

FORTUNE IAS ACADEMY

FORTUNE PRELIMS TEST SERIES 2025

COMPREHENSIVE TEST 01

GENERAL STUDIES

PAPER – II

Time Allotted: 2 Hours

Maximum Marks: 200

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES *NOT* HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. You have to enter your Roll Number on the Test Booklet in the Box provided alongside.
3. DO NOT Write anything else on the Test Booklet.
4. This Booklet contains **80** Items (*Questions*). Each item is printed ONLY IN ENGLISH. Each item comprises four responses (*Options*). You shall select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response for an item, mark the response which you consider the best. In any case, choose ONLY ONE response per item.
5. You have to mark all your responses ONLY on the separate Answer Sheet provided.
6. All items carry equal marks.
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 Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to the Invigilator *Only the Answer Sheet*. You are permitted to take away with you the Test Booklet.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. Penalty for wrong answers: "Achieve your Dreams with Fortune"

THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPER.

- (a) There are four alternatives for the answer to every question. For each question which has a penalty for which a wrong answer has been given by the candidate, **one-third of the marks assigned to that question will be deducted as penalty.**
- (b) If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will be same penalty as above to that question, if it has a penalty.
- (c) If a question is left blank, i.e., no answer is given by the candidate, there will be no penalty for that question.



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

PASSAGE – 1

With the growing impact of global warming, India is predicted to face more severe climatic events. Increased precipitation, glacier melting, and rising sea levels are expected to significantly affect the Indian climate, leading to a higher frequency of floods, hurricanes, and storms. Global warming also poses a grave threat to food security, as recurring droughts and devastating floods continue to destroy arable land. Rising temperatures on the Tibetan Plateau are accelerating the melting of Himalayan glaciers, reducing the water flow in major rivers like the Ganges, Brahmaputra, and Yamuna, which are lifelines for hundreds of thousands of farmers.

1) Based on the above passage, the following assumptions have been made:

1. India will only experience droughts due to global warming, with no impact from floods or storms.
2. India's densely populated regions will face heightened vulnerability to the cascading effects of climate change.
3. The agricultural sector in India is critically dependent on stable climatic conditions and reliable water sources.

Which of the above assumptions is/are valid?

- (a) 1 only
- (b) 2 only
- (c) 2 and 3 only
- (d) All of the above

2) Which one of the following statements best reflects the crux of the passage?

- (a) Indian farmers will have no livelihood in the future.
- (b) Rising sea levels are likely to trigger natural calamities.

- (c) Preventing the onset of global warming is impossible.
- (d) The Tibetan plateau is expected to bear the brunt of the adverse ecological impacts in the Himalayas.

PASSAGE – 2

Some sports, such as motor racing and equestrian events, report more fatalities and severe injuries annually than boxing. However, boxing faces significantly more medical and public scrutiny. This disparity arises from the perception that boxing inherently involves a deliberate intent to harm the opponent. While injuries in other sports are viewed as accidental mishaps, boxing is criticized because causing injury is seen as a fundamental goal. This perspective leads to the argument that severe outcomes in boxing cannot be entirely considered accidental. Supporters of boxing, however, strongly reject this notion, asserting that the sport's objective is to land precise strikes on designated target areas rather than to harm. They argue that, like in other sports, injuries in boxing are unfortunate and unintended consequences of competing to win.

3) Based on the above passage, the following assumptions have been made:

1. There is a perception that the intent in boxing is to harm the opponent, making injuries inherent to the sport.
2. Proponents argue that injuries in boxing are accidental, not intentional.
3. Boxing receives disproportionate criticism.

Which of the above assumptions is/are valid?

- (a) 1 and 2 only
- (b) 3 only
- (c) 1 only
- (d) All of the above



- 4) Which one of the following statements best reflects the crux of the passage?
- (a) Boxing involves an intrinsic aspect of brutality.
 - (b) Motor racing ranks as the most lethal sport globally, with equestrian sports following closely.
 - (c) Sports with significant risks of fatal injuries ought to be prohibited.
 - (d) There is a divide among groups over whether boxing aims to intentionally inflict harm.
- 5) What is the number of nines used in numbering a 192-page book?
- (a) 37
 - (b) 29
 - (c) 32
 - (d) 34
- 6) Let m be a positive integer such that $3m + 64$ is divisible by m . How many values of m are possible?
- (a) Infinitely many
 - (b) 0
 - (c) 7
 - (d) 8
- 7) Find the unit's place digit of the following: $6783 \times 7482 \times 5217 \times 9375$
- (a) 5
 - (b) 0
 - (c) 2
 - (d) 1
- 8) Find the least number by which 22932 must be multiplied or divided so as to make it a perfect square:
- (a) 10
 - (b) 4
 - (c) 11
 - (d) 13
- 9) A number N is formed by writing the digits of the number 97 repeatedly (979797.....) till there are 80 digits in it. What will be the remainder if N is divided by 11?
- (a) 8
 - (b) 3
 - (c) 9
 - (d) 1

- 10) A Question is given followed by two Statements I and II. Consider the Question and the Statements.

Question: What are the values of x and y , where x and y are natural numbers?

Statement-I: $x + y > xy$ and $y > x$.

Statement-II: The solution of y divided by x is 36.

Which one of the following is correct in respect of the above Question and the Statements?

- (a) The Question can be answered by using one of the Statements alone, but cannot be answered using the other Statement alone
- (b) The Question can be answered by using either Statement alone
- (c) The Question can be answered by using both the Statements together, but cannot be answered using either Statement alone
- (d) The Question cannot be answered even by using both the Statements together

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

PASSAGE – 3

The world has seen countless scientific and technological advancements throughout its journey of progress. However, in this quest for development, it is often overlooked that true progress cannot be sustainable unless it respects and upholds human rights. This brings us to the question: "What are human rights?" Simply put, human rights are the entitlements inherent to every individual, regardless of nationality, race, religion, gender, or any other distinction, by virtue of being human. These rights are fundamental to our nature, enabling us to live with dignity. They empower us to fully realize our potential by nurturing our intelligence, talents, and conscience.



- 11)** Based on the above passage, the following assumptions have been made:
1. Development and human rights are inherently at odds.
 2. Human rights are universally agreed upon and understood.
 3. Human rights can serve as catalyst for personal growth.

Which of the above assumptions is/are valid?

- (a) 1 and 2 only
- (b) 1 only
- (c) 3 only
- (d) None of the above

- 12)** Which one of the following statements best reflects the crux of the passage?

- (a) The concept of human rights is not static and continues to evolve over time.
- (b) It is the responsibility of the State to ensure that everyone has the freedom to exercise their human rights.
- (c) Promoting human rights helps individuals to embrace their humanity and realize their full potential.
- (d) Science and technology can be harnessed to foster development, thereby ensuring that human rights are accessible to all.

PASSAGE – 4

Children's aspirations and achievements are often limited by societal constraints, yet these barriers must be challenged and overcome. Poverty, cultural traditions, and religious practices are frequently used as pretexts for inaction on critical issues such as child labour, access to education, and social inclusion. Governments, international organizations, and elites have often hidden behind these excuses, stalling progress. However, examples from various countries show that determined political action and grassroots movements can successfully dismantle cycles of

poverty and harmful cultural norms. The focus now must be on harnessing the progress achieved by these initiatives and driving meaningful change, rather than justifying an unsatisfactory status quo.

- 13)** Based on the above passage, the following assumptions have been made:

1. Societal constraints like poverty and traditions hinder children's opportunities.
2. Political and grassroots efforts can break cycles of poverty and exclusion.
3. Inaction by authorities sustains inequality and limits progress.

Which of the above assumptions is/are valid?

- (a) 1 only
- (b) 2 only
- (c) 2 and 3 only
- (d) All of the above

- 14)** Which one of the following statements best reflects the crux of the passage?

- (a) Public policy measures to address child labour have overlooked critical contextual factors such as poverty, religion, and tradition.
- (b) Poverty, religion, and tradition are the primary barriers to successfully eliminating child labour.
- (c) Inclusive and consistent political efforts can play a pivotal role in empowering children.
- (d) Governments and international organizations worldwide have shown a complacent attitude toward addressing child labour.

- 15)** How many of the numbers from 1 to 500 are not divisible by any of the digits 2, 3 or 7 ?

- (a) 122
- (b) 143
- (c) 166
- (d) 148



16) Suppose m is the smallest integer greater than 4 such that when it is divided by 5 or 7, the remainder is 4. n is the smallest integer greater than 3 such that when it is divided by 5 or 7, the remainder is 3. What is $n - m$?

- (a) -1
- (b) -2
- (c) 1
- (d) 2

17) If $n + 1$, $n + 3$ and $n + 5$ are prime numbers, then find the number of possible solutions for n ?

- (a) 3
- (b) 2
- (c) 1
- (d) more than three

18) Let x , y and z be distinct positive integers. Let x and y be odd and z be even. Consider the following statements:

Statement-I: $17y(x - 10)$ is even

Statement-II: $x^2y^2 + z^2$ is odd

Statement-III: $(z - x)^3 - y$ is odd.

How many of the statements given above are correct?

- (a) Only one statement
- (b) Only two statement
- (c) All 3 statements
- (d) None are correct

19) Find the number of zeros at the end of the integer obtained in the product

$$3^2 \times 6^4 \times 9^6 \times \dots \times 30^{20}$$

- (a) 70
- (b) 30
- (c) 35
- (d) 50

20) Find the last digit at the units place for the number $4^{52^{52}} \times 9^{52^{52}}$?

- (a) 3
- (b) 7
- (c) 6
- (d) 1

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

PASSAGE - 5

The earth's crust contains vast energy in rock, with potential for hot dry rock (HDR) reservoirs in areas with hot rock but insufficient water. New recovery systems are being developed by drilling into deep artificial reservoirs, requiring artificial stimulation to enhance permeability for heat extraction. HDR resources, typically found in rock over 150°C at depths under ten kilometres, are accessible with current drilling technology, though deeper wells face economic challenges. The geothermal gradient, which determines the drilling depth, influences resource availability, with estimates showing significant energy potential, though the economics of well depth versus energy value remain a challenge.

21) Based on the above passage, the following assumptions have been made:

1. HDR resources can be exploited with current drilling technology, but economic challenges remain.
2. Deep artificial reservoirs are the key to unlocking the full potential of HDR resources.
3. The geothermal gradient is the primary factor that determines drilling depth for HDR resources.

Which of the above assumptions is/are valid?

- (a) 1 only
- (b) 2 only
- (c) 2 and 3 only
- (d) All of the above

22) Which one of the following statements best reflects the crux of the passage?

- (a) Hot dry rock (HDR) resources offer significant energy potential, but economic challenges limit their accessibility.



- (b) Deep artificial reservoirs are essential for extracting geothermal energy from hot dry rock.
- (c) HDR resources are abundant but largely inaccessible due to insufficient drilling technology.
- (d) Geothermal energy extraction is primarily limited by the temperature gradient in the Earth's crust.

PASSAGE – 6

Aluminium, the most abundant metal in the Earth's crust, wasn't discovered until 1825 due to its reactivity, which prevents it from being found in its pure form in nature. It is typically extracted from bauxite and is challenging and costly to refine. Aluminium's high reactivity helps protect it in products like aluminium foil, forming a protective layer of aluminium oxide that prevents corrosion. Although metals like iron are less reactive, their oxides do not form as effectively. For many years, aluminium was considered a precious metal, more expensive than gold or platinum, due to high production costs. Its price dropped significantly in 1886 when two inventors developed an electrolytic process to extract pure aluminium from molten aluminium salts, replacing the rare cryolite with synthetic alternatives.

- 23)** Which one of the following statements best reflects the crux of the passage?
- (a) Aluminium was considered a precious metal due to its high reactivity and difficulty in extraction.
 - (b) Aluminium's high reactivity prevents it from being found in its pure form in nature.
 - (c) The electrolytic process for aluminium extraction significantly reduced production costs.
 - (d) Aluminium is now cheaper than gold or platinum due to synthetic cryolite.

- 24)** The number $10^a - 1$ is divisible by 11 for :
- (a) even values of a
 - (b) all values of a
 - (c) odd values of a
 - (d) a must be a multiple of 11

- 25)** If m be a prime number, then $m^2 + 1$ cannot have its unit digit equal to
- (a) 5
 - (b) 2
 - (c) 0
 - (d) 7

- 26)** A six-digit number XYZXYZ such that X,Y,Z are natural numbers, then which is the most correct statement :
- (a) It is divisible by 7 only
 - (b) It is divisible by 13 only
 - (c) It is divisible by 11 only
 - (d) It is divisible by all of 7, 11, 13

- 27)** Let x, be any repeating infinite decimal of the form, $x = 0.ABCABCABCABC\dots$ and $y = 0.DEFGDEFGDEFG\dots$. Consider the following statements and choose the appropriate option.

Statement I: $2x+y$ and $\frac{x}{3} + \frac{y}{8}$ will also be repeating, infinite decimals

Statement II: Any repeating, infinite decimal can be written as a fraction of two integers.

Which one of the following is correct in respect of the above Question and the Statements?

- (a) Statement I is correct and Statement II is the correct explanation for Statement I.
- (b) Statement I is correct but Statement II is not the correct explanation for Statement I.
- (c) Statement I is correct but Statement II is incorrect
- (d) Statement I is incorrect but statement II is correct



- 28)** If a, b, c represents three distinct non negative integers such that $(aba)^c = abcba$ is a valid relation, then the value of $a + b + c$ is
- 4
 - 5
 - 3
 - 7
- 29)** A three-digit number which on being subtracted from another three-digit number consisting of the same digits in reverse order gives 495. The minimum possible sum of all the three digits of this number is :
- 9
 - 11
 - 14
 - 7
- 30)** The sum of digits of three-digit number is subtracted from the number. The resultant number is always :
- divisible by 7
 - divisible by 9
 - divisible by 6
 - divisible by 11

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

PASSAGE – 7

Ethics is rooted in responsibility and accountability. In a democracy, public officials are ultimately answerable to the people, with accountability enforced through laws created by elected representatives. Ethics shapes these laws, reflecting society's moral values. The legal system is based on a shared sense of justice. Ethics in public life spans from high moral ideals to specific actions for which officials can be held accountable. While all citizens must obey the law, public servants are held to stricter standards of conduct.

- 31)** Based on the above passage, the following assumptions have been made:
1. Ethics is solely concerned with personal moral values, unrelated to the legal system.
 2. Public servants are expected to follow the same standards of conduct as ordinary citizens.
 3. Laws and ethics are interrelated.

Which of the above assumptions is/are valid?

- (a) 1 and 2 only
 - (b) 3 only
 - (c) 1 only
 - (d) All of the above
- 32)** Which one of the following statements best reflects the crux of the passage?
- (a) In a democracy, ethics ensure officials use their power for the people's best interests.
 - (b) Laws in a democracy reflect the opinions of the people.
 - (c) Public servants are held to higher standards, not due to greater immorality, but because of their responsibilities.
 - (d) Public officials are not accountable where no specific rules exist.

PASSAGE – 8

Television, initially lauded for its potential to democratize information, broaden news access, and cultivate a shared cultural identity, concealed significant shortcomings. The majority of programming favoured entertainment over substantive educational content, prioritizing commercial appeal at the expense of intellectual depth, while news coverage remained skewed, reflecting the biases of a homogenous, predominantly male production staff. Television ownership was initially concentrated among wealthier households, with rural areas lagging behind due to inadequate infrastructure. Moreover, television reinforced societal divisions by



perpetuating gender stereotypes and offering reductive portrayals of racial minorities, thereby limiting its unifying potential.

33) Based on the above passage, the following assumptions have been made:

1. Television's potential for democratizing information was overshadowed by its commercial interests.
2. The concentration of television ownership among wealthier households perpetuated societal divisions.
3. Television's portrayal of gender and racial minorities was largely neutral and non-stereotypical.

Which of the above assumptions is/are valid?

- (a) 1 and 2 only
- (b) 3 only
- (c) 1 only
- (d) All of the above

34) Which one of the following statements best reflects the crux of the passage?

- (a) Television programming focused primarily on entertainment and lacked educational content.
- (b) Television was originally a tool for democratizing information but failed to achieve this due to commercialization and bias.
- (c) Television's portrayal of gender and racial minorities promoted inequality.
- (d) Television ownership was concentrated among wealthier households, limiting its accessibility to rural areas.

35) The remainder when $(2)^{50 \times 49 \times \dots \times 2 \times 1}$ is divided by 31 ?

- (a) 7
- (b) 9
- (c) 3
- (d) 1

36) Consider the following statements:

1. The sum of 5 consecutive integers can be 70.
2. The product of two consecutive natural numbers can be less than their sum.

Which of the above statements is/are correct ?

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

37) If 'a' and 'b' are roots of the equation $y^2 + 19y - 150 = 0$ then find the value of $a^2 + b^2$?

- (a) 530
- (b) 661
- (c) 576
- (d) 484

38) If "HOUSE" is written as "KRYVH", then how is "PLANE" written?

- (a) SODQH
- (b) SODPH
- (c) SOEQH
- (d) SOEMF

39) x is a positive integer such that \sqrt{x} is an integer, $\sqrt[3]{x}$ is an integer, and x is divisible by 12. Consider the following:

1. x must be divisible by 216.
2. The sum of the digits of x is always divisible by 9.

Which of the above statements is/are correct?

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

40) A warehouse manager needs to pack a large number of items into boxes of sizes 12, 14, 18, and 20 units respectively. However, after filling the boxes, a few items always remain—5 when using boxes of size 12 units, 7



when using boxes of size 14units, 11 when using boxes of size 18 units, and 13 when using boxes of size 20units. Given that the total number of items is less than 10,000, what is the largest possible number of items that could be in the warehouse?

- (a) 8800
- (b) 8807
- (c) 8813
- (d) None of these

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

PASSAGE – 9

To boost innovation and technological advancement, it is crucial to increase the investment in Research and Development (R&D) from both public and private sources to 2% of GDP. Currently, R&D investment as a percentage of GDP is shrinking, with an estimated 0.7% contribution today. Of this, the majority of funding comes from public research. The government has launched key initiatives such as the Technology Development Fund (TDF) and the Innovation for Defence Excellence (IDEX) to support research. However, these programs need to mature further, focusing on improving transparency in both the processes and outcomes to ensure greater impact.

- 41)** Based on the above passage, which of the following statements is/are true?
1. Public R&D investments currently constitute the majority of overall research funding in India.
 2. The government's initiatives such as TDF and IDEX are fully transparent and yield predictable results.
 3. Increasing R&D investment to 2% of GDP is crucial for fostering innovation and technological advancement.

Select the correct answer using the code given below:

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

- 42)** Which one of the following statements best reflects the most logical and rational implication conveyed by the passage?

- (a) Increasing R&D investment is critical to achieving long-term, sustainable economic growth.
- (b) The shift from private to public funding for R&D can create greater innovation and transparency.
- (c) Increasing GDP growth should naturally lead to an increase in R&D investment.
- (d) The government's role in R&D funding is currently limited.

PASSAGE – 10

The collapse of colonialism in the mid-20th century, once seen as a triumph of self-determination and the dawn of independence for many nations, gave way to a complex and often turbulent reality. The lofty ideals of freedom and unity that had fuelled anti-colonial movements were frequently undermined by the challenges of governance, economic instability, and the legacy of arbitrary borders imposed by former colonial powers. In the absence of strong institutions and unifying ideologies, many newly independent states grappled with internal divisions, authoritarian rule, and the resurgence of ethnic and religious tensions. This transition, rather than ushering in an era of prosperity and cohesion, often led to political fragmentation, civil wars, and the entrenchment of neo-colonial influences, revealing the fragile foundations upon which many post-colonial societies were built.



43) Based on the above passage, which of the following statements is/are true?

- (a) The collapse of colonialism resulted in a smooth transition to self-governance for most countries.
- (b) Post-colonial states often faced difficulties in maintaining unity due to internal divisions and external influences.
- (c) The political fragmentation and civil wars in post-colonial nations were a result of the failure to uphold anti-colonial ideals.

Select the correct answer using the code given below:

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

44) Which one of the following statements best reflects the most logical and rational implication conveyed by the passage?

- (a) The failure of newly independent states to establish strong institutions and unifying ideologies led to political fragmentation.
- (b) The arbitrary borders imposed by colonial powers were the primary cause of ethnic and religious tensions in post-colonial societies.
- (c) Transition from colonialism to independence was marked by economic instability, which overshadowed the ideals of freedom and unity.
- (d) The resurgence of authoritarian rule in post-colonial states was a direct result of the lack of international support for their development.

45) A Question is given followed by two Statements I and II. Consider the Question and the Statements.

A factory produces two types of metal rods, X and Y, where the lengths of both rods are greater than 10 cm but less than 100 cm.

Question: What is the longest possible length of pieces to which both rods can be cut without leaving any leftover material?

Statement-I: The difference between X and Y is 18 cm.

Statement-II: The product of X and Y is 1944 cm².

Which one of the following is correct in respect of the above Question and the Statements?

- (a) The Question can be answered by using one of the Statements alone, but cannot be answered using the other Statement alone
- (b) The Question can be answered by using either Statement alone
- (c) The Question can be answered by using both the Statements together, but cannot be answered using either Statement alone
- (d) The Question cannot be answered even by using both the Statements together

46) Ravi, Amit, and Suraj are painting a house together. Ravi can paint $\frac{2}{3}$ of the house in 6 days. Amit can paint $\frac{1}{3}$ of the house in 8 days. Suraj can paint $\frac{3}{4}$ of the house in 12 days. If all three work together for 4 days, but then Ravi and Suraj leave, how much more time will Amit need to finish the remaining work alone?

- (a) 3.83 days
- (b) 3.33 days
- (c) 2.22 days
- (d) 4.33 days

47) A Question is given followed by two Statements I and II. Consider the Question and the Statements.

Question: How many times does the output of a man exceed that of a woman?

Statement-I: It takes 6 days for 3 women and 2 men working together to complete a work.



Statement-II: 3 men would do the same work 5 days sooner than 9 women.

Which one of the following is correct in respect of the above Question and the Statements?

- (a) The Question can be answered by using one of the Statements alone, but cannot be answered using the other Statement alone.
- (b) The Question can be answered by using either Statement alone.
- (c) The Question can be answered by using both the Statements together, but cannot be answered using either Statement alone.
- (d) The Question cannot be answered even by using both the Statements together.
- 48)** A water tank is being filled using two inlet pipes. The first pipe can fill the tank in 15 minutes, while the second pipe can fill it in 10 minutes. However, there is a small outlet pipe that can drain full tank in 30 minutes. If both inlet pipes are opened together along with the outlet pipe, how long will it take to completely fill the tank?
- (a) $7\frac{1}{2}$ minutes
- (b) $6\frac{2}{3}$ minutes
- (c) $8\frac{3}{4}$ minutes
- (d) The tank will never be filled
- 49)** A bag contains 12 red balls, 18 blue balls, 24 green balls, 30 yellow balls, 36 black balls, and 40 white balls. Consider the following statements:
1. The smallest number n such that any n balls drawn from the bag randomly must contain one full group of at least one colour is 150.
 2. The smallest number m such that any m balls drawn from the bag randomly must contain at least one ball of each colour is 140.

Which of the above statements is/are correct?

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

- 50)** In a room everybody shakes hands with everybody else. The total number of handshakes is 91. The total number of persons in the room is:
- (a) 8
- (b) 14
- (c) 12
- (d) 13

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

PASSAGE – 11

The Special Rapporteur on minority issues by United Nations has observed that the term "caste" refers to a rigid, hierarchical social structure often rooted in ideas of purity and pollution, where individuals at the bottom face exclusion and discrimination across various aspects of life. While the concept of the "caste system" is primarily linked to South Asia and its association with Hinduism's socially sanctioned framework, which originally divided people into four main, endogamous groups or varnas, the term has since expanded in scope. Today, "caste" can apply to both religious and secular contexts, and similar systems exist within various religious, ethnic, and geographical groups, including among diaspora populations.

- 51)** Which one of the following statements best reflects the crux of the passage?
- (a) The caste system in India extends beyond religious boundaries.
- (b) South Asia is the only region that has been afflicted by the detrimental effects of the caste system.



- (c) The caste system follows a hierarchical structure, often leading to discrimination against the lowest tier of society.
- (d) The four original varnas must be reformed to restore relevance to the caste system.

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

PASSAGE – 12

As globalization continues to grow, effective cross-cultural communication has become crucial in the interconnected world we live in. Consequently, cultural differences are evident all around us. The divide between Eastern and Western cultures is notably significant, affecting not only beliefs and thought patterns but also everyday behaviours, which at times may even be entirely opposed to one another.

- 52)** Which one of the following statements best reflects the crux of the passage?
- (a) There are significant differences in cultural norms between Eastern and Western societies.
- (b) People from Eastern and Western cultures struggle to reach a consensus.
- (c) The gap between Eastern and Western cultures is unbridgeable.
- (d) Cultural preservation is difficult in an open society.

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

PASSAGE – 13

Corporatisation has significantly transformed the Indian film industry, driving its growth after 2000. It has enabled a much-needed influx of institutional finance, offering reliable funding at lower interest rates compared

to other financing options. Additionally, it has encouraged the adoption of improved corporate governance practices, such as following standard accounting methods, business plans, targets, and timelines. With the involvement of the corporate sector, the film industry has embraced market-driven practices, leading to greater efficiency in film production and fewer delays. Moreover, this shift has encouraged international studios to collaborate with Indian production houses for movie production and distribution.

- 53)** Which one of the following statements best reflects the crux of the passage?
- (a) In the 20th century, Indian film producers faced challenges in obtaining financing.
- (b) Corporatization has positively influenced the Indian film industry.
- (c) International studios began entering India only after 2000.
- (d) Indian film producers can now obtain loans at lower interest rates.
- 54)** Three bags contain different distributions of red and blue balls. The first bag has 4 red and 2 blue balls, the second bag has 3 red and 3 blue balls, and the third bag has 2 red and 4 blue balls. If one ball is drawn randomly from each bag, what is the probability that exactly 2 red and 1 blue ball are drawn?
- (a) $19/54$
- (b) $20/54$
- (c) $21/54$
- (d) $22/54$
- 55)** A Question is given followed by two Statements I and II. Consider the Question and the Statements.
- Question:** What was the original average salary of employees in Team C before the increase?
- Statement-I:** A company, with four teams—Team A, Team B, Team C, and Team D—each comprising seven



employees, has an average employee salary of ₹52,000 per month.

Statement-II: The salaries of employees in Team C increase by 10%, while the salaries in other teams remain unchanged.

Which one of the following is correct in respect of the above Question and the Statements?

- (a) The Question can be answered by using one of the Statements alone, but cannot be answered using the other Statement alone.
 - (b) The Question can be answered by using either Statement alone.
 - (c) The Question can be answered by using both the Statements together, but cannot be answered using either Statement alone.
 - (d) The Question cannot be answered even by using both the Statements together.
- 56)** In a school, the average height of 50 students in Class A is 140 cm, and the average height of 40 students in Class B is 155 cm. When some students from Class A are moved to Class B, the new average height of Class B decreases to 152 cm while the average height of class A remains the same. How many students were transferred from Class A to Class B?
- (a) 8
 - (b) 5
 - (c) 10
 - (d) 7
- 57)** A train covers a distance of 240 km between two stations. A faster train takes 4 hours less than a slower train. If the speed of the slower train is 30 km/h less than the faster train, what is the speed of the faster train?
- (a) 40 km/h
 - (b) 60 km/h
 - (c) 80 km/h
 - (d) 90 km/h

- 58)** A Question is given followed by two Statements I and II. Consider the Question and the Statements.

A train covers a certain distance at an average speed of 75.6km/h.

Question: What is the length of the train?

Statement-I: The train crosses a pole in 7 seconds.

Statement-II: The train crosses a 378-meter-long platform in 25 seconds.

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

- (a) The question can be answered by using one of the statements alone, but cannot be answered using the other statement alone.
 - (b) The question can be answered by using either statement alone.
 - (c) The question can be answered by using both the statements together, but cannot be answered using either statement alone.
 - (d) The question cannot be answered even by using both the statements together.
- 59)** A and B were playing a game of infinite patterns. B started with a large square tile of side 8 meters and kept cutting smaller square tiles inside it by joining the midpoints of the sides of the previous square. B continued this process indefinitely. B challenged A to calculate the total area of all the square tiles they had cut. If A answered correctly, what would be the answer?
- (a) 32
 - (b) 64
 - (c) 128
 - (d) 256



- 60) 216 identical cubes are arranged in the form of a cubical block. How many cubes are completely surrounded by other cubes from each side?
- (a) 64
 - (b) 125
 - (c) 98
 - (d) 27

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

PASSAGE – 14

The framers of the Indian Constitution demonstrated foresight by incorporating essential and mandatory provisions to ensure justice in every sphere of life, equality of status, social security, and economic safeguards for the weaker sections of society. Over the years, successive governments have acknowledged the pressing need for broader financial inclusion and have introduced significant policy reforms. These efforts have often involved innovative strategies to bridge the gap between the underprivileged and the rest of society. Additionally, governments have made crucial constitutional amendments and enacted legislative measures to uphold and strengthen the social and economic rights of marginalized communities.

- 61) Which one of the following statements best reflects the crux of the passage?
- (a) Achieving social justice remains an ongoing challenge, and the government is making consistent efforts to address it.
 - (b) Given India's vast diversity, attaining social justice often feels like an unattainable goal for the government.
 - (c) Social justice cannot be implemented as the definition keeps on changing.

- (d) The lack of political determination hampers the government's ability to introduce robust measures to ensure social justice in India.

PASSAGE – 15

India is a diverse nation, home to people from various religions, customs, and cultural backgrounds. This diversity makes it evident that a single concept may hold different meanings across the country, and the same applies to privacy. Privacy is a subjective notion that varies from person to person. For some, it may revolve around the confidentiality of information, for others, it could concern bodily autonomy, and for yet others, it may represent entirely different perspectives. Thus, privacy can be understood through multiple lenses, reflecting the varied dimensions of society and the nation as a whole.

- 62) Which one of the following statements best reflects the crux of the passage?
- (a) Social norms and values shape the development of socio-legal concepts such as privacy.
 - (b) Varied interpretations of privacy require clear and precise legal enforcement.
 - (c) It is essential for every citizen to understand their fundamental right to privacy.
 - (d) India can draw lessons from Western nations on effectively enforcing privacy rights.

PASSAGE – 16

The Indian economy exhibits a unique blend of formal and informal sectors, rural and urban settings, agricultural and non-agricultural activities, and skilled and unskilled labour coexisting simultaneously. Efforts to enhance employment must take a holistic approach to address the concerns of these diverse components. On one hand, there is a pressing need to provide skills to the unskilled workforce; on the other, the integration of informal sector workers into



the formal economy is crucial. Although agriculture remains the primary source of employment in India, non-agricultural activities such as small-scale manufacturing, processing, repair work, construction, and other services in villages and small towns contribute significantly to rural household incomes. Programs like Agri-clinics, Agri-business centres, and the National Food Security Mission have significantly boosted non-agricultural employment opportunities in rural areas.

- 63)** Based on the above passage, the following assumptions have been made:
1. The informal sector in India can easily transition into the formal sector.
 2. Managing economic issues is challenging due to their complex and diverse nature.
 3. Employment in non-agricultural sectors creates greater value compared to agricultural work in rural areas and small towns.

Which of the above assumptions is/are valid?

- (a) 1 and 2 only
 - (b) 2 only
 - (c) 1 and 3 only
 - (d) None of the above
- 64)** Two types of gold alloys contain 85% and 92% gold, respectively. How much of each alloy must be mixed to obtain 70 kg of an alloy containing 88% gold?
- (a) 40 kg and 30 kg
 - (b) 25 kg and 35 kg
 - (c) 35 kg and 25 kg
 - (d) 40 kg and 20 kg
- 65)** A piggy bank contains 10 paise, 25 paise, and 50 paise coins. There are 700 coins in total, and the total value of these coins is ₹210. The number of 25 paise coins is equal to double the number of 50 paise coins.

Consider the following statements:

1. The number of 10 paise coins is 250.
2. The number of 50 paise coins is 200.

Which of the above statements is/are correct?

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

- 66)** A Question is given followed by two Statements I and II. Consider the Question and the Statements.

In a seminar, 80 people attended the mathematics session, 65 people attended the Science session, and 20 people attended both Mathematics and Science sessions. No one attending Literature attended Mathematics. Each person attended at least one session.

Question: How many people attended the seminar?

Statement - 1: 55 people attended the Literature session.

Statement - 2: The total number of attendees at the seminar is six times the number of people who attended only Literature.

Which one of the following is correct in respect of the above Question and the Statements?

- (a) The Question can be answered by using one of the Statements alone, but cannot be answered using the other Statement alone.
- (b) The Question can be answered by using either Statement alone.
- (c) The Question can be answered by using both the Statements together, but cannot be answered using either Statement alone.
- (d) The Question cannot be answered even by using both the Statements together.



67) A bookseller wants to sell 50 books. If he sells them at Rs. 200 per book, he would be able to sell all the books. But for every Rs. 10 increase in price, he will be left with one unsold book. At what selling price would he be able to maximize his profits (assuming unsold books remain with him)?

- (a) 300
- (b) 320
- (c) 350
- (d) 360

68) Ravi borrows a total of Rs. 2000 from two lenders. He pays interest at the rate of 10% per annum for one loan and at the rate of 15% per annum for the other. The total interest he pays for the entire year is Rs. 240. How much does he borrow at the rate of 10%?

- (a) 1250
- (b) 1200
- (c) 1400
- (d) 1500

69) Question: What is the value of the two-digit number TU, where T represents the tens digit and U represents the units digit?

Statement-I: $T \times U^2 = 196$

Statement-II: $3T + 5U = 47$

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

- (a) The question can be answered by using Statement-I alone
- (b) The question can be answered by using Statement-II alone
- (c) The question can be answered by using either statement alone
- (d) None of the above

70) A starts a business with Rs. 80,000. After 4 months, B joins with Rs. 1,20,000. After another 4 months, C joins with Rs. 1,60,000. If the total profit at the end of the year is Rs. 52,000, what is C's share?

- (a) Rs. 10,000
- (b) Rs. 12,000
- (c) Rs. 13,000
- (d) Rs. 16,000

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

PASSAGE – 17

If the belief were accepted as a result of reasoning, the refutation of that reasoning might weaken the conviction. However, when the belief is based purely on feeling, it fares worse in an argumentative contest. The more the argument challenges it, the more its adherents become convinced that their feeling must have a deeper foundation that the arguments cannot address. As long as the feeling persists, it continuously generates new lines of defence, reinforcing itself against any holes punctured in the old arguments.

71) Which one of the following statements best reflects the crux of the passage?

- (a) Individuals who are able to separate their arguments from their emotions tend to be more passionate in defending them.
- (b) We should only accept arguments that combine both emotion and logic.
- (c) Beliefs rooted in logical reasoning can be modified, but beliefs based on emotion are much harder to change.
- (d) Those who argue from an emotional standpoint seldom alter the views of individuals who present logical arguments.

**PASSAGE - 18**

The development of a nation is closely tied to its people's understanding and application of science and technology. While it is sometimes argued that the mere application of technology can drive growth, this idea often falls short in practice. History shows that the true social and economic benefits of technology are realized only when it is applied with understanding. Therefore, it is crucial for a substantial portion of citizens in every developing country to grasp and pursue the principles of modern science and the technology derived from it.

72) Based on the above passage, the following assumptions have been made:

1. Countries that prioritize research and development can be the leaders in shaping the future of the world.
2. Science and technology are fundamental for advancement of civilization, and those who excel in it can be the ones who lead the world.
3. Different nations adopt various development models and utilize different tools to achieve their goals.

Which of the above assumptions are valid?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) All of the above

73) A cube of side 6 cm is cut into smaller cubes of side 2 cm.

Consider the following statements:

1. The total number of smaller cubes formed is 27.
2. The total surface area of all the smaller cubes together is greater than the surface area of the original cube.

Which of the above statements is/are correct?

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

74) If $6 \# 9 \# 13 = 5$, $8 \# 11 \# 21 = 2$, and $11 \# 14 \# 28 = 4$, what is the value of $13 \# 17 \# 36$?

- (a) 6
- (b) 7
- (c) 5
- (d) 4

75) A person moves 5 km towards the south from point P, then turns left and moves 7 km, then turns left again and moves 5 km, and finally turns right and moves 4 km. In which direction is the person now with respect to P?

- (a) West
- (b) North-west
- (c) South-west
- (d) East

76) Towns A, B, and C are positioned as follows: The distance between A and B is 50 km, whereas the distance between A and C is 120 km. B is located to the east of A, and C is to the south of A. What is the distance between B and C?

- (a) 170 km
- (b) 130 km
- (c) 110 km
- (d) 100 km

77) What will come in place of * in the sequence 2, 12, 36, 80, 150, *, 392?

- (a) 186
- (b) 252
- (c) 300
- (d) 350



- 78)** What is the middle term of the sequence?
A, A, B, B, B, C, C, C, C, D, D, D, D, D, ..., Z
(a) M
(b) O
(c) S
(d) R
- 79)** A brother tells his younger sister, "When I was at your present age, you were 8 years old. When you reach my current age, I will be 50." What is the age difference between the brother and sister?
(a) 10 years
(b) 12 years
(c) 14 years
(d) Cannot be determined
- 80)** What is the angle between the hour hand and minute hand at 7:20?
(a) 95°
(b) 100°
(c) 105°
(d) 110°



ROUGH SPACE



ROUGH SPACE



ROUGH SPACE



ROUGH SPACE