

SRCC GBO 2022

Verbal Ability

Instructions [1 - 4]

Read the given passage and answer the questions that follow.

In the past four decades, people around the world have become increasingly aware of the problem of energy. Traditional energy sources such as oil and natural gas are dwindling rapidly. In many countries, this has meant extracting natural resources at the expense of the environment. In order to solve this problem, scientists are looking for new ways to satisfy the world's energy needs.

One possible solution to the energy problem is a "solar paint" called "Sun-believable". Scientists at the University of Notre Dame have invented a paint that can produce energy. The paint has energy-producing particles called "quantum dots" that convert sunlight into electricity. Despite the promise of solar paint, there are still some problems. While the paint only converts about one per cent of light to energy, it is cheap to make and can be used anywhere. Scientists are trying to make the paint more efficient in converting sunlight to energy.

Garbage and waste can also be changed to energy but there are some issues with this method. This method, called 'Waste to Energy' or WtE, has become popular in the last decade. In this, solid waste is burned at very high temperatures to create energy. However, the burning process causes pollution and creates more problems. Some new energy plants use a cleaner method of converting waste to energy. However, these types of energy plants still emit carbon dioxide (CO₂), which contributes to other environmental problems. Waste to Energy plants remain somewhat controversial among scientists and environmental activists. Finally, the use of wind as a source of energy is becoming more popular recently. Floating wind farms are large groups of big wind turbines (fans) that many countries are beginning to build. Building the turbines on the ocean is more effective than building them on land because there tends to be a steadier and stronger wind on the ocean. Building the farms on the ocean also helps save valuable space in crowded countries.

1. **According to the passage, the disadvantage of 'solar paint' is that the:**

- A** manufacturing process takes time
- B** paint is cheap to make and can be used anywhere
- C** scientists are not able to make the 'quantum dots' better
- D** paint only converts about one percent of light to energy

Answer: D

2. **Based on the passage, we can say that the problem with the 'Waste to Energy' method is that it:**

- A** has led to a debate between scientists and activists
- B** is not very energy efficient
- C** leads to more pollution
- D** needs new types of energy plants

Answer: C

3. **In the last paragraph of the passage, the writer suggests that:**

- A** in the last few years many countries have come together to develop floating wind farms
- B** building floating wind turbines is better because the wind is stronger and steadier in the ocean
- C** we will see a significant reduction in the number of floating wind turbines in use within the next decade
- D** crowded countries must consider using wind as a source of energy because it saves space

Answer: B

4. **According to the passage, conventional energy sources**

- A** have disappeared in the last few decades
- B** have become more easily available
- C** are not easy to extract
- D** are diminishing quickly

Answer: D

Instructions [5 - 8]

Read the given passage and answer the questions that follow.

The tale, the parable and the fable are all common and popular modes of conveying instruction - each being distinguished by its own special characteristics.

The tale is the narration of a story either founded on facts, or created solely by the imagination, and not necessarily associated with the teaching of any moral lesson. A parable is a short story used to illustrate a moral or spiritual lesson and it comes from a Greek word meaning 'comparison'. The fable, a short fictional

story, partly agrees with, and partly differs from both of these. It will contain, like the tale, a short but real narrative; it will seek, like the parable, to convey a hidden meaning, and that not so much by the use of language, as by the skillful introduction of fictitious characters; and yet unlike both the tale or parable, it will ever keep in view, the great purpose of instruction, and will necessarily seek to inculcate some moral maxim, social duty, or general truth.

The purpose of a fable is to convey moral messages to the readers and this objective is usually achieved through animals, birds or trees that behave and speak as human beings. As the story conveyed through the fable progresses, the reader becomes appreciative of all that is pure, honourable and praiseworthy, and critical of all that is low, dishonourable and unworthy. In a fable, the reader receives advice without perceiving the presence of the adviser and it is for this reason that the advice finds greater acceptance. The true fabulist (a writer of fables) therefore, is all of these- a teacher, a corrector of morals, a commender of virtue and a censor of vice. It is in this that the fable scores a point over the tale and the parable.

5. The passage suggests that one of the objectives of a fable is to:

- A** make the reader understand animal nature
- B** uplift a man's character
- C** discuss the problems of contemporary society
- D** describe the past

Answer: B

6. By stating that the fabulist is a 'great teacher, a corrector of morals, a censor of vice, and a commender of virtue', the writer implies that:

- A** there is a need for more fabulists because they can reform society
- B** fabulists must be honoured and respected above other writers
- C** as a multifaceted personality the fabulist can take the place of teachers and censors
- D** the fabulist plays an important role in society because his writings fulfil many purposes

Answer: D

7. Based on the passage, it could be suggested that the difference between a tale and a parable lies in the:

- A** presence of a concealed meaning
- B** depiction of facts
- C** length of the narrative
- D** choice of characters

Answer: A

8. The main idea of the passage is that:

- A the reader should learn to appreciate the creativity of the writer of tales, parables and fables.
- B the fable is superior to the tale and the parable because it conveys a moral in the form of a story
- C the fable's message may be hidden because it is based on both facts and imagination.
- D the difference between the tale, the parable and the fable lies in the portrayal of characters.

Answer: B

Instructions [9 - 12]

Read the given passage and answer the questions that follow.

Beneath the snow lies the subnivium (from the Latin *nivis* for snow, and *sub* for below), a small, protected area that is insulated and maintains a constant temperature. This microhabitat turns traditional thinking about snow on its head. Thanks to the emerging field of winter ecology, we now know that snowy environments have lives of their own. "Without snow, plant and animal life would be completely different," says biologist Jonathan Pauli of the University of Wisconsin-Madison. Pauli and scientists such as Ben Zuckerberg, are members of a new breed of researchers called winter ecologists who study the relationships among animals, plants and their snow-covered environments.

Their studies have shown that tiny mammals like shrews don't migrate but spend their winters in the subnivium. For some of the tiniest forms of life - fungi, invertebrates, soil bacteria and plant roots- snow maintains a mild winter temperature in which they can survive, compared to the killing cold up above. Plants and soil benefit from this layer because the lack of a hard frozen surface lets plant roots function. The active fungi release important nutrients to plants. As the temperature warms, the snow slowly melts and provides water for spring flowers. On an average, snow covers almost 18 million square miles of the planet each year. However, climate change is upsetting that chilly balance. Winter ecologists are studying how the lack of snow cover directly affects the ecology of many subnivium ecosystems, exposing organisms to temperatures for which they are not adapted.

9. The main idea of the passage is:

- A ecologists have recently become more interested in studying the subnivium and they have come up with a variety of creative approaches
- B we know very little about plants and animals that survive winter beneath the snow
- C a secret world, unseen by most humans, is found just beneath the winter snow and it can be adversely affected by climate change

- D** the world is experiencing less snow due to climate change and this has led to a new field of study called winter ecology

Answer: C

10. **Based on the information in the fourth paragraph, it can be reasonably inferred that:**

- A** as compared to other habitats, animals feel more comfortable when there is heavy snowfall
- B** the tiniest to the largest forms of life depend on the frozen surface for their food
- C** the snow cover in winter helps to sustain many forms of life
- D** the temperature in the subnivium is much higher than the surface and doesn't allow organisms to survive

Answer: C

11. **Which of the following sentences is best supported by the last paragraph?**

- A** Changes in the amount of snow covering the ground will affect the access to water resources.
- B** Climate change will have important consequences for species that need the subnivium to survive.
- C** The subnivium starts forming as soon as snow starts to build up on the ground.
- D** Some plant and animal species are dependent on the layers of snow for their survival.

Answer: B

12. **In the second paragraph of the passage, the author seems to imply that:**

- A** winter ecologists do not know much about the subnivium because it lies beneath the snow
- B** the best time to see the subnivium is when the snow has nearly melted
- C** in contrast to what has been understood for many years, the winter environment is far from dormant
- D** because of historical reasons scientists did not think it important to study the winter environment

Answer: C

13. Select the most appropriate option to fill in the blank.

Famous for being a long distance swimmer, Mihir Sen was the first Asian to swim _____ the English Channel.

- A** through
- B** across
- C** over
- D** against

Answer: B

14. Given here is a paragraph. Its last sentence is missing. Select the most appropriate sentence to complete the paragraph.

Most of the year 2021 was focused on the revival of businesses. Companies have continued their investments in up-skilling and re-skilling their workforce. In fact, in 2021, investments in up-skilling saw 18% to 25% increase. _____

- A** The pandemic has taught employers the importance of having a multi-skilled work force.
- B** AI and machine Learning became more prevalent in the skilling process.
- C** Some of the sectors where these investments have gone up are IT, e-commerce, pharma and EdTech, among others
- D** The year 2021 also made blended learning more acceptable

Answer: C

15. Select the most appropriate option to fill in the blanks.

Mr. Joshi _____ from his trip to Maldives. He _____ hard to finish the pending work since then.

- A** had returned ; is trying
- B** returns; tries
- C** returned ; was trying
- D** has returned ; has been trying

Answer: D

16. Select the most appropriate option to fill in the blanks.

An opportunity _____ at everyone's door but some people miss it and some people _____ them into success stories.

- A hits ; alter
- B thumps ; trade
- C knocks ; convert
- D blows ; exchange

Answer: C

17. Select the odd one out.

- A Selectively
- B Sumptuously
- C Plentifully
- D Richly

Answer: A

18. Select the most appropriate set of idioms to fill in the blanks.

His offhand remarks _____ of the members of the committee. But the Chairman told the members to _____ and stop arguing.

- A ruffled the hair ; cool their heels
- B ruffled the feathers ; cool it
- C ruffled the hair ; cool it
- D ruffled the feathers ; cool their heels

Answer: B

19. Sentences of a paragraph are given below. While the first and the last sentences (S1 and S6) are in the correct order, the sentences in between are jumbled up. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

S1. I was standing at the gaol gate talking to the gaoler when we noticed a man carrying a strange animal.

A. This animal had been twisted round in a most peculiar way forming a kind of knot.

B. The gaoler sent for him and I saw something between a lizard and crocodile, about two feet long with claws and a scaly covering.

C. When asked by the gaoler what he proposed to do with it, he replied with a broad smile that he would make bhujji- a kind of curry - out of it.

D. Its owner had passed a pole through this knot and was merrily carrying it in this fashion.

S6. Subsequently I discovered from reading F W Champion's book -The Jungle in Sunlight and Shadow- that this animal was the pangolin.

A ABCD

B BCDA

C BADC

D CBAD

Answer: C

20. Select the odd one out.

A Scurry

B Stroll

C Saunter

D Amble

Answer: A

21. The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer.

Despite of her busy schedule / she decided to visit / her friend on her birthday.

A Despite of her busy schedule

B she decided to visit

C No error

D her friend on her birthday

Answer: A

22. **Select the most appropriate synonym of the given word.**

Impenetrable

A Impassable

B Impersonal

C Impeccable

D Impossible

Answer: A

23. **Select the most appropriate set of idioms to fill in the blanks.**

A new project is _____ in Central Delhi. My father, being the chief architect, is always _____, even on weekends.

A on the air ; on the boil

B on the card ; on the boil

C on the air ; on call

D on the cards ; on call

Answer: D

24. **Select the most appropriate option to fill in the blanks.**

My father _____ that he _____ me to school tomorrow.

A has promised ; will drop

B is promising ; is dropping

C promised ; will drop

D promises ; drops

Answer: A

25. Four statements are given here, labeled A, B, C and D. Among these, three statements are in logical order and form a coherent paragraph. From the given options, choose the option that does NOT fit into the theme of the passage.
- A. As per the Census 2011, as many as 76.34 crore persons in the country are literate.
 - B. The overall literacy rate works out to be 72.9 %for the country.
 - C.As per the Census report, the population of Panipat City in 2011 is 2.94 lakhs.
 - D. Of these, 43.46 crore are males and 32.88 crore are females.

A C

B D

C A

D B

Answer: A

26. Select the most appropriate option to fill in the blank.
The flower woman, _____, is very well-off.

- A** with which I like to talk
- B** from whom I buy roses
- C** where the traffic lights are
- D** which you were looking at

Answer: B

27. Select the most appropriate option to fill in the blanks.
In this time of economic crisis, such a _____ expenditure of public funds needs to be _____.

- A** judicious ; condemned
- B** proper ; vindicated
- C** lavish ; justified
- D** righteous ; criticised

Answer: C

28. Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

A. Suddenly they fell into a deep pit someone had dug to trap foolish animals like them who weren't watching where they were going.

B. Their wild squawking brought the other animals to the pit.

C. Ostrich and Emu were racing each other across the Australian outback.

D. Ostrich and Emu tried to jump out of the pit but it was too deep.

A DBCA

B DCAB

C CADB

D CABD

Answer: C

29. Select the odd one out.

A Vicious

B Patient

C Humane

D Forgiving

Answer: A

30. Select the most appropriate option to fill in the blank.

The skill of carpet weaving is _____ from generation to generation.

A handed down

B handed up

C handed in

D handed out

Answer: A

31. Select the most appropriate ANTONYM of the given word.

Repulsive

A Modest

- B** Disagreeable
- C** Nasty
- D** Attractive

Answer: D

32. Select the most appropriate synonym of the given word.

Contemplate

- A** Conceal
- B** Consider
- C** Conceive
- D** Concur

Answer: B

33. Select the option in which the words share the same relationship as that shared by the given pair of words.

drum : beat :: ?

- A** trumpet : blow
- B** flute : finger
- C** guitar :
string
- D** piano : key

Answer: A

34. Four statements are given here, labeled A, B, C and D. Among these, three statements are in logical order and form a coherent paragraph. From the given options, choose the option that does NOT fit into the theme of the passage.

- A.** Teacher attendance is just 85% in primary and middle schools.
- B.** Primary school enrollment in India has been a success story.
- C.** The enrollment has reached at least 96% since 2009 of which girls make 56% of new students between 2007 and 2013.
- D.** Largely due to various programs and drives, the enrollment has increased even in remote areas.

- A** A

B C

C B

D D

Answer: A

35. Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

A. He also advised me to come to table.

B. An English passenger, taking kindly to me, drew me into conversation.

C. He laughed at my insistence on abjuring meat, and said in a friendly way, "It is so cold in England that one cannot possibly live there without meat."

D. He asked me what I ate, what I was, where I was going, why I was shy, and so on.

A DBAC

B BACD

C BDAC

D CBDA

Answer: C

36. Select the option in which the words share the same relationship as that shared by the given pair of words.

shrug : indifference :: ?

A wave : fatigue

B blink : scorn

C scowl : desire

D nod : assent

Answer: D

37. The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer.

Group discussion and pair work are / good classroom strategies encourage / students to speak out their ideas.

A students to speak out their ideas

- B** No error
- C** Group discussion and pair work are
- D** good classroom strategies encourage

Answer: D

38. **Select the most appropriate option to fill in the blank.**

The secretarial job, _____, was advertised on the internet.

- A** for which she has applied
- B** which she has read
- C** that she bought
- D** for which she has written

Answer: A

39. **Select the most appropriate option to fill in the blanks.**

The migrant workers, feeling tired _____ a long journey, rested _____ the shade of a big banyan tree.

- A** before ; in
- B** over ; in
- C** after ; under
- D** until ; under

Answer: C

40. **Select the most appropriate option to fill in the blank.**

Every year, some boys _____ in the middle of the course due to their family or financial problems.

- A** drop off
- B** drop by
- C** drop out
- D** drop in

Answer: C

Data Interpretation

Instructions [41 - 44]

Study the given table and answer the questions that follow.

The table shows the data regarding the number of medals won by countries A, B, C, D, E and F in International games in 2020

Country	Gold Medals	Ratio of the number of silver medals to that of bronze medals	Total number of Gold, Silver and Bronze Medals
A	15	3 : 2	40
B	14	5 : 3	38
C	16	6 : 7	42
D	10	2 : 3	30
E	12	4 : 5	39
F	13	5 : 6	46

41. The total number of Silver medals won by countries C, D and F is approximately what per cent of the total medals won by countries A, B and C together?

A 37.5%

B 25%

C 29.2%

D 28.5%

Answer: C

42. The total number of Gold medals won by countries B, D and E together is what per cent more than the total number of Bronze medals won by countries C and F (correct to one decimal place)?

A 11.1%

- B** 12.5%
- C** 13.8%
- D** 15.6%

Answer: D

43. The average number of Bronze medals won by all the five countries is what per cent less than the total number of Silver medals won by all the five countries (nearest to an integer)?

- A** 83
- B** 82
- C** 80
- D** 78

Answer: A

44. What is the ratio of the total number of silver medals won by countries A and E to the total number of Bronze medals won by countries D and F?

- A** 5 : 6
- B** 5 : 8
- C** 9 : 10
- D** 4 : 5

Answer: C

Instructions [45 - 48]

Read the given information and answer the question that follows.

In an institute, 1800 students are studying five different courses -A, B, C, D and E. The number of male students is $57\frac{1}{7}\%$ more than that of female students. Out of male total students, 24% are studying course B and the ratio of the number of female students to male students studying this course is 5:6. The total number of students studying course C is 342, out of which female students are 104.18% of female are studying course A and the ratio of male students to female students studying A is 4:3. One-fifth of total males are studying course D and the number of female students studying D is 25% less than that of males studying D. The remaining male and female students are studying course E.

45. The average number of female students studying courses A, B and C is approximately what per cent less than the total number of male students studying courses D and E?

- A** 65.1%
- B** 63.6%
- C** 61.8%
- D** 62.7%

Answer: A

46. What is the ratio of the number of male students studying course B to that of female students studying course D?

- A** 5 : 3
- B** 24 : 35
- C** 8 : 5
- D** 2 : 1

Answer: C

47. The number of male students studying course A is what per cent of the total number of students studying course D (correct to one decimal place)?

- A** 76.4%
- B** 49.1%
- C** 43.6%
- D** 56.9%

Answer: C

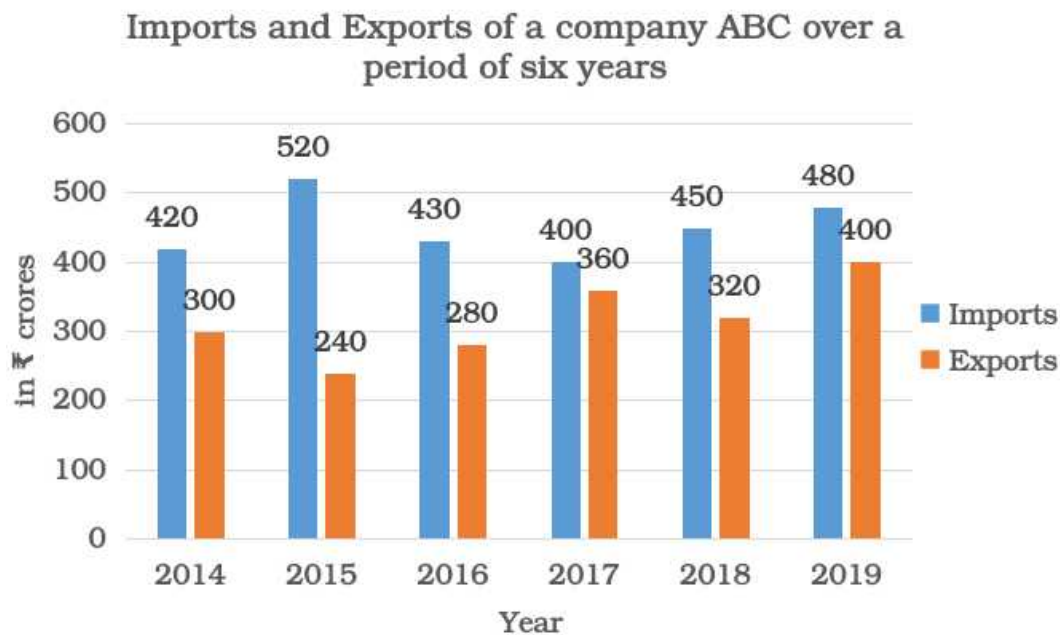
48. The difference between the number of male and two times the female students studying course E is . Which of the following is true?

- A** $x < 34$
- B** $34 < x < 38$
- C** $38 < x < 42$
- D** $42 < x < 46$

Answer: C

Instructions [49 - 52]

Study the given bar graph and answer the question that follows.



49. What is the ratio of the total imports in 2015, 2017 and 2019 to the total exports in 2014, 2015 and 2017?

- A 2 : 1
- B 4 : 3
- C 10 : 9
- D 3 : 2

Answer: B

50. In which year(s) was/were the imports less than the exports by p%, where p lies between 25 and 30?

- A 2016 and 2019
- B 2019
- C 2014 and 2018
- D 2015

Answer: C

51. In 2020, the exports decreased by the same percentage over 2019 as in 2018 over 2017 and the imports increased by the same percentage over 2019 as in 2018 over 2017. In 2020, by what per cent was the imports less than the exports (nearest to an integer)?

- A 35%
- B 39%
- C 34%
- D 36%

Answer: C

52. The average exports (per year) in 2015, 2018 and 2019 is approximately what per cent less than the imports in 2018?

- A 28.9%
- B 40.6%
- C 35.8%
- D 27.4%

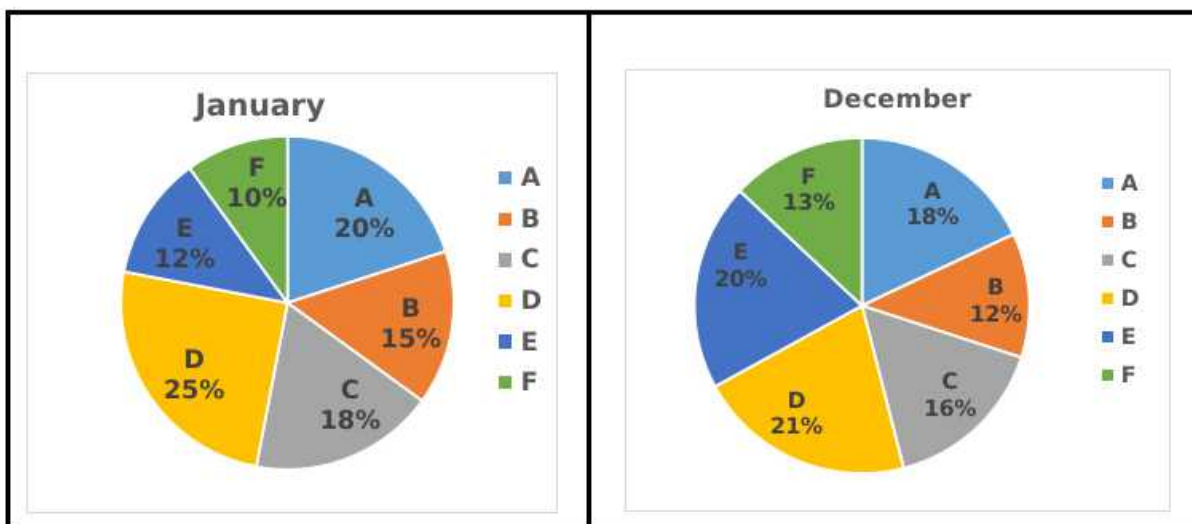
Answer: A

Instructions [53 - 56]

Study the given pie charts and answer the question that follows.

The pie chart shows the percentage wise distribution of expenditure of a family in January 2020 and December 2020 on items A, B, C, D, E and F.

The expenditure in December is 20% more than that in January.



Total expenditure in January = ₹54,000

53. The expenditure on item D in December is ₹108 more than the total expenditure in January over items:

A C and E

B B and C

C B and F

D E and F

Answer: C

54. The average expenditure on items A, C and D together in January is what per cent less than the expenditure on item E in December?

A 15%

B 14.3%

C 12%

D 12.5%

Answer: D

55. In January, if the income of the family is 20% more than the total expenditure, and the income in December is 15% more than the total expenditure in the same month, then by what per cent are the savings in January more than that in December (nearest to an integer)?

A 10%

B 11%

C 15%

D 12%

Answer: B

56. On which item was there 4% decrease/increase in expenditure in December as compared to that in January?

A C

B A

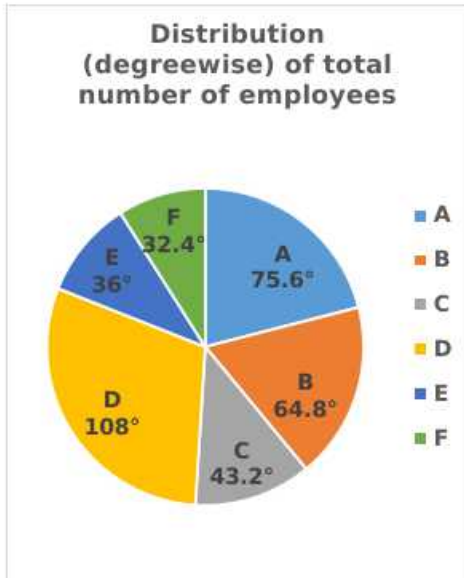
C B

D F

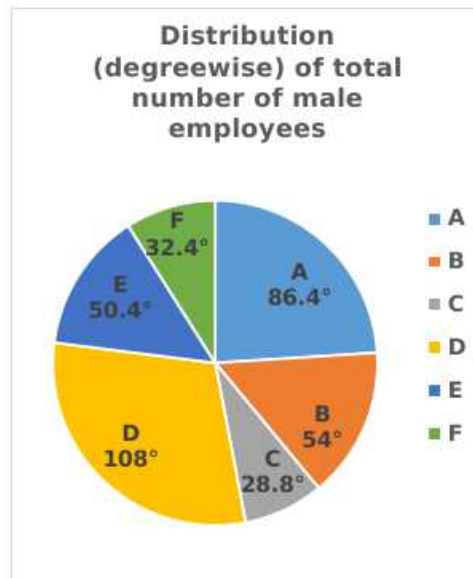
Answer: B

Instructions [57 - 60]

Study the given pie charts and answer the question that follows.



Number of employees
in office C = 288



Number of male employees
in office E = 224

The pie charts show the distribution of total number of employees and the total number of male employees of a company working in its six offices A, B, C, D, E and F

57. If 25% of the male employees in offices A are transferred to office C and 35% of female employees in D are transferred to office E, then the number of female employees in E as a percentage of the number of male employees in C is approximately equal to:

- A 42.7%
- B 40.2%
- C 41.4%
- D 44.6%

Answer: D

58. What is the ratio of the total number of male employees in offices C and F to the number of employees in office B?

- A 11 : 18
- B 17 : 27

C 17 : 18

D 11 : 27

Answer: B

59. The number of female employees as a percentage of male employees is second lowest in office:

A D

B E

C F

D A

Answer: D

60. The average number of male employees in offices A, D and F is what per cent more than the total number of female employees in offices B, E and F?

A 16.67%

B 20%

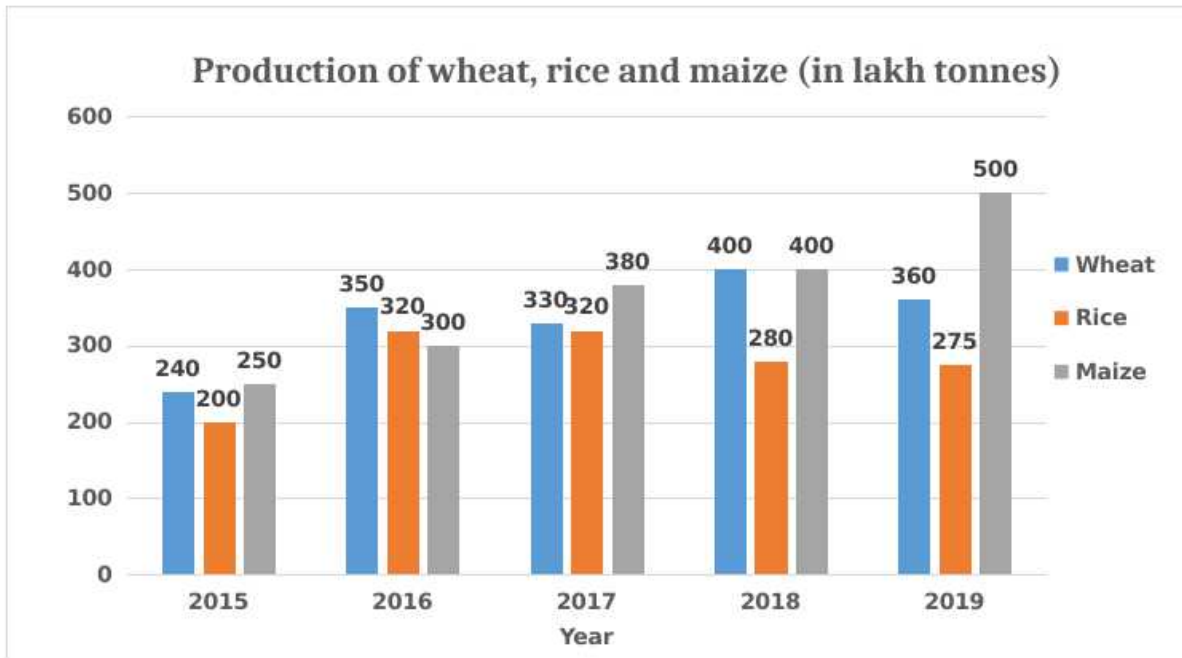
C 25%

D 18.33%

Answer: B

Instructions [61 - 64]

Study the given bar graph and answer the questions that follows.



61. What is the ratio of the total production of rice in 2016 and 2018 to the total production of maize in 2015 and 2019?

- A 12 : 13
- B 4 : 5
- C 2 : 3
- D 14 : 15

Answer: B

62. In which year was the increase in the production of maize the second largest as compared to its preceding year?

- A 2018
- B 2017
- C 2019
- D 2016

Answer: C

63. The average production of wheat (per year) in 2015, 2017 and 2019 is what per cent less than the production of maize in 2018?

- A 20%

- B** 25%
- C** 22.5%
- D** 17.5%

Answer: C

64. In 2020, the production of wheat increased over 2019 by the same percentage as in 2018 over its preceding year. If 16.5% of the production of wheat in 2020 was exported, then the amount of wheat left for domestic consumption (in lakh tonnes) was approximately:

- A** 366.2
- B** 364.4
- C** 360.8
- D** 368.4

Answer: B

Instructions [65 - 68]

Study given information and answer the questions that follows.

Companies X and Y, both produce all the five products A, B, C, D and E. The total units of all these products produced by X and Y together are 5500 and company Y produces 20% more units than company X. Out of the total units of the products produced by company Y, 12% are of the product B and company X produces 30% more units of B than Y. The ratio of the units of product A produced by companies X and Y is 5 : 6 and total number of units of A is 990. The number of units of product D produced by company X is 650 and company Y produces 40% more of it. The company X produces 550 units of C and company Y produces 55 more units of it. The units of the products left with companies X and Y are of product E.

65. The number of units of product C produced by company Y is what per cent of the total number of units of product B and E produced by company X (correct to one decimal place)?

- A** 71.2%
- B** 70.6%
- C** 59.4%
- D** 67.5%

Answer: A

66. What is the ratio of the number of units of product B produced by company X to the number of units of product E produced by company Y?

- A** 9 : 10
- B** 18 : 35
- C** 4 : 5
- D** 13 : 15

Answer: C

67. The different between the number of units of product A produced by company X and 40% of the number of units of products D produced by company Y is k. The value k lies between.

- A** 85 and 90
- B** 80 and 85
- C** 75 and 80
- D** 90 and 95

Answer: A

68. The average number of units of products A, B and E produced by company Y is what percentage less than the average number of units of products C and D produced by company X?

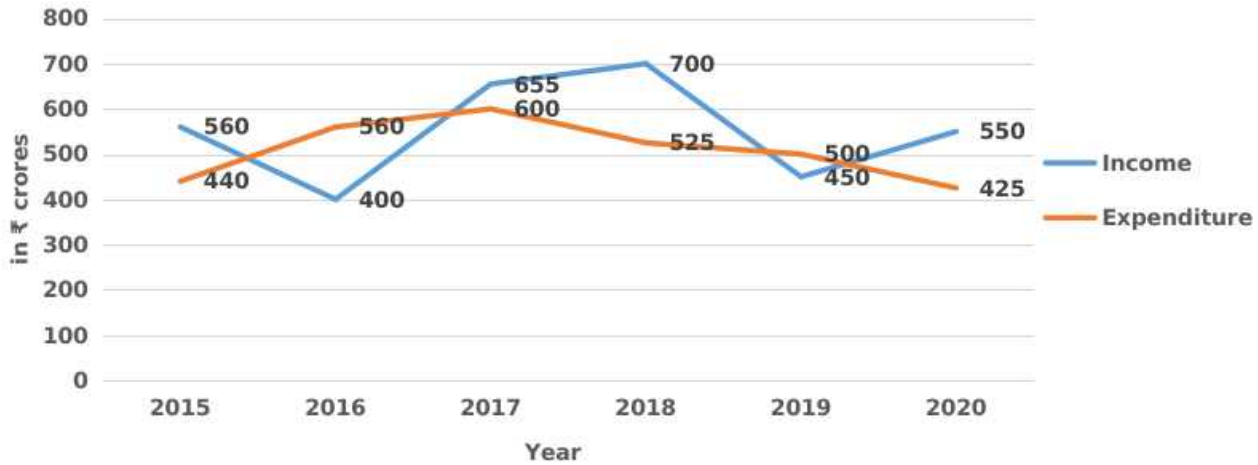
- A** 15.6%
- B** 17.5%
- C** 15.2%
- D** 16.4%

Answer: B

Instructions [69 - 72]

Study the given bar graph and answer the questions that follows.

**Income and Expenditure of a company
during 2015 to 2020 (in ₹ crores)**



Profit(loss)= Income - Expenditure

Percentage profit(loss) = $\frac{\text{Profit(loss)} \times 100}{\text{Expenditure}}$

69. What is the ratio of the profit earned by the company in 2015 and 2017 together to the loss incurred in 2016 and 2019 together?

- A** 17 : 21
- B** 3 : 4
- C** 3 : 5
- D** 5 : 6

Answer: D

70. What is the percentage loss incurred by the company in 2016 and 2019 together (correct to one decimal place)?

- A** 18.9%
- B** 46.7%
- C** 19.8%
- D** 28.6%

Answer: C

71. What is the average profit (in ₹ crores) earned by the company in 2015, 2017, 2018 and 2020 together?

- A** 121.25
- B** 120

C 118.75

D 116.5

Answer: C

72. If the ratio of expenditures of the company 2018 and 2021 was 7 : 11 and the company earns a profit of 18% in 2021, then what was the income (in ₹ crore) of the company in 2021?

A 850

B 676.5

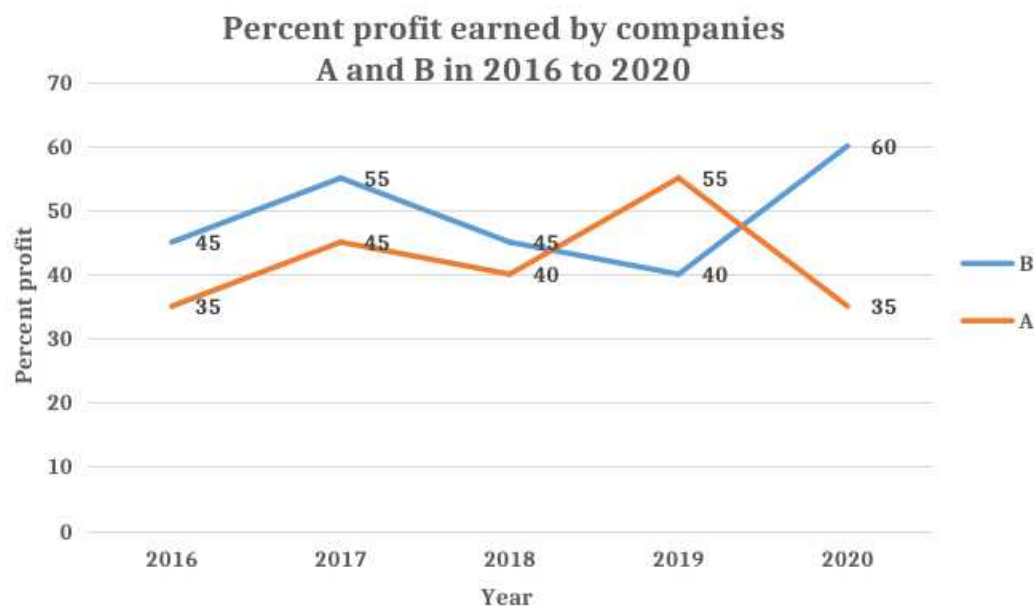
C 825

D 973.5

Answer: D

Instructions [73 - 76]

Study the given bar graph and answer the questions that follows.



$$\text{Profit percent} = \frac{\text{Income} - \text{Expenditure}}{\text{Expenditure}} \times 100$$

73. If the expenditures of companies A and B in 2019 were equal and the total income of both companies was ₹354 crores, then what was the total expenditure (in ₹ crores) of A and B in that year?

A 308

B 354

C 250

D 240

Answer: D

74. If the incomes of company B in 2016 and 2020 were equal and the expenditure in 2016 was ₹240 crores, then what was the expenditure (in ₹ crores) in 2020?

A 216

B 218.5

C 217.5

D 215

Answer: C

75. If the expenditure of company A in 2018 and 2020 was the same, then what was the ratio of the incomes of the company in 2018 and 2020, respectively?

A 29 : 28

B 17 : 15

C 28 : 27

D 8 : 7

Answer: C

76. If the income of company B was ₹446.4 crores in 2017, then what was its expenditure (in ₹ crores) in that year?

A 292

B 285

C 295

D 288

Answer: D

Instructions [77 - 80]

Study the given table and answer the questions that follows.

School Year	X		Z		Z	
	A	P	A	P	A	P
2016	250	200	200	175	300	285
2017	275	250	250	225	320	304
2018	280	242	270	254	380	362
2019	300	275	300	280	352	325
2020	350	300	325	276	400	381

The table shows the number of students Appeared (A) and Passed (P) in a examination, from three schools X, Y and Z in five years.

77. The ratio of boys and girls passed from school Y in 2017 is 7 : 8 and that of boys and girls passed from school X in 2019 is 12 : 13. The percentage of girls appeared from school Z in 2020 is 80%. The total number of girls passed from schools X in 2019 and from Y in 2017, is what per cent less than the number of girls appeared from school Z in 2020 (correct to one decimal place)?

- A** 24.5%
- B** 19.4%
- C** 17.8%
- D** 21.7%

Answer: C

78. In which year was the difference between the number of students appeared and the number of students passed the second lowest in school Z?

- A** 2017
- B** 2018
- C** 2020
- D** 2016

Answer: A

79. If m is the average of the number of students passed from school Y over all the five years and n is the average of the number of students passed from all the three schools in 2018, then $m : n$ is equal to:

A 11 : 13

B 9 : 13

C 7 : 10

D 19 : 21

Answer: A

80. The total number of students appeared from school X in 2016, 2017 and 2019 is approximately what per cent more than the total number of students passed from school Y in 2018 and 2020?

A 60.2%

B 56.2%

C 58.4%

D 55.7%

Answer: D

Quantitative Ability

81. If $\left(x^2 + \frac{1}{x^2}\right) = 8.25$, what is the value of $\left(x^3 - \frac{1}{x^3}\right)$?

A 30.625

B 20.625

C 30.375

D 20.375

Answer: A

82. x varies inversely as $(2y^2 - 5)$ and is equal to 25 when $y = 15$. Find the value of x when $y = 10$ (approximate value).

A 57

B 55

C 53

D 51

Answer: A

83. What is the composite function $(f \circ g)(x)$, if

$$f(x) = x + 7,$$

$$g(x) = x^4?$$

A $\frac{x^4}{7}$

B $(x + 7)^4$

C $x^4 + 7$

D $x^4 + 7^4$

Answer: C

84. Anil climbs a staircase stage by stage. He climbs the first 10 steps at 10 a.m., 11 more steps at 12.00 p.m. and 20 more steps at 2.00 p.m. Find the total number of steps Anil has climbed.

A 11

B 31

C 41

D 21

Answer: C

85. What are coordinates of the point that divides the line segment joining the points (4, 4) and (8, 12) internally in the ratio of 3 : 5?

A (6.5,
9)

B (9, 6.5)

C (5.5,
7)

D (7, 5.5)

Answer: C

86. Seven different coloured lights are fixed on a mast to produce signals by illuminating them. How many signals can be produced, if any number of lights is used?

A 12,689

B 13,699

C 10,080

D 11,547

Answer: B

87. In a coffee estate there are two varieties of coffee. At what ratio must the two varieties of coffee be mixed together into one at ₹40 per kg and the other at ₹50 per kg? The cost of the mixture is ₹43 per kg.

A 3 : 10

B 10 : 3

C 2 : 5

D 5 : 2

Answer: B

88. Find the missing term of the series
5050 , 7381, ? , 14365 , 19306.

A 10440

B 10460

C 10470

D 10480

Answer: A

89. If a water bill is paid before the due date, overall there is a reduction of 5% on the bill amount. A person paid the bill before the due date he got a reduction of ₹250. Find the amount of the water bill.

A ₹5,200

B ₹5,000

C ₹5,400

D ₹5,600

Answer: B

90. Two mixtures A and B contain petrol and kerosene. A has 40% of petrol and B has 60% of petrol. If 8 litres of A and 12 litres of B are mixed together, what will be the ratio of petrol and kerosene in the new mixture?

A 13 : 12

B 13 : 8

C 8 : 13

D 12 : 13

Answer: A

91. If $6^{15} + 6^{16} + 6^{17} + 6^{18}$ is divided by 24, find the remainder of finite series.

A 9

B 19

C 29

D 39

Answer: B

92. In a big drum there are three cubes of ice whose edges are 5 cm, 7 cm and 9 cm respectively. The ice cubes are melted and formed into a single cube. Find the edge of a new cube (approximate value).

A 5.6 cm

B 11.56 cm

C 10.62 cm

D 15 cm

Answer: C

93. α and β are the roots of the equation $ax^2 + bx + c = 0$. What is the condition for which $\beta = 5\alpha$?

A $5b^2 = 24ac$

B $3b^2 = 12ac$

C $3b^2 = 16ac$

D $5b^2 = 36ac$

Answer: D

94. While shifting glass bottles from one country to the other, on an average, 1 out of 9 bottles breaks. What is the probability that out of 4 bottles, at least 3 will arrive safely?

A $\frac{1024}{6561}$

B $\frac{512}{6561}$

C $\frac{512}{2187}$

D $\frac{2048}{2187}$

Answer: D

95. Consider that $[p_n]$ and $[qn]$ are two arithmetic progressions with 50 elements each. If $[p_n]$ has the elements $a_1 = 4, a_2 = 6$ and so on, and $[qn]$ has $b_1 = 2, b_2 = 5$ and so on, how many common elements do both $[p_n]$ and $[qn]$ have ?

A 11

B 15

C 13

D 16

Answer: D

96. Solve the inequality.

$$\frac{x+1}{2x-1} > 1$$

A $-\frac{1}{2} > x > -2$

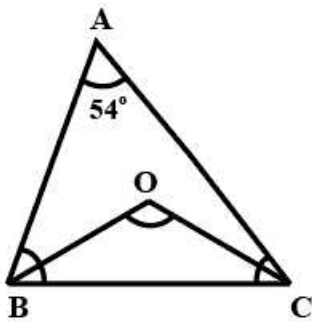
B $\frac{1}{2} < x < 2$

C $\frac{1}{2} > x > 2$

D $-\frac{1}{2} > x > 1$

Answer: B

97. In $\triangle ABC$, BO and CO are the bisectors of the $\angle ABC$ and $\angle ACB$. If the measure of $\angle A = 54^\circ$, what is the measure of $\angle BOC$



A 120°

B 117°

C 150°

D 144°

Answer: B

98. Avinash invested ₹6,400 in three business at 3%, 5% and 7% per year with simple interest. At the end of the year, he received the same amount from three business. The money invested at 3% is (up to two decimals):

A ₹2,567.43

B ₹3,154.92

C ₹2,675.43

D ₹2,657.43

Answer: B

99. If $(21^{13} + 29^{13})$ is divided by 25, then what is the remainder?

A 3

B 2

C 1

D 0

Answer: D

00. Find the sum of infinity of the series

$$\frac{1}{5} + \frac{3}{5^2} + \frac{1}{5^3} + \frac{3}{5^4} + \dots$$

A $\frac{1}{5}$

B $\frac{1}{2}$

C $\frac{1}{3}$

D $\frac{1}{4}$

Answer: C

01. If the resulting numbers be the consecutive terms of Harmonic Progression, then what number should be added to the numbers 8, 10, 14?

A 2

B -2

C 1

D -1

Answer: B

02. The population of Kompally village is 10,000. The population increases by 10% in the first year and 15% in the second year. Due to increase in pollution the population decreases by 5% in the third year. What will be its population after 3 years (round off number)?

A 12,208

B 12,018

C 12,008

D 12,308

Answer: B

03. What is the value of x in the following equation?

$$3 \log_5^3 - \log_{21}^x + 2 \log_9^{25} = 0$$

A 35

B 28

C 42

D 14

Answer: A

04. In a cricket stadium, the people are made to sit to watch the match. If the organisers make a row of 15 people each, there will be 10 people left. If they make rows of 20 people each then there will be 15 people left and if they make rows of 24 people each, 19 people will be left. If they make rows of 28 people each there will be 23 people left. Find the minimum number of people present in the stadium.

A 825

B 805

C 815

D 835

Answer: D

05. The ratio of the number of sides of two regular polygons is 2 : 3 and the ratio of the sum of their interior angles is 5 : 8. What is the number of sides of the first polygon and the measure of the interior angle (in degrees) of the second polygon, respectively?

A 8, 150

B 10, 156

C 12, 160

D 6, 140

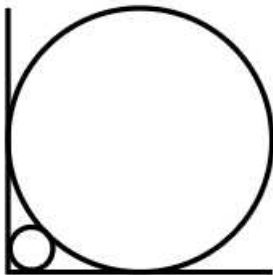
Answer: C

06. The GST on groceries is reduced by 20% and its consumption increases by 15% . Find the percentage of effect on revenue.

- A -8%
- B -5%
- C -1%
- D -2%

Answer: A

07. A spherical disc of radius 5 cm is placed on a horizontal surface against a vertical wall as given.



Another small disc is placed in the gap between the right angle and the disc such that the horizontal surface, vertical wall, the larger disc, and the smaller disc touch each other. What is the radius (in cm) of the smaller disc ?

- A $15 - 10\sqrt{2}$
- B $15 - 10\sqrt{3}$
- C $10 - 15\sqrt{3}$
- D $10 - 15\sqrt{2}$

Answer: A

08. The remainder is 20, when a number is divided by a divisor. If the remainder is 7 when thrice the original number is divided by the same divisor, find the value of the divisor.

- A 56
- B 50
- C 59
- D 53

Answer: D

09. ABCDE is a pentagon. There are 5 paths connecting A and B, 4 paths connecting B and C, 6 paths connecting C and D, 5 paths linking D and E, 3 paths connecting E and A. Also, 3 paths joining A and C. If an ant starting from A is always heading towards point C, how many different valid routes can it take?

- A** 113
- B** 90
- C** 120
- D** 69

Answer: A

10. Two-fifths of a number is five more than one-fifth of the number. Find the number.

- A** 25
- B** 20
- C** 22
- D** 27

Answer: A

11. The average height of 30 students of a class is 165 cm. 5 new students with average height 172 cm join the class. What is the new average (in cm) of the class?

- A** 166
- B** 171
- C** 168
- D** 170

Answer: A

12. What is the sum of the vertex angles (in $^{\circ}$) of a nine-pointed star?

- A** 1080
- B** 1260
- C** 900
- D** 720

Answer: C

13. The present value of an ATM machine is ₹55,000. The value of the machine depreciates at the rate of 25% every year. What will be the value of the machine after two years?

- A** ₹30,937.50
- B** ₹37,933.50
- C** ₹31,937.50
- D** ₹33,937.50

Answer: A

14. A large container having three different vessels contains 780 , 690 and 950 litres of oil and petrol, respectively. Find the largest measure among all three vessels.

- A** 11 litres
- B** 9 litres
- C** 12 litres
- D** 10 litres

Answer: D

15. The graph of $f(x) = x^2 - 5x + 6$ is translated 2 units left and 12 units down to get $h(x)$. Express $h(x)$ in the form $h(x) = ax^2 + bx + c$.

- A** $x^2 - 9x + 32$
- B** $x^2 - x + 12$
- C** $x^2 - x - 12$
- D** $x^2 - 9x - 8$

Answer: C

16. What is the domain and the vertical asymptote (VA), respectively, of $f(x) = \log_5(x - 4) - 4, x > 0$?

A $\{x \mid x = 0\}, VA \Rightarrow x = 0$

B $\{x \mid x > 4\}, VA \Rightarrow x = 4$

C $\{x \mid x = 4\}, VA \Rightarrow x = 4$

D $\{x \mid x > 0\}, VA \Rightarrow x = 0$

Answer: B

17. Two straight parallel lines are cut by a transversal, such that, the measures of two co-interior angles are $\frac{3x}{4}$ and $(\frac{5x}{4} - 20)$. What are the values of the measures of the two angles (in $^\circ$), respectively?

A 115, 65

B 75, 105

C 105, 75

D 65, 115

Answer: B

18. The length of the major axis is 12 cm and that of the minor axis is 2.8 cm. What is the area (in cm^2) of the ellipse?

A 28.6

B 105.6

C 26.4

D 108.4

Answer: C

19. If $(x^2 - x - 6)$ is a factor of $x^4 + ax^3 - x^2 - bx - 12 = 0$, what are the values of constants a and b, respectively, in the above equation ?

A 4, -16

B -4, 16

C -4, -16

D 4, 16

Answer: C

120. A train overtakes two persons walking along a railway bridge. The first one walks at 4 km/h and the other one walks at 6 km/h. The train needs 4.2 and 4.8 seconds, respectively, to overtake them. What is the speed of the train, if both the persons are walking in the same direction?

A 22 km/h

B 20 km/h

C 26 km/h

D 24 km/h

Answer: B

Reasoning and Logical Ability

21. Read the given passage and answer the question that follows.

Access to material wealth does not necessarily mean that one country is out of poverty. A strong economy in a developed nation doesn't mean much when a significant percentage (even a majority) of the population is struggling to survive.

Which of the following options most logically completes the argument?

True riddance from poverty means:

- A** an improvement in living standards and access to all basic needs such as enough food, water, shelter, clothing, health, education, etc.
- B** getting means to provide luxury items for once to the underprivileged
- C** a boost in the economy of the country and inflow of foreign investment into the domestic market
- D** a stable political and economic environment and social freedom

Answer: A

22. A train crosses a bridge in 30 seconds at the speed of 72 km/h. If the length of train is 250 m, then what is the length of the bridge?

- A** 250 m
- B** 350 m
- C** 300 m
- D** 400 m

Answer: B

23. Read the given information carefully and answer the questions that follow.

The children of Shyam colony are selecting a team to play a cricket match with Vasant colony. Varun is captain of the team of Shyam colony. He wants his team to have two batsmen, two bowlers and two wicketkeepers. Among the players Rohan, Raveena, Sonal and Animesh are batsmen Brijesh, Cynthia and Manish are bowlers. Similarly, Ruby, Bhuvan, Tiya and Yash are wicketkeepers.

Some of the other conditions are as follows:

- i) Ruby and Yash will always be selected together.
- ii) If Sonal is selected, then neither Manish nor Bhuvan can be selected.
- iii) If Raveena is selected, then Bhuvan is definitely selected.
- iv) Tiya and Yash can never be selected together.

Which of the following is a possible combination of a team?

- A** Raveena, Animesh, Brijesh, Manish, Ruby, Yash
- B** Sonal, Animesh, Brijesh, Cynthia, Tiya, Yash
- C** Rohan, Sonal, Cynthia, Manish, Bhuvan, Tiya
- D** Rohan, Raveena, Brijesh, Cynthia, Bhuvan, Tiya

Answer: D

24. Read the given statement and conclusions carefully. Assuming that the information given in the statement is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statement.

Statement:

Many countries around the globe have either put a ban on the plastic bag or levied tax on it. However, the problem hasn't been solved completely because the implementation of these measures hasn't been as successful.

Conclusions:

- I. Plastic bags are illegal to use or sell in many countries.
- II. The authorities are not strict enough to impose the ban on plastic bags completely.

- A** Only conclusion (II) follows.
- B** Either conclusion (I) or (II) follows.
- C** Both conclusion (I) and (II) follow.
- D** Only conclusion (I) follows.

Answer: C

25. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

- a) All parrots are sparrows.
- b) Some eagles are vultures.
- c) All vultures are sparrows.

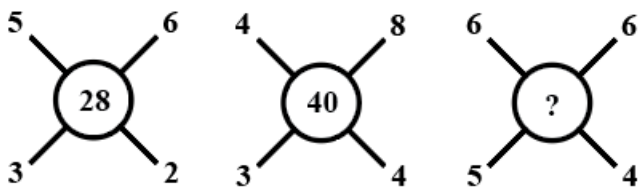
Conclusions:

- I. All vultures are parrots.
- II. Some parrots are eagles.
- III. Only some vultures are sparrows.

- A** None of the conclusions follow.
- B** Only conclusions I and II follow.
- C** Only conclusions I and III follow.
- D** Only conclusions II and III follow.

Answer: A

26.



Select the number from among the given options that can replace the question mark(?) and complete the pattern.

- A** 54
- B** 48
- C** 51
- D** 46

Answer: A

27. Select the number that will come next in the following series.
113, 117, 126, 151, 200, ?

- A** 275
- B** 258
- C** 321
- D** 323

Answer: C

28. Ishaan is standing at a bus stop facing the East. From there he turns right and starts walking for 30 m. Then he turns left and walks 10 m. He again turns left and walk 15 m. What is the shortest distance (approximate) between Ishaan and the starting point?

- A** 16 m
- B** 25 m
- C** 55 m
- D** 18 m

Answer: D

29. Read the given information carefully and answer the questions that follow.

The children of Shyam colony are selecting a team to play a cricket match with Vasant colony. Varun is captain of the team of Shyam colony. He wants his team to have two batsmen, two bowlers and two wicketkeepers. Among the players Rohan, Raveena, Sonal and Animesh are batsmen Brijesh, Cynthia and Manish are bowlers. Similarly, Ruby, Bhuvan, Tiya and Yash are wicketkeepers.

Some of the other conditions are as follows:

- i) Ruby and Yash will always be selected together.
- ii) If Sonal is selected, then neither Manish nor Bhuvan can be selected.
- iii) If Raveena is selected, then Bhuvan is definitely selected.
- iv) Tiya and Yash can never be selected together.

If Raveena is selected, then who among the following will definitely NOT be selected?

- A** Bhuvan
- B** Manish
- C** Rohan
- D** Sonal

Answer: D

30. If it was Wednesday on 1 January 2007, then what was the day of the week on 1 January 2011?

- A** Monday
- B** Wednesday
- C** Thursday
- D** Saturday

Answer: A

31. Three persons Shruti, Vihaan and Vishi gave the following statements about Anu's sweater.

Shruti said, "She is either wearing red or green."

Vihaan said, "She is wearing red."

Vishi said, "She is neither wearing red nor green."

Of these three, only one person is wrong.

Which colour sweater is Anu wearing?

- A** Red
- B** Data insufficient
- C** Green
- D** Neither Red nor Green

Answer: A

32. Select the option that is true regarding the following two statements labelled Assertion (A) and Reason (R).

A. A stable atom has the net charge of zero.

R. When the number of electrons does not equal the number of protons, the atom is ionized.

- A** A is true but R is false.
- B** Both, A and R, are true but R is not the correct explanation of A.
- C** A is false but R is true.
- D** Both, A and R, are true and R is the correct explanation of A.

Answer: B

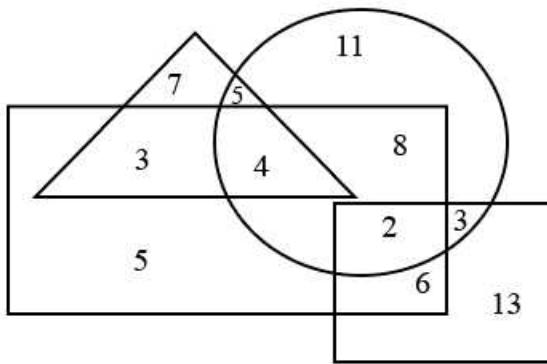
33. Three materials paper, cloth and plastic are cut into three shapes circle, triangle and square but not necessarily in the same order. Also, they are painted red, pink and green but not necessarily in this order. The paper is green and the plastic is cut in a square but is not painted pink. The circle shaped material is painted pink.

What is the shape and colour of the cloth?

- A** Circle, red
- B** Triangle, red
- C** Circle, pink
- D** Triangle, pink

Answer: C

34. Select the option which represents the number of black colored items that are warm but NOT bedsheets.



- | | |
|----------|----|
| A | 10 |
| B | 14 |
| C | 6 |
| D | 8 |

Answer: A

35. In an examination Roma was ranked 8^{th} from the top and Arjun was ranked 9^{th} from the bottom. In the next exam their rankings were interchanged, hence Arjun became 28^{th} from the bottom. How many total students were there, if equal number of students gave both the exams?

- | | |
|----------|----|
| A | 38 |
| B | 37 |
| C | 35 |
| D | 36 |

Answer: C

36. Select the option that is true regarding the following two statements labelled Assertion (A) and Reason (R).

A. A person who does hard work smartly gets the desired goals.

R. Only hard work is not enough to reach to your desired goals.

A Both, A and R, are true and R is the correct explanation of A.

B Both, A and R, are true but R is not the correct explanation of A.

C A is true but R is false.

D A is false but R is true.

Answer: A

37. Harry is the husband of Eli and Sue is the sister of Christa's father and Fred is the father of Sue. Nichole is Eli's mother-in-law and Fred is the husband of Eli's husband's mother. Sue is the sister-in-law of Eli who is the only child of her parents. If Nichole has only two children, then how is Fred related to Christa?

A Paternal grandfather

B Maternal grandfather

C Paternal uncle

D Maternal uncle

Answer: A

38. Becca can complete a work in 12 days and Jason can complete the same work in 24 days. If they work together, then the work can be finished in how many days?

A 12 days

B 24 days

C 8 days

D 10 days

Answer: C

39. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

- (a) All curtains are sheets.
- (b) Some sheets are shawls.
- (c) Some covers are sheets.

Conclusions:

- I. Some curtains are covers.
- II. Some shawls are covers.

- A** Only conclusion (I) follows.
- B** Either conclusion (I) or (II) follows.
- C** Only conclusion (II) follows.
- D** Neither conclusion (I) nor (II) follows.

Answer: D

40. Five students Leena, Poonam, Sarika, Afreen and Monisha are sitting in a row facing the North. Monisha is sitting between Sarika and Poonam. Afreen is sitting on the west end. Poonam is sitting third to the right of Afreen. Who is sitting in the middle of the row?

- A** Poonam
- B** Leena
- C** Sarika
- D** Monisha

Answer: D

41. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

- a) All cities are villages.
- b) Some states are cities.

Conclusions:

- I. All states are villages.
- II. Some villages are states.
- III. Some villages are cities.

- A** Only conclusions I and III follow.
- B** Only conclusions I and II follow.
- C** Only conclusions II and III follow.
- D** All the three conclusions follow.

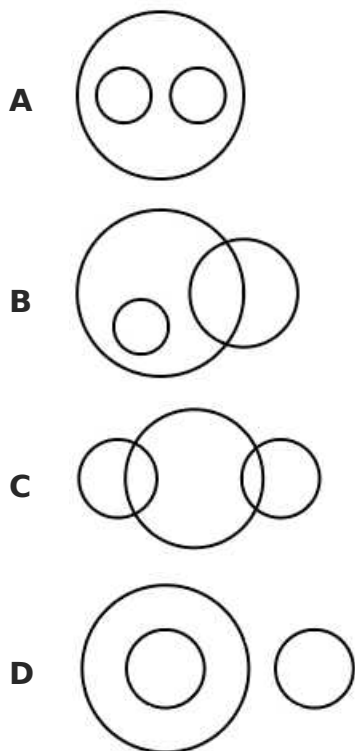
Answer: C

42. **Sanjay started from a point facing North. He walked for 10 m and then took a left turn and again walked 10 m. Then he took a right and walked 20 m further. Next he took right and walked 20 m. He further turned right and moved 20m. In which direction is Sanjay from the starting point?**

- A** North-west
- B** South-west
- C** South-east
- D** North-east

Answer: D

43. **Select the Venn diagram that best represents the relationship between Shark, Oviparous and Ostrich.**



Answer: B

44. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

- a) It is seen very often that a big corporation sets up small industries in a rural area, and around this, infrastructure is built, and development and urbanisation take place.
b) Jamshedpur is an example of such a place, where Tata Industries set up small industries many years ago and made the area highly developed.

Conclusions:

- I. Urbanisation definitely encourages the people of a place to have a better life.
II. The big corporations facilitate development in one way or another.

- A** Either conclusion (I) or (II) follows.
B Both conclusion (I) and (II) follows.
C Only conclusion (I) follows.
D Only conclusion (II) follows.

Answer: D

45. Indar is Ani's father. Lakshay is Ruchi's father-in-law and Ani is Tara's sister. Arohi is Indar's paternal grandmother. Tara is Lakshay's granddaughter. If Lakshay has only one child, then how is Ani related to Arohi?

- A** Granddaughter
B Great grandmother
C Great granddaughter
D Grandmother

Answer: C

46. Read the given statement and courses of action and decide which of the given courses of action follow(s) from the statement.

Statement:

A large number of people die due to road accidents daily.

Courses of action:

- I. The government should make adequate arrangements to reduce any accidents on roads.
II. People should not be allowed to go on the roads.

- A** Neither I nor II follows.

- B** Either I or II follows.
- C** Only I follows.
- D** Only II follows.

Answer: C

47. Consider the given statements and decide which of the given assumptions is/are implicit in the statement.

Statements:

'Your performance will be evaluated after two months of studying in the institution to confirm the admission' as stated in the selection letter of the institution.

Assumptions:

- I.** The aptitude of a student is determined after the selection not before it.
- II.** Generally a student tries to prove their potential in the final evaluation.

- A** Either I or II is implicit
- B** Only assumption II is implicit
- C** Only assumption I is implicit
- D** Both I and II are implicit

Answer: D

48. A clock was 5 minutes behind the actual time at 4 p.m. on Monday and 10 minutes ahead of the actual time at 2 p.m. the next Wednesday. When will it show the correct time?

- A** 3:46 p.m. on Tuesday
- B** Cannot be calculated
- C** 7:20 a.m. on Tuesday
- D** 10:17 a.m. on Tuesday

Answer: C

49. Eight friends are sitting around a round table facing the centre with equal distances between two neighbours. Sehaj is sitting opposite to Farhan. Aparna is second to the left of Ruchi. Only Karan is sitting between Tony and Sehaj. Ruchi is opposite to Prerna who is immediate neighbour to Farhan. Harsh is somewhere between Ruchi and Farhan. Who is sitting opposite Karan?

- A** Harsh
- B** Prerna
- C** Ruchi
- D** Aparna

Answer: D

50. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

- (i) Some robots are machines.
- (ii) All phones are gadgets.
- (iii) All robots are gadgets.
- (iv) No phones are robots.

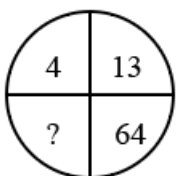
Conclusions:

- I. Some gadgets are machines.
- II. Some machines are phones.
- III. No phones are machines.

- A** Only conclusion (II) and either (I) or (III) follows.
- B** Only conclusions (I) and (II) follows.
- C** Only conclusion (I) and either (II) or (III) follows.
- D** Only conclusions (II) and (III) follows.

Answer: C

51. Select the number from among the give options that can replace the question mark(?) in the figure?



- A** 1024
- B** 2197
- C** 2064

D 1686

Answer: B

52. Lora, Bhumi and Tammy were given a work each and only one of the three completed their work. Each person was employed in one of the three different companies - Avtech, Prosys and Kygard. Avtech employees always speak the truth, Prosys employees always lie and Kygard employees tell the truth and lie, alternatively. After asking them about the work they gave these statements.
- Bhumi:
Lora has completed her work.
Tammy is not a Prosys employee.
- Lora:
I would have completed the work, if Tammy had not distracted me with movies.
Tammy always speaks the truth.
- Tammy:
I hadn't distracted Lora with the movies.
Bhumi completed her work.
Bhumi is an employee of which company?

- A** Prosys
- B** Avtech
- C** Kygard
- D** Either Prosys or Avtech

Answer: B

53. Read the given passage and answer the question that follows.
- India's earthen lamp makers are losing domestic sales because of lower-priced imports of cheap fancy electric lamps, which is because foreign government employs forced labour to work without any labour charges. Whatever the reason be, the cost is the means of livelihood of the domestic lamp makers and sellers. Therefore, it would not only support and protect domestic lamp makers, but also other industries sales, if our government took measures to reduce cheap material imports. Which of the following, if true, most seriously weakens the above argument?
- A** Because earthen lamps are rarely competitive in the markets, only a very small portion of revenue comes from the sales.
 - B** Because of advances in technology the earthen lamp are old fashioned and nobody wants to buy them.
 - C** The forced labour that foreign government is using do not specify any penalties for such violations.

- D** For many domestic industries who face severe international competition in both domestic and export markets, the cheap import of raw material from foreign government constitutes a significant part of their cost benefits.

Answer: D

54. Read the given statement and courses of action and decide which of the given courses of action follow(s) from the statement.

Statement:

A new strain of the virus is reported to have spread across the country.

Courses of action:

I. People should be made aware people about the virus and implementation measures should be taken to prevent the spread.

II. Minimise economic disruption by hiking prices and hence maintain the economy.

III. Support coordination and the efficient use of limited resources among local, national, regional and international public health partners.

- A** Only I and II follows.
- B** Only I and III follows.
- C** All three follows.
- D** Only II and III follows.

Answer: B

55. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

a) All lights are wires.

b) All wires are switches.

Conclusions:

I. All lights are switches.

II. Some switches are wires.

- A** Only conclusion I follows.
- B** Only conclusion II follows.
- C** Either conclusion I or II follows.
- D** Both conclusions I and II follow.

Answer: D

56. Consider the given statements and decide which of the given assumptions is/are implicit in the statement.
Statements:
Safety and health sectors in India are well below the quality standards as revealed by the pandemic.
Assumptions:
I. The quality standards set for health and safety are unrealistic and non-achievable.
II. The health and safety sectors were not considered as priority and as a sector to invest in.

- A** Either I or II is implicit
- B** Only assumption II is implicit
- C** Only assumption I is implicit
- D** Neither I nor II is implicit

Answer: B

57. In a class of 40 students Anuja is ranked 17^{th} and Mihir is ranked 18^{th} . What will be their ranks from the last, respectively?

- A** 23^{rd} and 24^{th}
- B** 24^{th} and 25^{th}
- C** 24^{th} and 23^{rd}
- D** 25^{th} and 24^{th}

Answer: C

58. Select the number from among the given options that can replace the question mark (?) in the following series.
323, 329, 344, ?, 456

- A** 385
- B** 421
- C** 405
- D** 379

Answer: D

59. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.

s_f_sg_c_g_c__fc

- A** gcfsfsg
- B** gcfsfsc
- C** cgscfsg
- D** cgfsfsc

Answer: A

60. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

- a) Since education is now dependent on electronic devices, homework and notes, explanation, almost everything is now accessible in our devices, which has increased the screen-time of students and teachers.
- b) The increase in the screen-time is harmful for students and teachers. This has resulted in children and teachers weakening themselves.

Conclusions:

- I. Online education is a necessity, but has many demerits with itself.
- II. We should stop online education as it has harsh negative effects on people connected to it.
- III. Online education is very helpful as everything is easily accessible.

- A** Only conclusions (I) and (III) follows.
- B** Only conclusions (II) and (III) follows.
- C** Only conclusions (I) and (II) follows.
- D** All the three conclusions follows.

Answer: A