2 and the period for A’s investment was 7 months, B invested the money for:
(1) 6 months 1
(2) 2 1/2 months
(3) 10 months
(4) 4 months
(5) 7 months

Solution : 3
(3): Let B invested the money for x months.

Ratio of investments of A and B = (5 \times 7) : (7 \times x)
\[= 35 : 7x\]

According to question,
\[
\begin{align*}
35 &= 1 \\
7x &= 2 \\
x &= 10 \text{ months}
\end{align*}
\]

20. An army lost 10% its men in war, 10% of the remaining due to diseases and 10% of the rest were disabled. Thus, the strength was reduced to 729000 active men. Find the original strength.
1. Let the original strength of men in army = $x$

Number of rest men after war

$= x - x \times \frac{10}{100} = \frac{9x}{10}$

Now, due to disease, rest men

$= \frac{9x}{10} - \frac{9x}{100} = \frac{81x}{100}$

Now, after disabled, rest men

$= \frac{81x}{100} - \frac{81x}{1000} = \frac{729x}{1000}$

According to question,

$\frac{729}{1000} x = 729000$

$x = 1000000$

\[ \therefore \text{Original strength of men} = 1000000 \]

21. What is the difference between the compound interests on 5,000/- for 1 year at 4% per annum compounded yearly and half-yearly?

(1) 2/-

(2) 3/-

(3) 4/-

(4) 8/-

(5) None of these

Solution : 1

(1) Required difference

$= 5000 \left[ \left( 1 + \frac{4}{2 \times 100} \right)^2 - 1 \right]$

$- 5000 \left[ \left( 1 + \frac{4}{100} \right)^1 - 1 \right]$

$= 5000 \left[ \left( \frac{51}{50} \right)^2 - 1 \right] - 5000 \left[ \left( \frac{26}{25} \right)^1 - 1 \right]$

$= 5000 \left[ \frac{2601 - 2500}{2500} \right] - 5000 \left[ \frac{26 - 25}{25} \right]$

$= 202 - 200 = \text{₹} 2$
22. The speeds of John and Max are 30 km/h and 40 km/h respectively. Initially, Max is at a place L and John is at a place M. The distance between L and M is 650 km. John started his journey 3 hours earlier than Max to meet each other. If they meet each other at a place P somewhere between L and M, then the distance between P and M is:
(1) 220 km
(2) 250 km,
(3) 330 km
(4) 320 km
(5) None of these

Solution: 3

\[ \text{Distance travelled by John in 3 hours} = 30 \times 3 = 90 \text{ km} \]

\[ \text{Remainder distance} = 650 - 90 = 560 \text{ km} \]

\[ \text{Time taken by Max and John to meet at point P} = \frac{560}{40} + \frac{560}{30} = 8 + \frac{560}{30} = 8 + \frac{8}{5} = 8 + 1.6 = 9.6 \text{ hours} \]

\[ \text{Total time taken by John to reach point P} = 9.6 + 3 = 11 \text{ hours} \]

\[ \text{Distance travelled by John in 11 hours} = 11 \times 30 = 330 \text{ km} \]

23. The average weight of boys in a class is 30 kg and the average weight of girls in the same class is 20 kg. If the average weight of the whole class is 23.25 kg, what could be the possible strength of boys and girls respectively in the same class?
(1) 14 and 26
(2) 13 and 27
(3) 17 and 27
(4) 19 and 21
(5) None of these
**Solution : 2**

(2): Let the number of boys in the class = \(x\)
and the number of girls in the class = \(y\)

According to question,
\[
23.25(x + y) = 30x + 20y
\]
\[
30x - 23.25x = 23.25y - 20y
\]
\[
6.75x = 3.25y
\]
\[
\frac{x}{y} = \frac{325}{675} = \frac{13}{27}
\]

Hence, possible strength of boys and girls could be 13 and 27 respectively.

---

24. A profit of 8% is made by selling a shirt after offering a discount of 12%. If the marked price of the shirt is Rs.1,080/-, find its cost price.

(1) Rs.890/-
(2) Rs. 780/-
(3) Rs.880/-
(4) Rs.900/-
(5) None of these

**Solution : 3**

(3): We know that,

Cost price = Marked price \( \times \left( \frac{100 - \text{Discount percent}}{100 + \text{Profit percent}} \right) \)

\[
= 1080 \times \left( \frac{100-12}{100+8} \right)
\]
\[
= 1080 \times \frac{88}{108}
\]
\[
= 880/-
\]

---

25. The difference between \(\frac{4}{5}\) of a number and 45% of the number is 56. What is 65% of the number ?

(1) 96
(2) 104
(3) 112
(4) 120
(5) None of these

Note: The information provided here is only for reference. This may vary the original.
26. A man can row 24 km upstream and 54 km downstream in 6 hours. He can also row 36 km upstream and 48 km downstream in 8 hours. What is the speed of the man in still water?
(1) 18.75 km/h
(2) 19.25 km/h
(3) 17.65 km/h
(4) 15.55 km/h
(5) 22.75 km/h

Solution : 2
(2) : Let the speed of man upstream = \(x\) km/h
and the speed of man downstream = \(y\) km/h

According to question,
\[
\frac{4}{5} x + \frac{9}{20} y = 6
\]
...\(i\)

\[
\frac{4}{5} + \frac{9}{y} = 1
\]

and
\[
\frac{36}{x} + \frac{48}{y} = 8
\]
\[
\frac{9}{x} + \frac{12}{y} = 2
\]
...\(ii\)

Solving equations (i) and (ii), we get
\[
x = \frac{11}{2}, \quad y = 33
\]
27. The numerator of a fraction is decreased by 25% and the denominator is increased by 250%. If the resultant fraction is 6/5 what is the original fraction?
(1) 22/5
(2) 24/5
(3) 27/6
(4) 28/5
(5) 30/11

**Solution:**
(4) Let the original fraction be \( \frac{x}{y} \)
According to question,
\[
\begin{align*}
\frac{x - x \times \frac{25}{100}}{y + y \times \frac{250}{100}} &= \frac{6}{5} \\
\frac{75x}{350y} &= \frac{6}{5} \\
\frac{x}{y} &= \frac{28}{5}
\end{align*}
\]

28. What would be the area of a rectangle whose area is equal to the area of a circle of radius 7 cm?
(1) 77 cm²
(2) 154 cm²
(3) 184 cm²
(4) 180 cm²
(5) 150 cm²

**Solution:**
29. In a village, three people contested for the post of Village Pradhan. Due to their own interest, all the voters voted and no one vote was invalid. The losing candidate got 30% votes. What could be the minimum absolute margin of votes by which the winning candidate led by the nearest rival, if each candidate got an integral percent of votes?

(1) 4
(2) 2
(3) 1
(4) 3
(5) None of these

Solution: 2

Let total number of voters in village = 100
Losing candidates got number of votes = 30% of 100 = 100 × \(\frac{30}{100}\) = 30

:. Remaining two candidates got number of votes = 100 - 30 = 70
Now, by hit and trial, winning candidate got number of votes = 36
and the nearest rival got number of votes = 70 - 36 = 34

:. Absolute margin of votes = 36 - 34 = 2

30. The price of an article is first increased by 20% and later on decreased by 25% due to reduction in sales. Find the net percentage change in final price of article.

(1) 20%
(2) 18%
(3) 38%
(4) 10%
(5) None of these

Solution: 4
(4) Let the initial price of an article = ₹x

According to question,
Price of article after change

\[ \text{Price} = x \times \frac{120}{100} \times \frac{75}{100} \]
\[ = x \times \frac{9 \times x}{10} \]
\[ = \frac{9x}{10} \]

\[ \therefore \text{Required percentage} = \frac{x - \frac{9x}{10}}{x} \times 100 \]
\[ = \frac{x}{10} \times x \]
\[ = 10\% \]

Directions (31-35) : What will come in the place of question mark (?) in the following number series ?

31. 48, 23, ?, 4.25, 1.125
   (1) 10.5
   (2) 10
   (3) 2.5
   (4) 11
   (5) None of these

Solution : 1

32. 2, 15, 41, 80, 132, ?
   (1) 197
   (2) 150
   (3) 178
   (4) 180
   (5) None of these

Solution : 1
33. ? , 15 , 75 , 525 , 4725 , 51975
   (1) 5
   (2) 10
   (3) 8
   (4) 6
   (5) None of these

   Solution : 1
   (1) : 5, 15, 75, 525, 4725, 51975
   \[
   \begin{align*}
   \times 3 & \quad \times 5 & \quad \times 7 & \quad \times 9 & \quad \times 11 \\
   \end{align*}
   \]

34. 4, 19, 49, ?, 229
   (1) 75
   (2) 109
   (3) 65
   (4) 169
   (5) None of these

   Solution : 2
   (2) : 4, 19, 49, 109, 229
   \[
   \begin{align*}
   +15 & \quad +30 & \quad +60 & \quad +120 \\
   \times 2 & \quad \times 2 & \quad \times 2 \\
   \end{align*}
   \]

35. 840, ?, 420, 140, 35, 7
   (1) 408
   (2) 840
   (3) 480
   (4) 804
   (5) None of these

   Solution : 2
(2) \[ \begin{array}{cccccc}
840 & 840 & 420 & 140 & 35 & 7 \\
\times 1 & \times \frac{1}{2} & \times \frac{1}{3} & \times \frac{1}{4} & \times \frac{1}{5}
\end{array} \]
REASONING

Directions (01-05): To answer these questions study carefully the following arrangement of letters, digits and symbols.

M 7 ∑ 8 L P @ ? 6 N B T Y 3 2 = E $ 4 9 © G H 5

1. How many such letters are there in the arrangement each of which is immediately followed by a number?
   (1) Three
   (2) Four
   (3) One
   (4) Two
   (5) None of these

   Solution : 1
   (1) ; M 7 ∑ 8 L P @ ? 6 N B T Y 3 2 = E $ 4 9 © G H 5

2. How many such symbols are there in the arrangement each of which is immediately preceded by a number?
   (1) Two
   (2) Three
   (3) Four
   (4) Nil
   (5) None of these

   Solution : 2
   (2) ; M 7 ∑ 8 L P @ ? 6 N B T Y 3 2 = E $ 4 9 © G H 5

3. If all the symbols are deleted from the arrangement, then which of the following will be fourth to the left of the 17th element from the left end?
   (1) 9
   (2) E
   (3) 2
   (4) Y
   (5) None of these

   Solution : 2
   (2) ; According to question, deleting all the symbols
   M 7 8 L P 6 N B T Y 3 2 E 4 9 G H 5
4. ’78’ is to ‘P?6’ and ‘?N’ is to ‘T32’ in the same way as ‘2E’ is to............in the arrangement.
   (1) 4©H
   (2) 49G
   (3) 4©G
   (4) 9GH
   (5) None of these
   **Solution : 3**

5. If all the numbers are deleted from the arrangement then which of the following will be fifth to the right of the 13th element from the right end ?
   (1) B
   (2) N
   (3) Y
   (4) T
   (5) None of these
   **Solution : 4**
   (4) ; According to question, deleting all numbers
   M Σ L P @ ? N B T Y =E $ © G H

**Directions (06-10) :** In these questions, a relationship between different elements is shown in the statements. The statements are followed by two conclusions.
Give answer :
(1) If only conclusion I is true
(2) If only conclusion II is true
(3) If either conclusion I or II is true
(4) If neither conclusion I nor II is true
(5) If both conclusions I and II are true

6. **Statements :** A>B>C<D, C = E > G
   **Conclusions :**
   I. D > E
   II. B > E
   **Solution : 5**
(5) Statements: \( A > B > C < D \)
\[ C = E > G \]
\[ E = C < D \]
\[ B > C = E \]
Conclusions:
I. \( D > E \) → True
II. \( B > E \) → True

7. Statements: \( P > Q > M > N, Q = S \)
Conclusions:
I. \( S > P \)
II. \( N < S \)
Solution: 2
(2) Statements: \( P > Q > M > N, \)
\[ Q = S \]
\[ P > Q = S > M > N \]
Conclusions:
I. \( S > P \) → False
II. \( N < S \) → True

8. Statement: \( S > M = Z > T < Q > V \)
Conclusions:
I. \( V = S \)
II. \( Q > M \)
Solution: 4
(4) Statements: \( S > M = Z > T < Q < V \)
Conclusions:
I. \( V = S \) → False
II. \( Q > M \) → False

9. Statement: \( T < U = V < S > P > Q \)
Conclusions:
I. \( S > T \)
II. \( V < Q \)
Solution: 1
(1) Statements: \( T < U = V < S > P > Q \)
Conclusions:
I. \( S > T \) → True
II. \( V < Q \) → False
10. **Statements**: M<N>R>W, E=J>L>W  
**Conclusions**:  
I. E > W  
II. M > L

**Solution**:

(1) **Statements**: M < N > R > W  
E = J > L > W  
M < N > R > W > L  

**Conclusions**: I. E > W → True  
II. M > L → False

---

**Directions (11-20)**: The following questions are based on the five three-digit numbers given below. 684 512 437 385 296

11. If 2 is added to the first digit of each of the numbers, how many numbers thus formed will be divisible by three?  
(1) None  
(2) One  
(3) Two  
(4) Three  
(5) None of these

**Solution**:

(2)  

<table>
<thead>
<tr>
<th>Numbers</th>
<th>Original</th>
<th>New Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>684</td>
<td></td>
<td>884</td>
</tr>
<tr>
<td>512</td>
<td></td>
<td>712</td>
</tr>
<tr>
<td>437</td>
<td></td>
<td>637</td>
</tr>
<tr>
<td>385</td>
<td></td>
<td>585</td>
</tr>
<tr>
<td>296</td>
<td></td>
<td>496</td>
</tr>
</tbody>
</table>

12. If all the digits in each of the numbers are arranged in descending order within the numbers, which of the following will be the highest number in the new arrangement of numbers?  
(1) 684  
(2) 385  
(3) 296  
(4) 437.  
(5) None of these

**Solution**:

(3)
13. What will be the resultant number if the second digit of the second lowest number is divided by the third digit of the highest number?

(1) 2
(2) 3
(3) 0
(4) 1
(5) 4

**Solution:**

(1) Highest number = 684
Second lowest number = 385
\[ \therefore \text{Required number} = \frac{8}{4} = 2 \]

14. If 1 is added to the first digit and 2 is added to the last digit of each of the numbers then which of the following numbers will be the second highest number?

(1) 385
(2) 684
(3) 437
(4) 296
(5) 512

**Solution:**

(5) According to question,

<table>
<thead>
<tr>
<th>6 8 4</th>
<th>5 1 2</th>
<th>4 3 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1</td>
<td>+2</td>
<td>+1</td>
</tr>
<tr>
<td>7 8 6</td>
<td>6 1 4</td>
<td>5 3 9</td>
</tr>
</tbody>
</table>

15. If in each number the first and second digits are ‘interchanged’ then which will be the highest number?
Directions (16-17): Study the following information carefully and answer the questions given below.
P is to the North of Q and S is to the East of P, who is to the South of W. T is to the West of P.

16. Who among the following is towards South of W and North of Q?
   (1) P
   (2) T
   (3) S
   (4) Q
   (5) None of these

   Solution: 5

   17. W is in which direction with respect to T?
      (1) North
Directions (18-22): Study the following information carefully and answer the questions given below.

Dhondu, Chintu, Titu, Chiku, Sonu, Monu, Bittu and Sonty are sitting around a circular table facing the centre. Sonty is third to the right of Titu and second to the left of Sonu. Chintu is not an immediate neighbour of Sonty or Titu. Monu is second to the right of Chiku and is the immediate neighbour of Titu. Bittu is not the immediate neighbour of Sonu.

18. Who amongst the following is second to the tight of Titu?
(1) Sonty
(2) Bittu
(3) Monu
(4) Sonu
(5) None of these

Solution : 2

Note: The information provided here is only for reference. This may vary the original.
19. Who amongst the following is an immediate neighbour of Sonty and Sonu?
   (1) Dhondu
   (2) Chintu
   (3) Titu
   (4) Bittu
   (5) None of these
   \textbf{Solution : 1}

20. In which of the following pairs the second person is sitting on the immediate right
    of the first person?
   (1) Dhondu, Sonty
   (2) Titu, Chiku
   (3) Bittu, Sonty
   (4) Sonu, Sonty
   (5) Monu, Titu
   \textbf{Solution : 3}

21. Who amongst the following is second to the left of Chintu?
   (1) Titu
   (2) Sonty
   (3) Monu
   (4) Dhondu
   (5) None of these
   \textbf{Solution : 4}

22. Who amongst the following is opposite to Chiku?
   (1) Dhondu
   (2) Bittu
   (3) Sonty
   (4) Sonu
   (5) None of these
   \textbf{Solution : 3}
Directions (23-27): Study the following information carefully to answer the given questions.

Seven neighbours S, P, L, Q, R, M and I live on different floors in the same building having seven floors numbered one to seven. (The first floor is numbered one, the floor above it, is numbered two and so on till the topmost floor is numbered as seven.) Three persons live between I and M. M lives on the floor above S, who does not live on an odd-numbered floor. P neither lives on an odd numbered nor on topmost floor. R does not live on the first floor. Two persons live between I and S. Q lives neither on the first floor nor on the third floor.

23. Who lives on the floor just above M?
   (1) I
   (2) P
   (3) Q
   (4) R
   (5) None of these

Solution: 3

24. How many persons live between L and P?
   (1) None
   (2) One
   (3) Two
   (4) Three
   (5) Can’t be determined

Solution: 3

25. Which of the following pairs live on the first floor and the topmost floor respectively?
   (1) L, Q
   (2) Q, P
   (3) I, Q
   (4) L, I
   (5) Can’t be determined

Solution: 1
26. Who amongst the following lives on the topmost floor?

(1) I
(2) Q
(3) P
(4) L
(5) None of these

Solution: 2

27. Which of the following combinations is true?

(1) First floor-S
(2) Fourth floor-R
(3) Third floor-M
(4) Sixth floor-I
(5) None of the above

Solution: 5

28. How many pairs of letters are there in the word (in forward direction) APPLICATION, each of which have as many letters between them in the word as they have between them in the English alphabet?

(1) One
(2) Two
(3) Three
(4) Four
(5) None of these

Solution: 1

(1); A P P L I C A T I O N

:. Required pair = {AI}

29. In a certain coding system, PAPER is written as PERPA and SUBJECT is written as JECTSUB, what should be the code for COUNCIL?

(1) NCILCOU
(2) LICNOUC
(3) NCOUCIL

Note: The information provided here is only for reference. This may vary the original.
30. In a certain code language, `lu ja ka hu' means ‘will you meet us’, `lu ka hu pa’ means ‘will you sold us’. Then what is the code of ‘meet’ in this code language?
(1) ja
(2) lu
(3) ka
(4) hu
(5) Cannot be determined

Solution : 1
(1) ; lu / ka / hu → will / you / us
   pa → sold
   ja → meet

31. In a certain code language, COMBINE is written as XLNYRMV. How will TOWARDS be written in that code language?
(1) FLDZIWH
(2) GLDZIWH
(3) GLEZJWH
(4) FLEZIWH
(5) None of these

Solution : 2
32. 37 girls are standing in a row facing the school building. Ayesha is fifteenth from the left end. If she is shifted six places to the right, what is her position from the right end?
(1) 16th
(2) 21st
(3) 20th
(4) 18th
(5) None of these

Solution: 5
(5); Present position of Ayesha,
\[ = 15 + 6 = 21 \text{th} \ \text{(From left)} \]
\[ \therefore \ \text{Position of Ayesha from right} \]
\[ = 37 - 21 + 1 = 17 \text{th} \]

33. X’s mother is the mother-in-law of the father of Z. Z is the brother of Y while X is the father of M. How is X related to Z?
(1) Paternal uncle
(2) Maternal uncle
(3) Cousin
(4) Grandfather
(5) Brother-in-law

Solution: 1
(1); 
```
X's Mother

Son

Father

Brother

Z's Mother

Z's Father

M
```

Note: The information provided here is only for reference. This may vary the original.
34. If A is the brother of B, C is the sister of A, D is the brother of E, E is the daughter of B, F is the father of C, who is the uncle of D?

(1) A
(2) C
(3) B
(4) None of these
(5) Can’t be determined

**Solution:**

![Family Tree Diagram](image)

(1) ;

35. A said to B that B’s mother was the mother-in-law of A’s mother. How is A’s mother related to B’s mother?

(1) Daughter-in-law
(2) Mother-in-law
(3) Sister
(4) Aunt
(5) None of these

**Solution:**

![Family Tree Diagram](image)

(1) ; B’s Mother

Daughter-in-law

B Wife A’s Mother

A