



# VIDHVATH ACADEMY FOR COMPETITIVE EXAMS

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## FULL LENGTH TEST: VPT055 CIVIL SERVICES APTITUDE TEST (CSAT) TEST BOOKLET

*Time Allowed: 120 mins*

*Maximum Marks: 200*

### INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS BOOKLET DOES NOT HAVE ANY UNPRINTED OR TURN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. ENCODE CLEARLY THE TEST BOOKLET SERIES A, B, C OR D AS THE CASE MAY BE IN THE APPROPRIATE PLACE IN THE ANSWER SHEET.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. Do NOT write anything else on the Test Booklet.
4. This Test Booklet contains 80 items (Questions). Each item is printed in English. Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response with you consider the best. In any case, choose ONLY ONE response for each item.
5. You have to mark all your responses ONLY on the separate Answer Sheet provided. See direction in the answers sheet.
6. All items carry equal marks. Attempt all items. Your total marks will depend only on the number of correct responses marked by you in the answer sheet. For every incorrect response  $1/3^{\text{rd}}$  (0.83) of the allotted marks will be deducted.
7. Before you proceed to mark in the Answer sheet the response to various items in the Test booklet, you have to fill in some particulars in the answer sheets as per instruction sent to you with your Admission Certificate.
8. After you have completed filling in all responses on the answer sheet and the examination has concluded, you should hand over to Invigilator only the answer sheet. You are permitted to take away with you the Test Booklet.
9. Sheet for rough work are appended in the Test Booklet at the end.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO

1. Anira is facing west. She then turns 45 degrees in the clockwise direction and then another 180 degrees in the same direction and then 270 degrees in the anti-clockwise direction. In which direction she is facing now?
  - (a) South
  - (b) North-west
  - (c) West
  - (d) South-west
2. Two statements are given followed by two conclusions:  
 Statements:  
 All numbers are divisible by 5  
 All numbers are divisible by 11  
 Conclusion-I: All numbers are divisible by 10  
 Conclusion-II: All numbers are divisible by 55  
 Which of the above conclusions logically follow/follows from the above given statement?
  - (a) Only conclusion I
  - (b) Only conclusion II
  - (c) Neither conclusion I nor conclusion II
  - (d) Both conclusions I and conclusion II
3. Statements:  
 I: No pear is a strawberry.  
 II: Some strawberries are mangoes.  
 III: Some mangoes are keys.  
 Conclusions:  
 I: Some mangoes are strawberries.  
 II: No keys are a pear.  
 III: No keys are a mango.  
 Which of the above conclusions logically follow/follows from the above given statement?
  - (a) if only conclusion I does not follow.
  - (b) if only conclusion II and III do not follow.
  - (c) if only conclusion III does not follow.
  - (d) if only conclusions I and II do not follow.
4. Consider the following sequence of numbers:  
 6 16 44 126 370 ?
  - (a) 1100
  - (b) 1050
  - (c) 1400
  - (d) 1260
5. Kusum is ranked 16th from the top and 29th from the bottom among those who passed an examination. Six students did not participate in the competition and five failed in it. How many students were there in the class?
  - (a) 35
  - (b) 45
  - (c) 50
  - (d) 55
6. How many integers are there between 1 to 100 which have 5 as a digit and are divisible by 5?
  - (a) 5
  - (b) 11
  - (c) 12
  - (d) 13
7. A land of dimension  $20\text{m} \times 12\text{m}$  is dug till a depth of 15m. The soil taken out is used to completely fill cuboidal pit of length 25m and breadth 10m. Find the depth of the pit
  - (a) 15m
  - (b) 16.2m
  - (c) 18m
  - (d) 14.4m
8. It takes Bob  $2t$  minutes to complete form A, which has  $k$  questions, and  $3t$  minutes to complete form B which has  $k/2$  questions. If Bob answers all the questions, how much more time does he take on an average to answer a form B question than he takes to answer a form A question?
  - (a)  $2tk$
  - (b)  $8t/k$
  - (c)  $4t/k$
  - (d)  $t/k$

9. A grocer buys 300 oranges at 25p per doz. and sells them at 5 for 17 p. How much profit has he made?
- Rs.3.95
  - Rs. 4.50
  - Rs. 4.95
  - Rs. 8.76

**Directions for the following 7 (seven) items:**

Read the following five passages and answer the items that follow. Your answer to these items should be based on the passages only.

**Passage-1**

The cities grow with their people. They are made of aspirations, dreams, and opportunities. They offer the lifestyle millions aim at, providing them a platform to climb up the ladder of development. People come to cities in search of employment, profit, better lives, quality education, larger markets and similar prospects which their native environment lack or show little chance of providing in future as well. Not all of them find in the growing city what they dreamed of. And yet they stay on, hoping to have a better future or giving better opportunities to their children.

10. With reference to the above passage, which of the following assumptions have been made?
- People come to the cities for the things that they do not find at their native place
  - People primarily come to the cities for better job opportunities.
  - Cities provide a better platform for the development of their inhabitants.
  - Most of the people come to the cities to give better future to their children.
- Choose the correct answer from the code given below:
- 1 and 2 only
  - 2 only
  - 3 only
  - 3 and 4 only

**Passage-2**

The circular economy of waste management which is the primary governing policy worldwide has the basic tenet of 'lesser wastage', which is ingrained in Indian ethos of giving away, sharing and donating—books, clothes, utensils and other household and community goods—even passing from one generation to other. These were our own ways of leading a minimalistic lifestyle, generating minimum waste. Aparigraha (non-possession) mentioned in Gandhiji's vows also promotes 'not hoarding anything that we do not need today', leading to lesser wastage and waste generation.

11. With reference to the above passage, which of the following could be most rational and practical implication?
- Most of the waste is generated by the consumeristic behaviour of our society.
  - People should be educated regarding of traditional Indian ethos.
  - Minimalistic lifestyle is not good for economic growth.
  - Waste processing should be made compulsory across the country/world.
- Choose the correct answer from the code given below:
- 1 and 2 only
  - 2 only
  - 3 only
  - 2 and 4 only

**Passage-3**

Lack of universal sanitation coverage has been a cause for concern since India's independence. Even during a time, when nutritional and health indicators were tracking progress, sanitation's own progress curve grew sluggishly. The negative implications of open defecation were widely accepted at the time, but many acknowledged that there were also structural forces such as entrenched social norms, power dynamics within social strata, and gender-exclusive taboos that influenced the uptake of healthy sanitation practices and private investment in the related behaviour,

markets, and goods. This meant that even during the 1970s and 80s, when national vaccine programmes were experiencing a relatively high rate of coverage; sanitation coverage was averaging a growth rate of 1 per cent annually. At that rate, it would take India until 2080 to achieve universal sanitation access, and that is assuming a no population growth.

12. With reference to the above passage, the following assumptions have been made:

1. Sanitation has never been on the agenda of the government in the past and this is indicated in low growth rate of just 1 percent.
2. Implementation of government schemes and initiatives are also dependent on the social practices and accepted behaviour.

Choose the correct answer from the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

#### Passage-4

Corporate Social Responsibility (CSR) is the buzzword in the corporate world and the Government. There is an impression among some both in business and public at large that the Government, by making a law forcing the corporate and the business world to spend two per cent of their profit for social betterment, has gained the ground for Gandhi's idea of Trusteeship. However, Gandhi's idea is deeper. Gandhi also had something to say about ethics in business. He had definite ideas about how people engaged in commerce and business should act and can contribute to nation building and forming a nonviolent harmonious society. He had conveyed to the business community that they had a clear role.

13. What is the most logical and crucial message conveyed through the passage?

- (a) The idea of Corporate Social Responsibility is much wider than what we understand in the current context.
- (b) People have not understood the ideas of Mahatma Gandhi in the context in which has conveyed them.
- (c) The ideas of Gandhiji are much wider than what has been incorporated through the CSR.
- (d) Gandhiji's ideas help us to live within our means and act as trustees for the resources to be shared with others.

14. With reference to the above passage, the following assumptions have been made:

1. Business should pay back to the society in the form of CSR to help the people and contribute in nation building
2. Business should do CSR as there is no other significant way in which they can contribute to the society.
3. CSR is a system to implement Gandhiji's idea of trusteeship in letter and spirit to ensure harmonious development.

Choose the correct answer from the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1 and 2 only

#### Passage-5

India's rise is an opportunity to reimagine an India in consonance with our highest civilization ideals: joy, sustainable prosperity, responsible freedom, inclusive growth, peace and mutual respect. These ideals, when they influence our foreign policy, have the potential to shape a plural global order. As potential leaders and shapers of tomorrow, the current global environment calls on us to envision an inclusive global order and then strive to make it a reality. India needs a dream, an overarching vision to bring coherence to our actions, to act as a balancing power and connect with individuals, nations and regions

for achieving sustainable prosperity and progress.

15. Which of the following best reflects the critical message of the passage?

- (a) India is destined to lead the world and she will be a super power.
- (b) India's opportunity lies in balancing the past and the present ensuring sustainability, freedom, growth and peace.
- (c) India has to play a balancing role between the superpower to rise to its status of credible force in the world affairs.
- (d) India's opportunity to become a superpower is dependent on how she solves the problems of today and is ready for tomorrow.

16. With reference to the above passage, the following assumptions have been made:

- 1. Other countries of the world are not in a position to solve the problems that we see in the world today.
- 2. India is the only country with rich past which can help her to act as a balancer of the today and the tomorrow.

Choose the correct answer from the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

17. Two statements are given followed by a question:

S1:  $X + Y$  is a two digit number greater than 50.

S2:  $Y$  is a two digit number.

Question: What is the value of prime number  $X$ ?

Which of the following is correct in respect to the above statements and the questions?

- (a) S1 alone is sufficient to answer the question.
- (b) S2 alone is sufficient to answer the question.

(c) S1 and S2 together are sufficient to answer the question but neither S1 nor S2 alone is sufficient to answer the question.

(d) S1 and S2 together are not sufficient to answer the question

18. Find the largest four digit natural number  $N$  which when divided by 45, 60 and 72 leaves a remainder of 33, 48 and 60 respectively.

- (a) 9348
- (b) 9528
- (c) 9708
- (d) 9888

**Read the following information and answer the following question/s:**

In a cricket season, India defeated Australia twice, Pakistan defeated India twice, Australia defeated Pakistan twice, India defeated New Zealand twice and Pakistan defeated New Zealand twice.

19. Which country has lost maximum number of times?

- (a) India
- (b) Australia
- (c) New Zealand
- (d) Pakistan

20. Which sequence of letters when placed at the blanks one after another will complete the given letter series?

aab – cc – daa – bbb – cdddd

- (a) bdbd
- (b) ddca
- (c) dbbc
- (d) bdac

**Read the following information and answer the following question/s:**

Six students A, B, C, D, E and F are sitting in the field.

A and B are from Pune while the rest are from Mysore. D and F are tall while others are short. A, C and D are girls while others are boys.

21. Which is the tall girl from Mysore?  
(a) C  
(b) D  
(c) E  
(d) F
22. Which of the following is a leap year?  
(a) 1700  
(b) 1800  
(c) 1900  
(d) 2000
23. On 8th Dec, 2007 Saturday falls. What day of the week was it on 8th Dec, 2006?  
(a) Sunday  
(b) Thursday  
(c) Tuesday  
(d) Friday
24. How many zeros are there at end of the following product?  
 $1^1 \times 2^2 \times 3^3 \times 4^4 \times 5^5 \times 6^6 \times 7^7 \times 8^8 \times 9^9 = ?$   
(a) 3  
(b) 4  
(c) 5  
(d) 6
25. What is the Smallest Number that should be added (or subtracted) to 89355 to make it divisible by 9?  
(a) 3  
(b) 4  
(c) 5  
(d) 6
26. How many five digit prime numbers can be formed by using the digits 1, 2, 3, 4 and 5 without repetition of digits?  
(a) Zero  
(b) One  
(c) Two  
(d) Three
27. A is twice as good in fencing a garden as B and takes 8 hours less than B takes. Find the time B would take for fencing the garden.  
(a) 10 hours  
(b) 16 hours

- (c) 12 hours  
(d) 18 hours

28. A beats B by 15 sec in a 200 m race, B beats C by 25 sec in a 500 m race, C beats D by 32 sec in 800 m race and D beats E by 35 sec in a 1 km race. What must be the speed of A in order to beat E by 800 m in a 2 km race?  
(a) 2.5 m/s  
(b) 3.33 m/s  
(c) 5 m/s  
(d) 6.66 m/s
29. A, B and C are situated at the bank of river which is flowing at a constant rate. B is at an equal distance with A and C. A swimmer Avinash takes 10 h to swim from A to B and B to A. Also, he takes 4 h to swim from A to C. What is the ratio of speed of Avinash in still water and speed of stream?  
(a) 5 : 3  
(b) 3 : 5  
(c) 2 : 5  
(d) 1 : 2
30. How many pairs of natural numbers are there so that difference of their squares is 60?  
(a) 4  
(b) 3  
(c) 2  
(d) 1
31. How many times will the digit '7' be written when listing the integers from 1 to 1000?  
(a) 271  
(b) 300  
(c) 252  
(d) 304

**Instructions for the following 4 (four) items:**  
Read the following information and answer the questions that follow –  
Forty one students took three exams each in Algebra, Biology, and Chemistry. We have the following data:

- (1) twelve students failed the Algebra exam,
- (2) five students failed the Biology exam,
- (3) eight students failed the Chemistry exam,
- (4) two students failed both Algebra and Biology,
- (5) six students failed both Algebra and Chemistry,
- (6) three failed both Biology and Chemistry and
- (7) one student failed all three exams

**32.** How many passed all three subjects?

- (a) 27
- (b) 26
- (c) 25
- (d) 24

**33.** How many students passed in at least two of the three exams?

- (a) 22
- (b) 32
- (c) 13
- (d) 9

**34.** How many students failed in Algebra or Biology?

- (a) 17
- (b) 16
- (c) 13
- (d) 15

**35.** How many students passed in exactly two exams?

- (a) 8
- (b) 7
- (c) 6
- (d) 5

**Directions for the following 5 (five) items:**

Read the following four passages and answer the items that follow. Your answer to these items should be based on the passages only.

#### Passage-1

Digitisation as a phenomenon made its onset long ago. But the pace was so gradual and the changes involved so subtle, that it went almost unnoticed. Early digital initiatives

were mainly to preserve records, create in-house office management systems, processing of data, etc. It is over the last few years that the digital revolution has opened a whole new vista of opportunities reshaping the scope of development. From the Internet to artificial intelligence and robotics, emerging technologies have presented unprecedented opportunities for social and economic renovation. India, the fastest growing economy in the world, has undergone complete transformation with the rapid uptake of digital technologies. Smart and connected technology has become an integral part of businesses, governments and communities. It has had profound impact on the way people interact with each other, express their feelings, share ideas and manage their health and finances.

**36.** Which of the following is the most logical and rational inference that can be made from the passage above?

- (a) Digitization has impacted life of all of us in one way or another and it is bound to increase.
- (b) Digitization has severely impacted the social life of individuals as the social circle has increased to unmanageable level.
- (c) Digitization will help the growing economies to grow at a faster pace and this will bring enhanced value to everyone.
- (d) Digitization first entered the government systems and over a period industry accepted it as an integral part.

#### Passage-2

India has registered a sustained economic growth in the last few years. But it still faces a huge economic loss due to poor hygiene and sanitation. Inadequate sanitation poses serious issues for economic growth of the country by manifesting itself in the form of poor health, death, losses in education and overall productivity and well-being of its people. According to the World Bank, India loses 6.4 per cent of GDP annually because of

this particular reason. Perceiving this, the government of India has launched Swachh Bharat Mission on 15th August 2014, from the ramparts of the Red Fort and set a target to build a clean and open defecation free India by 2019, the 150th birth anniversary year of Mahatma Gandhi, as a befitting tribute.

**37.** Which of the following is the most logical and rational inference that can be made from the passage above?

- (a) Health is a right of an individual and the government is focusing on Swachh Bharat Mission to implement the same.
- (b) Investment in health and wellness of an individual brings recurring benefits to the economy.
- (c) In order to maintain economic growth and reduce losses to the GDP, investment in health and sanitation is required.
- (d) Mahatma Gandhi wanted to make India clean and open defecation free and this is the guiding principal of Swachh Bharat Mission.

**38.** With reference to the above passage, following assumptions have been made:

- 1. Health of the citizens was neglected by the previous governments.
  - 2. Health is the most important factor to increase productivity of people.
- Choose the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

### Passage-3

Indian economy has very unique characteristics with formal-informal, rural-urban, agricultural-non-agricultural, skilled-unskilled components existing at the same time. Any effort to promote employment needs to address concerns of these components holistically. While on the one hand there is requirement for skilling the unskilled labour class, there is also the

need to bring the informal sector workers into a formalised set up. While agriculture still accounts for bulk of employment in India, the non-agricultural employment like small scale manufacturing, processing, repairing, construction and other services in villages and rural towns accounts for significant proportion of income for rural households. Initiatives like Agriclincs, Agribusiness centres, National food security mission etc have given big boost to nonagricultural employment in rural areas.

**39.** With reference to above passage, following assumptions have been made:

- 1. It is not easy to handle the problems of economy as they are multi-faceted in nature.
- 2. The quality of employment, in terms of value creation, is better in non agricultural employment against the agriculture in village and small towns.

Choose the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

### Passage-4

The framers of the Indian Constitution have thought well in advance and ensured to provide adequate and mandatory provisions in the Constitution of India to provide justice in all aspects of life, equality in status, social security and economic/financial safeguards to the weaker sections of the society. The successive governments have recognised the social and economic imperatives for broader financial inclusion and have made significant policy changes from time to time by finding innovative ways to bring the poor at par with the rest of the society. The successive Governments in India have also made essential amendments to the constitution and brought legislative framework to ensure social and economic safeguards to the deprived sections of the society.



40. In the context of India, which of the following best reflects the critical message of the passage?
- Establishment of social justice is an unfinished agenda and government is working continuously for it.
  - Considering the kind of diversity in India, the idea of social justice is an elusive dream for the government.
  - Social justice cannot be implemented as the definition keeps on changing and government has to make changes continuously.
  - Governments lack political will to implement strong policy initiatives to ensure social justice in India.

**Instructions for the following 3 (three) items:**

Read the following information and answer the following question/s:

On a book rack seven books one each on Psychology, Hindi, English, Sociology, Economics, Finance and Accountancy are placed one above the other.

On top is the book on Sociology. Finance is immediately below Sociology.

Finance is immediately above Accountancy.

Economics is immediately above Psychology but is not in the middle.

Psychology is immediately above Hindi.

41. Economics is between which of the following books?
- Accountancy and Finance
  - Psychology and Hindi
  - English and Psychology
  - Psychology and Sociology
42. Which books are between Hindi and Accountancy?
- English, Economics and Psychology
  - Economics, Psychology and Finance
  - Economics, Psychology and Hindi
  - Can't be determined
43. Which book will be between Psychology and Sociology, if Sociology and English,

Accountancy and Hindi and, Finance and Psychology interchange their positions?

- Accountancy
- Psychology
- Hindi
- Economics

44. Two statements S1 and S2 are given below followed by a Question:

$$S1: y - 3 = 2$$

$$S2: y^2 = 25$$

Question: What is the value of y?

Which among the following is correct in respect of above statements and question?

- S1 alone is sufficient to answer the question.
- S1 and S2 together are sufficient to answer the question.
- S2 and S3 together are sufficient to answer the question.
- S1 and S3 together are sufficient to answer the question.

45. The difference between SI and CI on a certain sum at the rate of 4% is Rs. 1 for 2 years, find the sum

- Rs. 500
- Rs. 550
- Rs. 600
- Rs. 625

**Direction for the following 2 (two) item:**

Read the following Passage and answer the items that follow. Your answers to these items should be based on the passages only.

**Passage 1**

Unlike our current broken industrial agriculture model, eco-farming answers these questions as a food system, with people and farmers at its heart. Eco-farming combines modern science and innovation with respect for nature and biodiversity. It ensures healthy farming and healthy food. It protects the soil, the water and the climate. It does not contaminate the environment with chemical inputs or use genetically engineered crops. And it places people and farmers—consumers and producers, rather

than the corporations who control our food now—at its very heart. It is a vision of sustainability and food sovereignty in which food is grown with health and safety first and where control over food and farming rests with local communities, rather than transnational corporations.

46. What is the most logical conclusion that can be drawn from the passage above?
- Farmers are going to engage mostly in ecofarming in the future
  - International corporations and industrial farming will eliminate the small farmers if left unchecked
  - Eco-farming is a sustainable solution that pays heed to environmental concerns
  - Food sovereignty is of vital importance for small farmers to survive
47. Which of the following assumptions are implied in the passage above?
- Eco-farming harms neither the flora and fauna, nor the biodiversity of a region.
  - Corporations have no role to play in eco farming.
- Only I
  - Only II
  - Both I & II
  - Neither I nor II

**Direction for the following 2 (two) item:**

Read the following Passage and answer the items that follow. Your answers to these items should be based on the passages only.

**Passage 2:**

Global warming is the long-term warming of the planet's overall temperature. Though this warming trend has been going on for a long time, its pace has significantly increased in the last hundred years due to the burning of fossil fuels. As the human population has increased, so has the volume of fossil fuels burned. Fossil fuels include coal, oil, and natural gas, and burning them causes what is known as the "greenhouse effect" in Earth's atmosphere.

The greenhouse effect is when the Sun's rays penetrate the atmosphere, but when that heat is reflected off the surface cannot escape back into space. Gases produced by the burning of fossil fuels prevent the heat from leaving the atmosphere. These greenhouse gasses are carbon dioxide, chlorofluorocarbons, water vapor, methane, and nitrous oxide. The excess heat in the atmosphere has caused the average global temperature to rise overtime, otherwise known as global warming.

48. What is the central message conveyed by the passage above?
- Burning fossil fuels leads to global warming
  - The greenhouse effect can be observed only in the Earth's atmosphere
  - It is unclear how chlorofluorocarbons and methane are emitted
  - Global warming has increased significantly in recent years
49. Which of the following statements cannot be inferred from the passage above?
- The greenhouse effect results from the burning of fossil fuels
  - If fossil fuels are not burnt, there will be no heat in the Earth's atmosphere
  - Carbon dioxide is a greenhouse gas
  - The rise in global temperatures is known as global warming
50. Three numbers 2811, 3981 and 5151 when divided by a certain divisor, leave the common remainder. The sum of the digits of the divisor is:
- 6
  - 8
  - 9
  - 11
51. 4800 chocolates were distributed among the children of a class VI. Each child got thrice as many chocolates as the number of children in the class. The number of children in the class is:
- 35

- (b) 40
- (c) 50
- (d) 45

52. The average weight of four persons sitting in a car and driver is 55kg. The average weight of the car and the all persons sitting in the car is 440kg. What is the weight of the car?
- (a) 2365 kg
  - (b) 2565 kg
  - (c) 2415 kg
  - (d) 2405 kg

53. The average of marks obtained by a class is 70 in English, where girls got average of 75 and boys got 68. In Mathematics, if boys have got an average of 70 marks and girls got 77, then what is the average mark of the class in Mathematics?
- (a) 74
  - (b) 73.5
  - (c) 72
  - (d) 71

**Direction for the following 2 (two) item:**

Read the following Passage and answer the items that follow. Your answers to these items should be based on the passages only.

**Passage 3:**

Forests are carbon sinks and, therefore, help to mitigate the emission of carbon dioxide and other greenhouse gases. Tropical forests alone hold more than 228 to 247 gigatons of carbon, which is more than seven times the amount emitted each year by human activities. But when forests are cut, burned or otherwise removed they emit carbon instead of absorb carbon. Deforestation and forest degradation are responsible for around 15% of all greenhouse gas emissions. These greenhouse gas emissions contribute to rising temperatures, changes in patterns of weather and water, and an increased frequency of extreme weather events. For example, in Sumatra, rainforests on deep peatlands are being cleared, drained and converted to pulp plantations, contributing

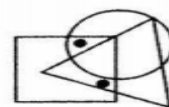
to Indonesia's high greenhouse gas emissions. Changes in climate can affect forest-dwelling creatures by altering their habitats and decreasing availability of food and water. Some will be able to adapt by moving to higher elevations or latitudes, but species losses may occur.

54. What is the most logical, rational and critical inference that can be drawn from the passage above?
- (a) Forests will play a vital role in resolving the problem of global warming on Earth
  - (b) 85% of greenhouse gases occur naturally in the environment
  - (c) Pulp plantations form a large part of the agriculture in Sumatra
  - (d) Forest wildlife is endangered as a result of deforestation
55. What is the most logical, rational and crucial message conveyed by the passage above?
- (a) Forests absorb more carbon than the quantity emitted by humans
  - (b) Global temperatures are rising owing to greenhouse gas emissions
  - (c) Deforestation can be linked directly to global warming and to potential loss of biodiversity
  - (d) Tropic forests hold more carbon than polar ones

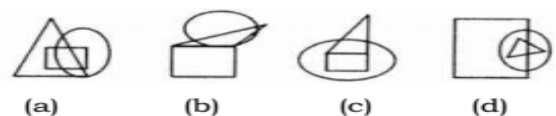
**Direction for the following 1 (one) item:**

Select the appropriate alternative, from among the answer figures marked (a), (b), © and (d) satisfying the similar conditions of placement of dot(s) as in the problem figure.

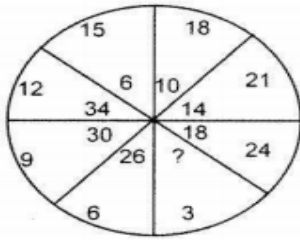
**56. Problem figure:**



Answer figure:



57. Find the missing term(s) in the given figure(s).



- (a) 22  
(b) 20  
(c) 12  
(d) 15

**Direction for the following 3 (Three) item:**

Read the following Passage and answer the items that follow. Your answers to these items should be based on the passages only.

**Passage 4**

Wild animals are always on the move. They move from place to place in search of food, mates, shelter, and water. Many animals do not have to move far in order to have all their needs met, but other animals—for example migratory birds, wolves, mountain lions, or butterflies—require much more space. Currently many species with large territories, including gray wolves, are threatened because habitat loss and fragmentation have limited their available space. Roads, fences, and buildings cut off habitat and force wildlife into smaller areas. Conservationists have to take into account the different spatial needs of wildlife when designing plans to protect them. They have to think about the territory size, different habitat types, and migration routes that wildlife need. A wildlife corridor is a tract of land that connects different wildlife habitats (such as refuges, parks, or rivers) that might otherwise be separated by human development. Wildlife corridors provide many benefits to wildlife. With corridors, animals have a better opportunity of finding the basic necessities they need—food, water, shelter, and places to raise their young. Animals that require larger territories can access new habitats and maintain a healthy territory size. Wildlife corridors also promote

genetic biodiversity. When more individuals of a species are interconnected, the gene pool becomes larger and more viable. Migratory wildlife benefit from corridors because they can move safely over long distances without having to come into contact with human developments or cars. Species are more likely to survive disturbances by having more undisturbed areas.

58. What is the most logical, rational and critical inference that can be drawn from the passage above?
- (a) Mountain lions cover a wide geographical area in order to sustain themselves  
(b) Human settlements are the primary cause of several animal extinctions  
(c) Wild animals cannot survive in confined spaces  
(d) Wildlife conservationists are making sub-optimal plans to protect wildlife
59. Which of the following assumptions are implied in the passage above?
- I. Wildlife corridors are the only way to ensure the survival of migratory birds.  
II. Human settlements are an impediment to the movement of migratory wildlife.
- (a) Only I  
(b) Only II  
(c) Both I & II  
(d) Neither I nor II
60. Which of the following is a suitable title for the aforementioned passage?
- (a) A Comparison of the Migratory Patterns of Migratory Birds and Animals  
(b) The Impact of Human Development on Wildlife Habitat  
(c) Different Methods of Wildlife Conservation  
(d) The Role of Migration Corridors in Wildlife Conservation

**Directions for the following 3 (three) items:**

Read the following Passage and answer the items that follow. Your answers to these items should be based on the passages only.

These questions are based on the information given below.

A family of eight persons has three married couples. Amelie is the grandmother of Charles and is the mother-in-law of Floyd. Helen is the daughter of Bob, who is the brother of George. Diana is the only child of George and is the mother of Charles. Emma is the wife of Bob.

61. How is George related to Helen?

- (a) Uncle
- (b) Father
- (c) Brother
- (d) Cousin

62. How is Helen related to Diana?

- (a) Sister
- (b) Daughter
- (c) Cousin
- (d) Mother

63. Diana's mother is

- (a) Emma
- (b) Amelie
- (c) Helen
- (d) Floyd

**Direction for the following 2 (two) item:**

Read the following Passage and answer the items that follow. Your answers to these items should be based on the passages only.

**Passage 5**

Soil is the earth's fragile skin that anchors all life on Earth. It is comprised of countless species that create a dynamic and complex ecosystem and is among the most precious resources to humans. Increased demand for agriculture commodities generates incentives to convert forests and grasslands to farm fields and pastures. The transition to agriculture from natural vegetation often cannot hold onto the soil and many of these plants, such as coffee, cotton, palm oil,

soybean and wheat, can actually increase soil erosion beyond the soil's ability to maintain itself.

64. Which of the following assumptions are implied in the passage above?

- I. The soil on Earth cannot withstand excessive exploitation.
- II. Soil erosion is directly proportional to crop diversity.
- (a) Only I
- (b) Only II
- (c) Both I & II
- (d) Neither I nor II

65. What is the central theme of the passage above?

- (a) Agricultural activities may exacerbate soil erosion
- (b) Soil is the most precious resource for human beings
- (c) Most ecosystems in the world are complex
- (d) It is a painstaking but worthwhile initiative to convert forests into farmland

**Directions for the following 4 (four) items:**

These questions are based on the following information:

P, Q, R, S, T, U, V and W are eight employees of a concern. Each is allotted a different locker, out of eight lockers numbered 1 to 8 in a cupboard. The lockers are arranged in four rows with two lockers in each row.

Lockers 1 and 2 are in the top row from left to right respectively while lockers 7 and 8 are in the bottom row – arranged from left to right respectively. So lockers 5 and 6 – arranged from right to left respectively – in the second row from the top 3 and 4 arrange from right to left respectively. P has been allotted locker 1 while V has been allotted locker 8. T's locker is just above that of Q which is just above that of R, whereas W's locker is in the bottom row. (Above or below indicates the same column).

66. If U's locker is not beside Q's locker, whose locker is just above that of W?  
 (a) U  
 (b) S  
 (c) R  
 (d) Q
67. Which of these pairs cannot have lockers that are diagonally placed?  
 (a) P-Q  
 (b) S-R  
 (c) U-R  
 (d) Either (B) or (C)
68. Which of the following groups consists only occupants of odd numbered lockers?  
 (a) Q, R, W  
 (b) R, V, W  
 (c) T, R, Q  
 (d) P, T, Q
69. If U's locker is in the same row as that of R and S exchanges his locker with V, then who is the new neighbour of V in the same row? (Assume that nothing else is disturbed from the original arrangement.)  
 (a) P  
 (b) Q  
 (c) R  
 (d) U
70. Statement:  
 No Rain is Game  
 Some Games are Chain  
 No Chain is Lane  
 Conclusions:  
 (I) Some Chains are not Rain  
 (II) Some Games are Lane  
 (a) Only conclusion I follows  
 (b) Only conclusion II follows  
 (c) Both conclusion I and II follow  
 (d) Neither conclusion I nor II follows
71. What is the approximate average number of temples in all the states together?  
 (a) 4200  
 (b) 4900  
 (c) 5700  
 (d) 4500

72. The number of temples in State B is what percent of the number of temples in state D?  
 (a) 54.54%  
 (b) 50%  
 (c) 48.8%  
 (d) 60%
73. The number of temples in state E is approximately what percent more or less than the number of temples in state G?  
 (a) 29%  
 (b) 37%  
 (c) 15%  
 (d) 47%
74. If Rs. 1 is charged for each temple in state A, Rs. 2 for each temple in state B and so on, a person has to pay how much money to visit all the temples of A, B, C and D?  
 (a) Rs. 345  
 (b) Rs. 385  
 (c) Rs. 455  
 (d) Rs. 165
75. In a certain code language, East is called North-east, South-east is called East, South is called South-east, South-west is called south and so on. A man starts travelling as per the original directions and travels a distance of 7 km towards North, then turns by an angle of 90° Clockwise direction and travels 24km in that direction. How far is he from the starting point and in which direction is he now from the starting point in that language?  
 (a) 35 km, North-east  
 (b) 25 km, North  
 (c) 35 km, East  
 (d) 35 km, South
76. What comes in the place of question mark?

4		5	10		3	7		2
	4			29			19	
6		1	8		4	3		?

- (a) 4
- (b) 5
- (c) 1
- (d) 3

77. In a queue, Sadiq is 14th from the front end and Joseph is 17th from the back end, while Jane is in between Sadiq and Joseph. If Sadiq be ahead of Joseph and there are 48 persons in the queue, how many persons are between Sadiq and Jane?

- (a) 5
- (b) 6
- (c) 7
- (d) 8

78. How many 9's are followed by and preceded by numbers divisible by 2?

8 9 6 5 3 5 9 6 8 3 4 9 6 5 2 6 9 7 3 7 2 9 4  
1 3 7 9 4 1 7 3 4 9 8 4 5 3 9 7 6 1 5 3 1 9 5  
7 4 2 9 6 8 5 3 2 9 5 7 4 8 9 4 5 1

- (a) 12
- (b) 6
- (c) 8
- (d) 10

79. There are 15 apples in a basket and 3 of them are rotten. If two apples are selected at random, what is the chance that only one is good apple?

- (a)  $36/345$
- (b)  $9/445$
- (c)  $16/345$
- (d)  $36/445$

80. In a box we have twice as many red balls as green balls. Also, 3 lesser white balls than the red balls. And there are 10 green balls in the box. If Arun has to take one ball at a time randomly from the box blindfolded, how many balls he has to take to ensure he had taken at least one from each colour?

- (a) 38
- (b) 29
- (c) 31
- (d) Cannot be determined