

IBPS BANK PO (PRELIMINARY EXAM), 23-10-2016 - PREVIOUS YEAR PAPER

ENGLISH LANGUAGE

Directions (1-10) : In these questions, read the sentence to find out whether there is any grammatical error in it. The error, if any, will be in one part of the sentence. Mark that part with the error as your answer. If there is no error, mark 'No error' as your answer. (Ignore the errors of punctuation, if any.)

1. A lot of research has been (1)/ conducted on the field human (2)/ resources for understanding what creates (3)/ work culture in an organisation. (4)/ No error(5)

Ans. - 3

Use "to understand" in place of "for understanding".

2. During our visit to the hill station, we (1)/ came across signboards which read that (2)/ the area where we was (3)/ under observation by the neighbouring country. (4)/ No error(5)

Ans. - 3

Use "were" in place of "was".

3. No matter what people opine about (1)/ the stern measures taken against (2)/ traffic signal violators, taking such an (3)/ action have been pending since long. (4)/ No error(5)

Ans. - 4

Use "has" in place of "have".

4. Though these buildings have been given (1)/ clearance by fire safety officials, any (2)/ layman can understand that hardly (3)/ any fire safety norms have followed. (4)/ No error(5)

Ans. - 4

Use "have been followed" in place of 'have followed'.

5. Hardly he had entered the building (1)/ when the security guard called and (2)/ informed him that he had left his (3)/ car door open in the parking lot. (4)/ No error(5)

Ans. - 1

Use "Hardly had he" in place of "Hardly he had".

6. The new variety of genetically modified (1)/ crops is being extremely successful in (2)/ curbing the usage of (3)/ pesticides and increasing the per unit output. (4)/ No error(5)

Ans. - 2

Remove "being" from the sentence.

7. Air pollution in the city rises (1)/ beyond the permissible limits every winter (2)/ as the pollutants cannot escape from the (3)/ atmosphere due to radial inversion. (4)/ No error(5)

Ans. - 5

No error

8. Globally, the Indian market is the second (1)/ largest user of mobile phones, with more than (2)/ a billion people using mobile (3)/ phones for calling and internet purposes. (4)/ No error(5)

Ans. - 5

No error

9. After having working for five (1)/ years in a private firm, Karan (2)/ got down to preparing for (3)/ various bank entrance examinations. (4)/ No error(5)

Ans. - 1

Use "Having worked" in place of "After having working".

10. Those who want to do good are (1)/ neither selfish nor in a hurry because (2)/ they know what it requires a long (3)/ time to impregnate people with good. (4)/ No error(5)

Ans. - 3

Use "that" in place of 'what'.

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

A. Moreover, the number of licence-holders has risen even faster, one in five Chinese now has a licence.

B. Apart from the fact that the country's population is so large, most of these

accidents have to do with the fact that China is so new to the business of driving cars.

C. Accidents are a common sight on the roads of China for many reasons.

D. In 2015, it added more cars to its roads than were driving in the whole country in 1999.

E. Economic rise has played a large part in all these developments.

F. In the rich world, where this economic rise has already taken place, the number of licence-holder is flat or falling.

11. Which of the following should be the FIFTH sentence after the rearrangement ?

- (1) E
- (2) D
- (3) A
- (4) F
- (5) C

Ans. - 1

12. Which of the following should be the SIXTH sentence after the rearrangement ?

- (1) E
- (2) D
- (3) A
- (4) B
- (5) F

Ans. - 5

13. Which of the following should be the FIRST sentence after the rearrangement ?

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

Ans. - 2

14. Which of the following should be the SECOND sentence after the rearrangement ?

- (1) A
- (2) B
- (3) F
- (4) D
- (5) E

Ans. - 2

15. Which of the following should be the FOURTH sentence after the rearrangement ?

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

Ans. - 1

Directions (16-22) : *Read the following passage and answer the given questions.*

After the Second World War, the leaders of the Western world tried to build institutions to prevent the conflicts of the preceding decades from recurring. They wanted to foster both prosperity and interdependence, to 'make war not only unthinkable but materially impossible'. Their work bore fruit. Expanded global trade has raised incomes around the world. While globalisation is sometimes portrayed as a corporate plot against the workers; that was not how it was seen before 1914. British trade unions were in favour of free trade, which kept down food prices for their members and also opened up markets for the factories in which they worked. Yet, as the Brexit vote demonstrates globalisation now seems to be receding. Most economists have been blindsided by the backlash. Free trade can be a hard sell politically. The political economy of trade is treacherous. Its benefits, though substantial, are dilute, but its costs are often concentrated. This gives those affected a strong incentive to push for protectionism. Globalisation itself thus seems to create forces that erode political support for integration.

Deeper economic integration required harmonisation of laws and regulations across countries. Differences in rules on employment contracts or product safety requirements, for instance, act as barriers to trade. Trade agreements like the Trans-Pacific Partnership focus more on "non-tariff barriers" than they do on tariff reduction. The net impact of this is likely to be that some individuals, consumers and businesses are not likely to be as benefitted as others and given rise to discontent. Thus the consequences of such trade agreements often run counter to popular preferences. Joseph Stiglitz, a Nobel Prize winner, has warned that companies influence over trade rules harms workers and erodes support for trade

liberalisation. Clumsy government efforts to compensate workers hurt by globalisation contributed to the global financial crisis, by facilitating excessive household borrowing, among other things.

Researchers have also documented how the cost of America's growing trade with

China has fallen disproportionately on certain American cities. Such costs perpetuate a cycle of globalisation. Periods of global integration and technological progress generate rising

inequality, which inevitably triggers two countervailing forces, one beneficial and one harmful. On the one hand, governments tend to respond to rising inequality by increasing redistribution and investing in education, on the other, inequality leads to political upheaval and war. The first great era of globalisation, which ended in 1914, gave way to a long period of declining inequality, in which harmful forces played a bigger role than beneficial ones.

History might repeat itself, he warns. Such warnings do not amount to arguments against globalisation. As many economists are quick to note, the benefits of openness are massive. It is increasingly clear, however, that supporters of economic integration underestimated the risks both that big slices of society would feel left behind and that nationalism would continue to provide an alluring alternative. Either error alone might have undercut support for globalisation and the relative peace and prosperity it has brought in combination, they threaten to reverse it.

16. What can be concluded from the example of Britain cited in the passage ?

- (1) Countries which previously supported globalisation no longer do.
- (2) Trade unions are losing their influence.
- (3) Agriculture has suffered in most developed countries.
- (4) Britain has not recovered from the financial crisis.
- (5) Technological progress boosts economic growth tremendously.

Ans. - 4

17. Which of the following has/have been the outcome(s) of global integration ?

A. Laws have become fairer for all. B Trade unions have become more peaceful.

C. Trade has grown substantially.

- (1) Only C
- (2) Only A
- (3) Only A and B
- (4) Only A and C
- (5) All A, B and C

Ans. - 1

18. Which of the following is the author's view of Trans-Pacific Partnership ?

- (1) It is likely to face opposition.
- (2) It will be proved beneficial to all workers.
- (3) It will reduce tariffs effectively.
- (4) Trade with China will suffer.
- (5) None of the given options

Ans. - 1

19. Which of the following is true in the context of the passage ?

- (1) The first era of a globalisation resulted in a decline in inequality.
- (2) Governments are making efforts to help workers hurt by globalisation.
- (3) Standardising policy regulations will boost economic integration.
- (4) Technology has exacerbated the ill-effects of globalisation.
- (5) All of the given options are true in the context of the passage.

Ans. - 5

20. Which of the following best explains the phrase "Such warnings do not amount to arguments against globalisation" in the context of the passage ?

- (1) Most economists are unnecessarily alarmist about globalisation.
- (2) Globalisation is beneficial to all.
- (3) Do not do away with globalisation but take concerns about globalisation seriously.
- (4) Politicians warn against globalisation during elections but actually support it.
- (5) We cannot reverse globalisation but we must stall it.

Ans. - 3

21. Which of the following can be said about America's trade with China ?

- (1) America's discontent against globalisation has fallen.
- (2) Worker's wages have risen tenfold.
- (3) America has been badly hit by the slowdown in China.
- (4) It has been especially harmful for certain American cities.
- (5) None of the given options can be said.

Ans. - 5

22. Which of the following is the central idea of the passage ?

- (1) Protectionism is the only way for developed countries to retain stability.
- (2) Globalisation is receding and its decline should be speeded up.
- (3) While politicians are in favour of globalisation, economists are not.

- (4) While developed countries are on the decline emerging ones are rising.
(5) The backlash against globalisation is serious and must be handled carefully.

Ans. - 4

Directions (23-30) : *In the given passage, there are blanks, each of which has been numbered. Against each, five words are suggested, one of which fits the blank appropriately.*

Find the appropriate word in each case. The use of technology in education has been present throughout history. Over the last century, schools have modified their ...(23)... to teaching as well as the methods that are used to enhance student learning. Chalk and slate were at one time the newest technology. From there, technological changes have gone from film, radio and television to desk-top computers and now into interactive white boards like SMART Technology. The capabilities teachers have with new technology give them the ...(24)... to differentiate lessons for ...(25)... overall learning. Microsoft PowerPoint is one of the most popular technology tools used in any classroom. SMART Technologies has integrated the SMART Board Software with PowerPoint, thus combining the newest technology with the most popular SI. This brief description shows that new technology is being implemented in the classroom. Unfortunately, due to ...(26)... costs, the more advanced the new equipment becomes; the less likely schools are willing to ...(27)... it for their classrooms. ...(28)... sufficient funds, it is difficult for schools to obtain technologically advanced classrooms. SMART Technology is the most recent equipment to enter the classroom. In 2002, SMART Boards ranged from \$999.00 to \$1,999.00, and that was for just the board. If a school wanted to better ... (29)... its finances and purchase the rolling floor stand accessory, which makes the technology more accessible to all teachers. It Would pay an additional amount of somewhere \$425.00 and \$499.00. Any school that desires technology must have capacity to ...(30)... it. However, even with sufficient funds, a technological integration effort is only as strong as the administrative, support behind it.

23. (1) pathway
(2) departure
(3) approach
(4) pedagogy
(5) syllabus

Ans. - 3

24. (1) faculty
(2) lesson
(3) limitation
(4) abundance
(5) ability

Ans. - 5

25. (1) bigger
(2) better
(3) inferior
(4) benefit
(5) alleviated

Ans. - 2

26. (1) much
(2) overhaul
(3) high
(4) hover
(5) humble

Ans. - 3

27. (1) achieve
(2) acquire
(3) archive
(4) excess
(5) disperse

Ans. - 2

28. (1) Without
(2) Following
(3) Despite
(4) Bereft
(5) Unless

Ans. - 1

29. (1) allotment
(2) proportion
(3) allocate
(4) conform
(5) prorata

QUANTITATIVE APTITUDE

Directions (1-5) : In these questions, two equations numbered I and II are given. You have to solve both the equations and mark the appropriate answer.

Give answer :

- (1) If $x < y$
- (2) If $x > y$
- (3) If $x \leq y$
- (4) If $x \geq y$
- (5) If relationship between x and y cannot be determined

1. I. $x^2 - 9x + 18 = 0$

II. $5y^2 - 22y + 24 = 0$

Solution : 2

I. $x^2 - 9x + 18 = 0$

$x^2 - 6x - 3x + 18 = 0$

$x(x - 6) - 3(x - 6) = 0$

$(x - 3)(x - 6) = 0$

$x = 3, 6$

II. $5y^2 - 22y + 24 = 0$

$5y^2 - 10y - 12y + 24 = 0$

$5y(y - 2) - 12(y - 2) = 0$

$(y - 2)(5y - 12) = 0$

$y = 2, \frac{12}{5} \therefore x > y$

2. I. $6x^2 + 11x + 5 = 0$

II. $2y^2 + 5y + 3 = 0$

Solution : 4

I. $6x^2 + 11x + 5 = 0$

$6x^2 + 6x + 5x + 5 = 0$

$6x(x + 1) + 5(x + 1) = 0$

$(x + 1)(6x + 5) = 0$

$x = -1, -\frac{5}{6}$

II. $2y^2 + 5y + 3 = 0$

$2y^2 + 2y + 3y + 3 = 0$

$2y(y + 1) + 3(y + 1) = 0$

$(y + 1)(2y + 3) = 0$

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

$$\therefore x \geq y$$

3. I. $x^2 + 10x + 24 = 0$

II. $y^2 - \sqrt{625} = 0$

Solution : 5

I. $x^2 + 10x + 24 = 0$

$x^2 + 6x + 4x + 24 = 0$

$x(x+6) + 4(x+6) = 0$

$(x+4)(x+6) = 0$

$x = -4, -6$

II. $y^2 - \sqrt{625} = 0$

$y^2 = \sqrt{625}$

$y^2 = 25$

$y = \pm 5$

\therefore Relationship between x and y cannot be determined.

4. I. $10x^2 + 11x + 1 = 0$

II. $15y^2 + 8y + 1 = 0$

Solution : 5

I. $10x^2 + 11x + 1 = 0$

$10x^2 + 10x + x + 1 = 0$

$10x(x+1) + 1(x+1) = 0$

$(x+1)(10x+1) = 0$

$x = -1, -\frac{1}{10}$

II. $15y^2 + 8y + 1 = 0$

$15y^2 + 5y + 3y + 1 = 0$

$5y(3y+1) + 1(3y+1) = 0$

$5y(3y+1)(5y+1) = 0$

$y = -\frac{1}{3}, -\frac{1}{5}$

Relationship between x and y cannot be determined.

5. I. $15x^2 - 11x + 2 = 0$

II. $10y^2 - 9y + 2 = 0$

Solution : 3

I. $15x^2 - 11x + 2 = 0$

$15x^2 - 5x - 6x + 2 = 0$

$5x(3x-1) - 2(3x-1) = 0$

$(3x-1)(5x-2) = 0$

$x = \frac{1}{3}, \frac{2}{5}$ II. $10y^2 - 9y + 2 = 0$

$10y^2 - 5y - 4y + 2 = 0$

$5y(2y-1) - 2(2y-1) = 0$

$$(2y - 1)(5y - 2) = 0$$

$$y = \frac{1}{2}, \frac{2}{5}$$

$$\therefore x \leq y$$

6. The time taken by 24 children to complete a project is twice the time taken by 16 women to complete the same project. If 28 women complete the project in 8 days, how many days will 28 women and 24 children together take to complete the project ?

(1) $6\frac{2}{9}$ days

(2) $5\frac{2}{9}$ days

(3) $5\frac{1}{3}$ days

(4) $6\frac{1}{3}$ days

(5) None of these

Solution : 1

According to question,

$$2 [24 \text{ children}] \equiv 16 \text{ women}$$

$$48 \text{ children} \equiv 16 \text{ women}$$

$$3 \text{ children} \equiv 1 \text{ woman}$$

$$\therefore 28 \text{ women} + 24 \text{ children} \equiv (28 + 8) \text{ women}$$

$$\equiv 36 \text{ women}$$

We know that,

$$M_1 D_1 = M_2 D_2$$

$$28 \times 8 = 36 \times D_2$$

$$D_2 = \frac{28 \times 8}{36} = \frac{56}{9}$$

$$\therefore D_2 = 6\frac{2}{9} \text{ days}$$

7. The circumference of the semi-circle is 108 cm. If the side of a square is 30% more the diameter of the semi-circle, what is the perimeter of the square ?

(1) 226.4 cm

(2) 212.2 cm

(3) 214.6 cm

(4) 224.8 cm

(5) 218.4 cm

Solution : 5

(5) ; Let the radius of semi-circle = r cm

According to question,

$$2r + \pi r = 108$$

$$r \left[2 + \frac{22}{7} \right] = 108$$

$$r = \frac{108 \times 7}{36}$$

$$r = 21 \text{ cm}$$

$$\text{Diameter} = 2r = 2 \times 21 = 42 \text{ cm}$$

$$\begin{aligned}\text{Side of square} &= 42 \times \frac{130}{100} \\ &= 54.6 \text{ cm} \\ \therefore \text{Perimeter of square} &= 4 \times \text{Side} \\ &= 4 \times 54.6 \\ &= 218.4\end{aligned}$$

Directions (8-12) : What approximate value will come in place of question mark (?) in the given questions ? (You are not expected to calculate the exact value.)

8. $\sqrt{227} \times 11.98 \div 19.94 = ?$

- (1) 15
- (2) 18
- (3) 9
- (4) 35
- (5) 27

Solution : 3

$$\begin{aligned}\sqrt{227} \times 11.98 \div 19.94 &= ? \\ ? &\approx \sqrt{225} \times \frac{12}{20} \\ ? &\approx \frac{15 \times 12}{20} \\ ? &\approx 9\end{aligned}$$

9. $130.02 + 241 \div 6 - 165.11 = \sqrt[3]{?}$

- (1) 27
- (2) 125
- (3) 1000
- (4) 64
- (5) 216

Solution : 2

$$\begin{aligned}130.02 + 241 \div 6 - 165.11 &= \sqrt[3]{?} \\ 130 + \frac{240}{6} - 165 &\approx \sqrt[3]{?} \\ 130 + 40 - 165 &\approx \sqrt[3]{?} \\ \sqrt[3]{?} &\approx 170 - 165 \\ \sqrt[3]{?} &\approx 5 \\ ? &\approx (5)^3 \\ ? &\approx 125\end{aligned}$$

10. $40.09\% \text{ of } 80.15 + 60.04\% \text{ of } 160.12 = ?$

- (1) 80

- (2) 160
- (3) 180
- (4) 140
- (5) 128

Solution : 5

$$40.09\% \text{ of } 80.15 + 60.04\% \text{ of } 160.12 = ?$$

$$80 \times \frac{40}{100} + 160 \times \frac{60}{100} \approx ?$$

$$32 + 96 \approx ?$$

$$\therefore ? \approx 128$$

11. $14.08^2 - 3.01 \times 104.11 \div 4.02 = ?$

- (1) 280
- (2) 200
- (3) 160
- (4) 120
- (5) 125

Solution : $14.08^2 - 3.01 \times 104.11 \div 4.02 = ?$

$$196 - 3 \times \frac{104}{4} \approx ?$$

$$196 - 3 \times \frac{104}{4} \approx ?$$

$$? \approx 196 - 78$$

$$? = 118$$

$$? \approx 120$$

12. $\frac{1}{4} \times 117 - \frac{1}{3} \times 16 + ? = 40$

- (1) 35
- (2) 20
- (3) 6
- (4) 17
- (5) 10

Solution : 4

$$\frac{1}{4} \times 117 - \frac{1}{3} \times 16 + ? = 40$$

$$29.25 - 5.33 + ? = 40$$

$$30 - 5 + ? = 40$$

$$? = 40 - 25$$

$$? = 15$$

$$\therefore ? \approx 17$$

13. Ronnie invested Rs.P in a scheme A offering simple interest at 12% p.a. for two years. He invested the whole amount he received from scheme A, in another

scheme B offering simple interest 15% p.a. for two years. If the difference between the interest earned from schemes A and B was Rs.264/-, what is the value of P ?

- (1) Rs.2,640/-
- (2) Rs.2,500/-
- (3) Rs.2,250/-
- (4) Rs.1,800/-
- (5) Rs.2,000/-

Solution : 5

$$\text{Interest received by scheme A} = \frac{P \times 12 \times 2}{100} = \frac{24P}{100}$$

$$= \frac{6}{25}P$$

Total amount received by scheme A = P + Interest

$$= P + \frac{6}{25}P$$

$$= \frac{31}{25}P$$

Interest received by scheme B

$$= \frac{31}{25} \times \frac{P \times 15 \times 2}{100}$$

According to question ,

$$= \frac{31 \times 30P}{2500} - \frac{P \times 12 \times 2}{100} = 264$$

$$\frac{930P - 600P}{2500} = 264$$

$$330P = 264 \times 2500$$

$$P = \frac{264 \times 2500}{330}$$

$$P = \text{Rs. } 2000/-$$

Directions (14-18) : Study the table and answer the given questions.

Data regarding number of students studying in various streams in various universities (St. James, V. K. and DVA) in the year 2009

University	St. James		V.K.		DVA	
	Total Student	Female Students	Total Student	Female Students	Total Student	Female Students
A	2500	2000	1200	600	2400	1500
B	1500	600	1600	500	2000	800
C	900	300	800	300	600	150
D	550	200	500	250	470	200

Note : Total students = Male students + Female students

14. What is the respective ratio between the total number of females studying in stream C in all the universities together and the total number of females studying in stream D in all the universities together ?

- (1) 20 : 13
- (2) 15 : 14
- (3) 5 : 4

(4) 15 : 13

(5) 13 : 11

Solution : 4

Required ratio

$$= (300 + 300 + 150) : (200 + 250 + 200)$$

$$= 750 : 650 = 15 : 13$$

15. Total number of males studying in stream A in all the universities together in 2010 is 1200 more than that in the year 2009. In 2010, what was the total number of students (male + female) studying in stream A in all the universities together, if the total number of male students in stream A in 2010, constituted 50% of the total number of students ?

(1) 6400

(2) 6000

(3) 5000

(4) 5500

(5) 6200

Solution : 1

Number of male students in university A in the year 2009

$$= (2500 - 2000) + (1200 - 600) + (2400 - 1500)$$

$$= 500 + 600 + 900 = 2000$$

Number of male students in university A in the year 2010 = 2000 + 1200 = 3200

$$\therefore \text{Total number of students in university A in the year 2010} = 3200 + 3200 = 6400$$

16. Total number of students studying in streams A and B together in V.K. are what percent less than those studying in same streams together in St. James ?

(1) 35%

(2) 38%

(3) 40%

(4) 52%

(5) 30%

Solution : 5

Required percentage

$$= \frac{[(2500+1500)-(1200+1600)]}{(2500+1500)} \times 100$$

$$= \frac{4000-2800}{4000} \times 100$$

$$= \frac{1200}{40} = 30\%$$

17. What is the average number of male students studying in stream D in all the given universities ?
- (1) 240
 - (2) 210
 - (3) 290
 - (4) 310
 - (5) 280

Solution : 3

Required average

$$= \frac{(550-200)+(500-250)+(470-200)}{3}$$

$$= \frac{350+250+270}{3} = \frac{870}{3} = 290$$

18. Number of students studying in stream C in V.K. is what percent of that studying in stream B in DVA ?
- (1) 35%
 - (2) 38%
 - (3) $41\frac{2}{3}\%$
 - (4) $30\frac{1}{3}\%$
 - (5) 40%

Solution : 5

$$\text{Required percentage} = \frac{800}{2000} \times 100 = 40\%$$

19. The distance between two cities (M and N) is 350 km.

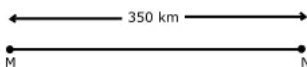
A train starts from city M at 6 a.m. and travels towards city N at 63 kmph.

Another train starts from city N at 7 a.m. and travels towards city M at 77 kmph.

At what time will the trains meet ?

- (1) 5 : 00 a.m.
- (2) 10 : 00 a.m.
- (3) 9 : 03 a.m.
- (4) 8 : 24 a.m.
- (5) 9 : 20 a.m.

Solution : 3



Distance covered by first train in one hour = 63 km

Remaining distance = $350 - 63 = 287$ km

$$\text{Time taken to meet} = \frac{287}{63+77} = \frac{287}{140} = 2\text{hours}3\text{min}$$

Total hours = 1 hour + 2 hours 3 min
 = 3 hours 3 min
 \therefore Required time = 6 a.m. + 3 hours 3 min
 = 9 : 03 a.m.

20. A, B and C started a business with investments of Rs.1,500/-, Rs.550/- and Rs.2,400/- respectively. After 8 months from the start of the business, A and C left and B invested an additional amount of Rs.450/-. If difference between the share in annual profit received by B and the total annual profit was Rs.13,000/-, what was the total annual profit received ?

- (1) Rs.16,500/
 (2) Rs.18,150/-
 (3) Rs.13,200/
 (4) Rs.19,800/-
 (5) Rs.16, 750/-

Solution : 1
 Ratio of investment of A, B and C
 $= 1500 \times 8 : (550 \times 8 + 1000 \times 4) : 2400 \times 8$
 $= 12000 : 8400 : 19200$
 $= 10 : 7 : 16$
 Let total profit = Rs.x
 B's share = $\frac{7x}{33}$
 According to question
 $x - \frac{7x}{33} = 13000$
 $26x = 13000 \times 3$
 $x = \text{Rs.}16,500/-$

Directions (21-25) : What should come in place of question mark (?) in the given number series ?

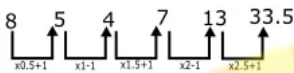
21. 14 15 32 99 ? 2005
 (1) 354
 (2) 372
 (3) 400
 (4) 368
 (5) 324

Solution : 3


22. 8 5 4 7 13 ?

- (1) 31
- (2) 37
- (3) 33.5
- (4) 35.5
- (5) 31.5

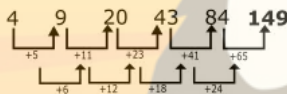
Solution : 3



23. 4 9 20 43 84 ?

- (1) 149
- (2) 157
- (3) 191
- (4) 145
- (5) 137

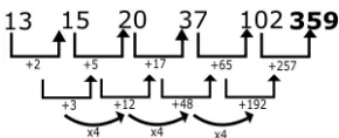
Solution : 1



24. 13 15 20 37 102 ?

- (1) 351
- (2) 359
- (3) 375
- (4) 377
- (5) 363

Solution : 2



25. 69 74 67 78 65

- (1) 85
- (2) 78
- (3) 82
- (4) 84
- (5) 75

Solution : 3



26. In Jar A 140 litre milk was mixed with 40 litre water Some of this mixture was taken out from Jar A and put in Jar B. If after 17 litre milk in Jar B, the resultant ratio between milk and water in jar B was 19 : 3 respectively, what was the amount of mixture that was taken out from Jar A ? (in litre)

- (1) 21
- (2) 36
- (3) 46
- (4) 18
- (5) 27

Solution : 5

Ratio of milk and water in Jar A = 140 : 40 = 7 : 2

Let the quantity of taken out mixture from Jar A = x litre

In x litre mixture,

Quantity of milk = $\frac{7x}{9}$ litre Quantity of water = $\frac{2x}{9}$ litre According to question,

In Jar B,

$$\frac{\text{Milk}}{\text{Water}} = \frac{19}{3}$$

$$\frac{\frac{7x}{9} + 17}{\frac{2x}{9}} = \frac{19}{3}$$

$$21x + 459 = 38x$$

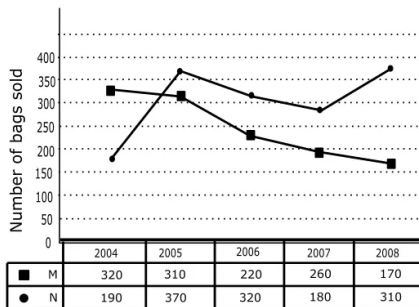
$$38x - 21x = 459$$

$$17x = 459$$

$$x = 27 \text{ litre}$$

Directions (27-31) : Refer to the graph and answer the given questions.

Data related to number of bags sold by two stores (M and N) during 5



27. Number of bags sold by store M decreased by what percent from 2004 to 2006 ?

- (1) $29\frac{3}{4}\%$
- (2) $27\frac{1}{2}\%$
- (3) $31\frac{1}{4}\%$
- (4) $39\frac{1}{4}\%$
- (5) $33\frac{1}{2}\%$

Solution : 3

$$\begin{aligned} \text{Required percentage} &= \frac{320-220}{320} \times 100 \\ &= \frac{1000}{32} = 31\frac{1}{4}\% \end{aligned}$$

28. 58. What is the respective ratio between total number of bags sold by stores M and N together in 2006 and that in 2008 ?

- (1) 13 : 8
- (2) 11 : 9
- (3) 6 : 5
- (4) 9 : 8
- (5) 11 : 8

Solution : 4

$$\text{Required ratio} = \frac{220+320}{170+310} = \frac{540}{480} = 9 : 8$$

29. In 2004, 30% of the bags sold by store M and 40% of the bags sold by store N were leather bags. What was the total number of leather bags sold by stores M and N together in 2004 ?

- (1) 168
- (2) 172
- (3) 184

(4) 164

(5) 176

Solution : 2

$$\begin{aligned}\text{Required number} &= 320 \times \frac{30}{100} + 190 \times \frac{40}{100} \\ &= 96 + 76 = 172\end{aligned}$$

30. If the average number of bags sold by store N in 2007, 2008 and 2009 was 305, what was the number of bags sold by the same store in 2009 ?

(1) 420

(2) 445

(3) 425

(4) 440

(5) 415

Solution : 3

Let the number of bags sold in year 2009 = x

According to question,

$$\frac{180+310+x}{3} = 305$$

$$x = 915 - 490$$

$$x = 425$$

31. What is the difference between total number of bags sold by stores M and N together in 2005 and that in 2007 ?

(1) 250

(2) 240

(3) 210

(4) 260

(5) 290

Solution : 2

$$\begin{aligned}\text{Required difference} &= (310 + 370) - (260 + 180) \\ &= 680 - 440 = 240\end{aligned}$$

32. Three years ago, Manini's age at that time was thrice of Rinu's age at that time. The respective ratio between Rinu's age six years hence and Manini's age eight years hence, will be 3 : 7. What will be Rinu's age two years hence ? (in years)

(1) 20

(2) 26

(3) 29

(4) 32

(5) 23

Solution : 1

Let present age of Rinu = $(x + 3)$ years

Present age of Manini = $(3x + 3)$ years

According to question,

$$\frac{(x+3)+6}{(3x+3)+8} = \frac{3}{7}$$

$$7x + 63 = 9x + 33$$

$$2x = 30 \Rightarrow x = 15 \text{ years}$$

$$\therefore \text{Rinu's age two years hence} = (x + 3) + 2$$

$$= x + 5 = 15 + 5$$

$$= 20 \text{ years}$$

33. The respective ratio between the monthly salary of Neil and that of Dipti is 5 : 6. Neil and Dipti, both save 40% and 25% out of their respective monthly salary. Neil invests $\frac{8}{5}$ th of his savings in LIC and Dipti invests $\frac{3}{5}$ th of her savings in LIC. If Neil invests Rs. 1,750/- more than Dipti in LIC, what is Neil's monthly salary ?

(1) Rs. 20,000/-

(2) Rs. 25,000/-

(3) Rs. 40,000/-

(4) Rs. 15,000/-

(5) Rs. 30,000/-

Solution : 2

Let monthly salary of Neil = Rs. $5x$

and monthly salary of Dipti = Rs. $6x$

$$\text{Neil's } 40\% \text{ saving} = \frac{5x \times 40}{100} = \text{Rs. } 2x$$

$$\text{Dipti's saving} = \frac{6x \times 25}{100} = \text{Rs. } \frac{3x}{2}$$

According to question,

$$\text{Investment of Neil} - \text{Investment of Dipti} = 1750$$

$$2x \times \frac{8}{5} - \frac{3x}{2} \times \frac{3}{5} = 1750$$

$$\frac{5x}{4} - \frac{9x}{10} = 1750$$

$$25x - 18x = 1750 \times 20$$

$$x = \frac{1750 \times 20}{7}$$

$$x = \text{Rs. } 5,000/-$$

$$\therefore \text{Monthly salary of Neil} = 5x$$

$$= 5 \times 5000$$

$$= \text{Rs. } 25,000/-$$

34. Cost price of two beds are equal. One bed is sold at a profit of 25% and the other one for Rs.6,596/- less than the first one. If the overall profit earned after

selling both the beds is 8%, what is the cost price of each bed ?

- (1) Rs. 20,400/-
- (2) Rs. 17,400/-
- (3) Rs. 18,600/-
- (4) Rs. 19,400/-
- (5) Rs. 16,800/-

Solution : 4

Let cost price of each bed = Rs.x

According to question,

$$x \times \frac{125}{100} + \left(x \times \frac{125}{100} - 6596 \right) = 2x \times \frac{108}{100}$$

$$250x - 659600 = 216x$$

$$34x = 659600$$

$$x = \text{Rs. } 19,400/-$$

35. A bag contains 16 eggs out of which 5 are rotten. The remaining eggs are in good condition. If two eggs are drawn randomly, what is the probability that one of the eggs drawn is rotten ?

- (1) $\frac{11}{24}$
- (2) $\frac{13}{24}$
- (3) $\frac{05}{12}$
- (4) $\frac{17}{24}$
- (5) $\frac{7}{12}$

Solution : 1

REASONING

Directions (1-5) : In these questions, relationship between different elements is shown in the statements. The statements are followed by two conclusions. Study the conclusions based on the given **statements** and **select** the appropriate answer.

Give answer :

- (1) If **either** conclusion I or II is true
- (2) If **both** conclusions I and II are true
- (3) If **only** conclusion I is true
- (4) If **only** conclusion II is true
- (5) If **neither** conclusion I nor II is true

(1-2) :

Statements : $L < A = M < P$; $A \leq C < T$; $M \geq O > R$

1. Conclusions :

I. $O < P$

II. $C > L$

Ans. - 2

Conclusions :

I. $O < P \rightarrow \text{True}$

II. $C > L \rightarrow \text{True}$

2. Conclusions :

I. $T < M$

II. $A > R$

Ans. - 4

Conclusions :

I. $T < M \rightarrow \text{False}$

II. $A > R \rightarrow \text{True}$

3. Statements :

$D \geq U = S \geq T$; $O = P \leq S$

Conclusions :

I. $D > P$

II. $P = D$

Ans. - 1

Statements :

$D \geq U = S \geq T$

$O = P \leq S$

$D \geq U = S \geq P$

Conclusions :

I. $D > P$

II. $P = D$ (Either I or II is true)

(4 - 5) :

Statements :

$T > I \geq L > E$; $I \leq N < B$; $N \geq S > D$

4. **Conclusions :**

I. $N > E$

II. $T < B$

Ans. - 3

Conclusions :

I. $N > E \rightarrow \text{True}$

II. $T < B \rightarrow \text{False}$

5. **Conclusions :**

I. $S \leq S$

II. $L > D$

Ans. - 5

Conclusions :

I. $S \leq I \rightarrow \text{False}$

II. $L > D \rightarrow \text{False}$

Directions (6-11) : Study the given information carefully to answer the given questions.

Seven athletes — M, N, O, P, Q R and S live on seven . different floors of a building but not necessarily in the same order. The lower most floor of the building is numbered 1, the one above that is numbered 2 and so on till the topmost floor is numbered 7. Each one of them runs for a different distance in a marathon-750 m, 1200 m, 2200m, 2900 m, 3600 m, 4300 m and 5000 m, but not necessarily in the same order.

The one who runs for 4300 m lives on floor numbered 4. Only one person lives

between M and the one who runs for 4300 m. Only two people live between M and S. The one who runs for 1200m lives on one of the even numbered floors above R. Only two people live between the one who runs for 1200 m and the one who runs for 2900 m. N lives on one of the floors above M. N runs for 2100 m more than the one who lives on floor numbered 3. The number of people living between the one who runs for 5000 m and S is same as the number of people living between M and R. Only one person lives between R and Q. The one who runs for the shortest distance lives immediately below Q. Only one person lives between P and the one who runs for 3600 m.

6. Which of the following live(s) between 0 and the one who runs for 2900 m ?
- (1) Only the one who runs for 2200m
 - (2) Both M and R
 - (3) Both M and the one who runs for 3600m
 - (4) Both P and the one who runs for 2200m
 - (5) Only R

Q. no. : 6 - 11

Floor Number	Person	Marathon
7	N	5000
6	Q	1200
5	S	750
4	R	4300
3	P	2900
2	M	2200
1	O	3600

Ans. - 1

7. As per the given arrangement, four of the following five are alike in a certain way and so form a group. Which one of the following does not belong to the group ?
- (1) M-4300m
 - (2) Floor numbered 7 - S
 - (3) Floor numbered 4 - N
 - (4) P-3600m
 - (5) Floor numbered 5-5000m

Ans. - 3

8. How many people live between S and O ?

- (1) Five
- (2) One
- (3) None
- (4) Four
- (5) Three

Ans. - 5

9. Who amongst the following runs for 2900 m ?

- (1) S
- (2) M
- (3) N
- (4) P
- (5) Q

Ans. - 4

10. If the total distance covered by B and M is 4800m, then how much did B run alone ?

- (1) 4050 m
- (2) 2600 m
- (3) 1200 m
- (4) 3600 m
- (5) 1900 m

Ans. - 2

11. Which of the following statement is true with respect to the given arrangement ?

- (1) None of the given options is true
- (2) Only two people live between P and R.
- (3) M lives on floor numbered 2.
- (4) The one who runs for 750 m lives immediately above S.
- (5) Q runs for 3600 m.

Ans. - 3

Directions (12-14) : Study the given information carefully to answer the given questions.

Point M is 15m to the east of Point L. Point C is 3m to the north of Point M.

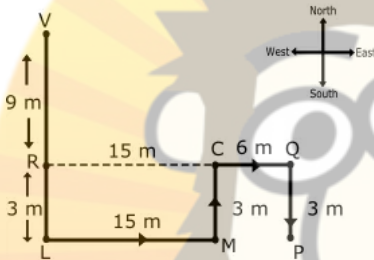
Point Q is 6m to the east of Point C. Point P is 3m to the south of Point Q. Point

V is to the north of Point L. A person walks 9m from Point V towards south, reaches Point R, takes a left turn and reaches Point C.

12. In which direction is Point V with respect to Point P ?

- (1) South-west
- (2) West
- (3) South-east
- (4) North-west
- (5) North-east

Q. NO. 12 -14



Ans. - 4

13. If a person walks 15m towards east from Point V, takes a right turn and walks 4m, how far will he be from Point M ?

- (1) 5 m
- (2) 9 m
- (3) 12 m
- (4) 6 m
- (5) 8 m

Ans. - 5

14. What is the difference of the distance between Points V, L and Points R, Q ?

- (1) 14 m
- (2) 9 m
- (3) 8 m

(4) 3 m

(5) 7 m

Ans. - 2

Directions (15-17) : Read the following information and answer the given questions.

T is the daughter of P. P is the father of L. L is the only son of A. B is the daughter-in-law of A. W is the son of B.

15. How is P related to B ?

(1) Father-in-law

(2) Brother

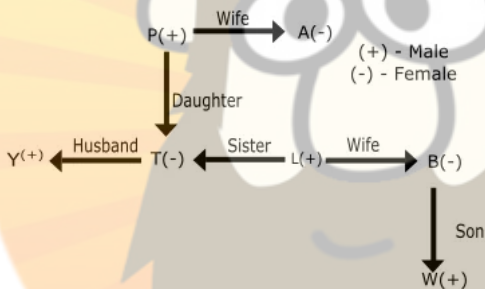
(3) Son-in-law

(4) Father

(5) Brother-in-law

Ans. - 1

Q. no. 15 - 17



16. If Y is the husband of T, how is L related to Y ?

(1) Brother-in-law

(2) Nephew

(3) Son-in-law

(4) Son

(5) Brother

Ans. - 5

17. How is A related to W ?

(1) Uncle

- (2) Grandfather
- (3) Grandson
- (4) Granddaughter
- (5) Grandmother

Ans. - 4

Directions (18 - 20) : Study the given information carefully to answer the given questions.

Six books — A, B, C, D, E and F, each of different thickness, are kept on a table. F is thicker than B but thinner than C. A is thinner than both B and E, but not thinnest. E is thinner than F. The second thinnest book is 7cm thick and the second thickest book is 13cm thick.

(Note: The thickness of all the books is in whole numbers.)

18. If E is 12cm thick, then which of the following is true about E ?

- (1) F is 2 cm thicker than E.
- (2) The total thickness of E and C together is 22 cm.
- (3) E is thinner than D.
- (4) All the given statements are true
- (5) E is the third thickest book of all.

Q.no. 18-20

$C > F > E > B > A > D$

\downarrow \downarrow
 13 cm 7 cm

Ans. - 5

19. If A is 2 cm thicker than D, then how thick is D ?

- (1) Cannot be determined
- (2) 15 cm
- (3) 5 cm
- (4) 11 cm
- (5) 3 cm

Ans. - 3

20. With respect to the thickness of given books, if $B + A = 17$, then $F + B = ?$

- (1) 17 cm
- (2) 21 cm

- (3) 23 cm
(4) 19 cm
(5) 24 cm

Ans. - 2
 $B + A = 17$
 $B + 7 = 17$
 $B = 10$ cm
 $\therefore F + B = 13 + 10 = 23$ cm

Directions (21 - 25) : Study the given information carefully to answer the given questions.

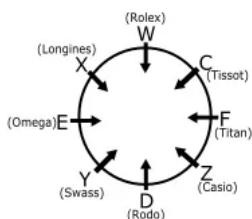
Eight different people viz. C, D, E, F, W, X, Y and Z are sitting around a circular table facing the centre but not necessarily in the same order. Each one of them is wearing a watch of a different brand viz. Titan, Rado, Casio, Tissot, Rolex, Swass, Omega and Longines but not necessarily in the same order.

Only two people sit between the one wearing Rado and X. The one wearing Tissot sits second to the left of X. Only three people sit between the one wearing Rado and W. The one wearing Casio sits second to the right of the one wearing Swass. Neither X nor W is wearing Swass. The one wearing Swass is not an immediate neighbour of the one wearing Tissot. Z is not wearing Tissot. The one wearing Titan sits to the immediate right of Z. C is an immediate neighbour of one wearing Titan. Only three people sit between C and Y. Only three people sit between F and the one wearing Omega. Neither F nor E is wearing Rado. Only one person sits between the ones wearing Omega and Rolex.

21. Who amongst the following sits to the immediate left of the one wearing Rado ?

- (1) C
 (2) The one wearing Omega
 (3) The one wearing Swass
 (4) Z
 (5) D

Q. no. (21 - 25)



Ans. - 3

22. Who amongst the following is wearing Longines ?

- (1) X
- (2) Y
- (3) D
- (4) E
- (5) Z

Ans. - 1

23. Four of the following five are alike in a certain way based on the given arrangement and thus form a group. Which is the one that does not belong to that group ?

- (1) Z – Rado
- (2) E – Longines
- (3) X – Rolex
- (4) W – Swass
- (5) C – Titan

Ans. - 4

24. Which of the following represents the brand of watch worn by E ?

- (1) Casio
- (2) Omega
- (3) Longines
- (4) Rolex
- (5) Swass

Ans. - 2

25. Who amongst the following sit exactly between X and the one wearing Rado when counted from the right of X ?

- (1) The ones wearing Tissot and Titan
- (2) Z and the one wearing Longines
- (3) D and F
- (4) E and Z
- (5) E and the one wearing Swass

Ans. - 5

Directions (26 - 30) : Study the following information to answer the given questions.

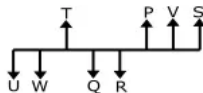
Eight friends—P, Q, R, S, T, U, V and W are seated in a straight line with equal distance between each other, but not necessarily in the same order. Some of them are facing north while some are facing south.

- ◆ V is an immediate neighbour of the person sitting at an extreme end of the line. R sits second to the left of V.
- ◆ Only one person sits between R and T.
- ◆ As many people sits to the right of T as to the left of P. V and P face the same direction (i.e., if V faces north then P also faces north and vice-versa.)
- ◆ Immediate neighbours of P face opposite directions (i.e., if one neighbour faces north then the other faces south and vice-versa.)
- ◆ Q sits fourth to the left of S. Q is not an immediate neighbour of V.
- ◆ Persons sitting at the extreme ends face opposite directions (i.e., if one person faces north then the other person faces south and vice-versa.)
- ◆ W faces south. W does not sit at an extreme end of the line: U sits to the immediate right of W.
- ◆ U and Q face the same direction (i.e., if U faces north then Q also faces north and vice-versa.)

26. As per the given arrangement, which of the following statements is not true with respect to U ?

- (1) U sits at an extreme end of the line.
- (2) Only three persons sit between U and R.
- (3) U sits second to the left of T
- (4) All the given statements are true
- (5) U is an immediate neighbour of Q.

Q. no. 26 - 27



Ans. - 5

27. What is the position of Q with respect to W ?

- (1) Immediate left
- (2) Second to the right

- (3) Third to the left
- (4) Third to the right
- (5) Second to the left

Ans. - 2

28. Four of the following five are alike in a certain way based on the given arrangement and hence form a group. Which of them does not belong to that group ?

- (1) WS
- (2) QT
- (3) WR
- (4) UP
- (5) RV

Ans. - 3

29. How many persons sit to the left of T?

- (1) Two
- (2) None
- (3) More than three
- (4) One
- (5) Three

Ans. - 1

30. Which of the following represents the immediate neighbours of P ?

- (1) R, T
- (2) S, V
- (3) W, P
- (4) V, R
- (5) T, S

Ans. - 4

Directions (31 - 35) : In each question below are given two/three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given

conclusions logically follows from the given statements, disregarding commonly known facts.

Give answer :

- (1) If **either** conclusion I or II follows.
- (2) If **both** conclusions I and II follow.
- (3) If **only** conclusion I follows.
- (4) If **only** conclusion II follows.
- (5) If neither conclusion I nor II follows.

(31 - 32) :

Statements :

No biscuit is a cookie.

All cookies are pastries.

Some pastries are sandwiches.

31. Conclusions :

- I. All pastries are cookies.
- II. All biscuits being pastries is a possibility.

Q no. 31 - 32



Ans. - 4

32. Conclusions :

- I. Atleast some cookies are sandwiches.
- II. Some sandwiches are biscuits.

Ans. - 5

(33-34) :

Statements :

Some keys are locks.

Some locks are drawers.

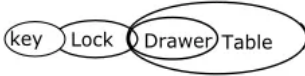
All drawers are tables.

33. Conclusions :

- I. No key is a drawer.

II. Atleast some keys are drawers.

Q. no. : 33 - 34



Ans. - 4

34. Conclusions :

- I. All keys can never be tables.
- II. Atleast some locks are tables.

Ans. - 4

35. Statements :

- All frames are pictures.
- Some pictures are images.

Conclusions :

- I. Some frames are images.
- II. All frames are images.

Ans. - 5

