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Test Booklet Series

TEST BOOKLET - 2023
GENERAL STUDIES EXAMINATION - 2023

Paper - II
(92)

A

Time Allowed: Two Hours

Maximum Marks: 200

INSTRUCTIONS

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4. This Test booklet contains 100 items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Response sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
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9. Sheets for rough work are appended in the Test Booklet at the end.
10. **Penalty for wrong answers:**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE.
(i) There are four alternatives for the answer to every question. For each question 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.
(ii) 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 for that question.
(iii) If a question is left blank, i.e., no answer is given by the candidate, there will be no **penalty** for that question.

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[P.T.O.]

Passage for Questions (1-5)

Childhood trauma is a prevalent issue that can have long-lasting effects on an individual's mental health. Trauma can result from various experiences, including physical abuse, sexual abuse, neglect, and emotional abuse. This passage will examine the impact of childhood trauma on adult mental health.

Recent studies have found that childhood trauma is associated with an increased risk of developing mental health issues, such as depression, anxiety disorders, post-traumatic stress disorder (PTSD), and substance abuse. The effects of childhood trauma can also manifest in physical health problems, such as chronic pain, autoimmune disorders, and cardiovascular disease.

One theory to explain the link between childhood trauma and adult mental health is the "stress-diathesis model." According to this theory, childhood trauma increases an individual's stress response, making them more vulnerable to developing mental health issues later in life, especially when faced with additional stressors. This theory suggests that both environmental factors, such as childhood trauma, and genetic factors, such as a family history of mental health issues, can contribute to an individual's susceptibility to mental health problems.

Additionally, research has found that the impact of childhood trauma on mental health can be mediated by various factors, such as social support, coping mechanisms, and resilience. Children who experience trauma but have access to supportive adults or resources, such as therapy, may be more likely to develop healthy coping mechanisms and build resilience, reducing the likelihood of developing mental health issues later in life.

1. What types of experiences can result in childhood trauma, as mentioned in the passage?
 A) Physical abuse and neglect
 B) Physical abuse and substance abuse
 C) Emotional abuse and cardiovascular disease
 D) Sexual abuse and autoimmune disorders
2. According to the "stress-diathesis model" theory, why are individuals with a history of childhood trauma more vulnerable to developing mental health issues?
 A) Childhood trauma increases genetic factors
 B) Childhood trauma reduces stress response
 C) Childhood trauma decreases susceptibility to stressors
 D) Childhood trauma increases stress response
3. What are some of the mental health issues associated with childhood trauma, as mentioned in the passage?
 A) Schizophrenia and bipolar disorder
 B) Depression and anxiety disorders
 C) Obsessive-compulsive disorder and phobias
 D) Autism and attention-deficit/hyperactivity disorder (ADHD)

4. What factors can mediate the impact of childhood trauma on mental health, as discussed in the passage?
- A) Genetic factors and environmental factors
 - B) Social support, coping mechanisms, and resilience
 - C) Cardiovascular disease and autoimmune disorders
 - D) Substance abuse and post-traumatic stress disorder (PTSD)
5. Which of the following is NOT mentioned as a physical health problem associated with childhood trauma in the passage?
- A) Chronic pain
 - B) Autoimmune disorders
 - C) Cardiovascular disease
 - D) Diabetes

Passage for Questions (6-10)

In the realm of contemporary literature, a relatively new genre has emerged, captivating readers and challenging the boundaries of storytelling—Hydrofiction. Unlike its conventional counterparts, hydrofiction delves deep into the uncharted waters of aquatic adventures, bringing to life narratives that are submerged in a world of intrigue and mystery. This genre takes readers on an exhilarating journey through underwater landscapes, combining elements of science fiction, fantasy, and environmental awareness to create a unique reading experience.

Hydrofiction narratives often feature protagonists who navigate the enigmatic depths of oceans, seas, or even submerged cities, offering a fresh perspective on human existence. These stories frequently explore themes related to marine life, conservation, and the consequences of climate change, making them not only entertaining but also thought-provoking.

In hydrofiction, the underwater world becomes a character, with its own set of rules and challenges. Authors use vivid descriptions to transport readers to this submerged realm, where they encounter exotic creatures, lost civilizations, and uncharted territories. Whether it's exploring the mysteries of the deep sea or embarking on a perilous quest to salvage sunken treasures, hydrofiction keeps readers on the edge of their seats.

6. What is hydrofiction?
- A) A genre that explores aquatic adventures.
 - B) A type of historical fiction set in ancient civilizations.
 - C) A genre focused on outer space adventures.
 - D) A form of non-fiction writing about underwater ecosystems.

(92 - II) (A)

(4)

7. Which of the following themes is often explored in hydrofiction?
- A) Time travel and alternate dimensions.
 - B) Life in outer space.
 - C) Marine life, conservation, and climate change.
 - D) Fantasy worlds and magical creatures.
8. What makes hydrofiction unique compared to other genres?
- A) It focuses on historical events.
 - B) It emphasizes outer space adventures.
 - C) It takes place in underwater settings.
 - D) It features time-traveling protagonists.
9. How does hydrofiction engage readers?
- A) By exploring the mysteries of outer space.
 - B) By transporting them to a submerged realm with vivid descriptions.
 - C) By focusing on historical events.
 - D) By featuring time-traveling protagonists.
10. What role does the underwater world play in hydrofiction?
- A) It is irrelevant to the stories.
 - B) It serves as the main antagonist.
 - C) It becomes a character with its own rules and challenges.
 - D) It is merely a backdrop for the human characters.

Passage for Questions (11-15)

The Aurora Borealis, also known as the Northern Lights, is one of nature's most mesmerizing and enigmatic phenomena. This celestial display occurs primarily in the polar regions, where charged particles from the sun interact with the Earth's magnetic field, resulting in a breath-taking dance of colours across the night sky. While the Aurora Borealis is more commonly observed in the Arctic Circle, it can occasionally be seen in lower latitudes during periods of high solar activity.

The phenomenon gets its name from the Roman goddess of dawn, Aurora, and the Greek word for the north wind, Boreas. It is a manifestation of the sun's energy, which releases charged particles into space in a solar wind. When these particles reach the Earth, they collide with gases in the atmosphere, such as oxygen and nitrogen. These collisions excite the atoms and molecules in the atmosphere, causing them to emit light of various colours, creating the dazzling display we associate with the Northern Lights.

The colours of the Aurora Borealis depend on the type of gas particles involved in the collisions. Oxygen produces red and green hues, while nitrogen can create purples, blues, and pinks. The exact colours and patterns of the Northern Lights vary from one display to another, making each sighting a unique and awe-inspiring experience.

11. What is the primary cause of the Aurora Borealis?
- A) Reflection of moonlight
 - B) Collision of charged solar particles with Earth's atmosphere
 - C) Magnetic attraction between the Earth and the sun
 - D) Refraction of sunlight through ice crystals
12. Which goddess is the Aurora Borealis named after?
- A) Venus
 - B) Athena
 - C) Aurora
 - D) Diana
13. What determines the colours of the Aurora Borealis?
- A) The moon's position
 - B) The type of gases in Earth's core
 - C) The type of gas particles in the atmosphere
 - D) The Earth's distance from the sun
14. In which geographical region is the Aurora Borealis most observed?
- A) Equator
 - B) Tropics
 - C) Polar regions
 - D) Temperate zones
15. What causes the variations in the colours and patterns of the Northern Lights?
- A) Changes in Earth's gravitational field
 - B) The rotation of the Earth
 - C) Differences in atmospheric pressure
 - D) Differences in the types of gas particles and their energy levels

Passage for Questions (16-20)

Green tourism, a burgeoning trend in the travel industry, signifies a profound shift in how we experience the world. With its roots deeply embedded in sustainability and environmental consciousness, it's more than just a vacation; it's a commitment to minimizing the deleterious impacts of travel while nurturing the environment. In recent years, green tourism has garnered immense traction among discerning travellers cognizant of the imperativeness of preserving our planet for posterity.

At its core, green tourism beckons travellers to make astute, eco-conscious choices throughout their journeys. This entails selecting eco-friendly accommodations, embracing public transport, adhering to zero-waste principles, and venerating local cultures and traditions. It champions the preservation of pristine ecosystems, biodiversity, and the judicious exploitation of resources.

The guiding principle here is "leave no trace" – a resounding imperative for travellers. Green tourists revel in pursuits such as wilderness trekking, avian observation, and responsible wildlife encounters, thereby fostering a harmonious coexistence with nature.

Furthermore, green tourism is a powerful socioeconomic catalyst for indigenous communities. By endorsing eco-resorts, local craftsmanship, and community-based tourism ventures, travellers galvanize regional economies. The confluence of economic growth, poverty mitigation, and the safeguarding of natural and cultural heritage epitomizes the tenets of green tourism.

Yet, challenges abound. Striking an equilibrium between tourism expansion and ecological preservation is a precarious act. Over-tourism and resource exploitation are ominous spectres. Stringent regulations and unwavering commitment to sustainable practices are sine qua non for addressing these conundrums.

16. Which fundamental shift characterizes green tourism?
- A) A focus on luxury travel experiences
 - B) An emphasis on environmental sustainability
 - C) A preference for adventurous escapades
 - D) A disregard for local cultures and traditions
17. What does the guiding principle of "leave no trace" in green tourism imply?
- A) Leaving a significant impact on the environment
 - B) Encouraging travellers to embrace eco-conscious choices
 - C) Ensuring that travellers leave visible marks on nature
 - D) Advocating for the expansion of tourism

18. Which of the following activities is NOT typically associated with green tourism?
- A) Wilderness trekking
 - B) Avian observation
 - C) Helicopter sightseeing tours
 - D) Responsible wildlife encounters
19. What does green tourism contribute to local communities?
- A) Increased pollution and overcrowding
 - B) Poverty reduction and economic support
 - C) Excessive resource consumption
 - D) A disregard for cultural heritage
20. What primary challenge does green tourism face?
- A) Maximizing profits for large corporations
 - B) Striking a balance between tourism growth and ecological preservation
 - C) Encouraging travellers to consume resources excessively
 - D) Disregarding environmental concerns for the sake of tourism expansion

Passage for Questions (21-25)

Holistic wellbeing is a multifaceted concept that extends beyond the superficial notions of health. It delves into the intricate web of interconnected dimensions that make up our overall state of being. One of the key principles of holistic wellbeing is the idea of "integrative vitality," which underscores the importance of harmonizing physical, mental, emotional, and spiritual health.

In the pursuit of holistic wellbeing, it's vital to understand the role of "holistic triage." This concept involves assessing the various dimensions of wellbeing and identifying the most critical one to focus on at any given time. For instance, in times of high stress, prioritizing emotional wellbeing might be essential, while during an illness, physical health could take precedence.

A fascinating aspect of holistic wellbeing is the field of "psychoneuroimmunology," which explores the connection between psychological factors, the nervous system, and the immune system. Mindful eating, a practice where individuals pay full attention to their eating experience, falls under this umbrella. It's believed to have a profound impact on overall health by reducing stress and promoting positive physiological responses.

Salutogenesis, another critical concept in the realm of holistic wellbeing, shifts the focus from disease prevention to understanding the origins and maintenance of health. It asks questions about what keeps individuals healthy rather than what makes them sick, emphasizing the importance of a proactive approach to wellbeing.

Lastly, achieving a state of "flow" is often considered a pinnacle of holistic wellbeing. This term describes the feeling of complete absorption and focused attention in an activity, where time seems to vanish. Activities that induce a state of flow, such as meditation or engaging in creative pursuits, can significantly contribute to an individual's overall sense of balance and contentment.

21. Which term best describes the interconnectedness and harmony among the dimensions of holistic wellbeing in the passage?
- A) Holistic balance
 - B) Synergistic wellness
 - C) Integrative vitality
 - D) Comprehensive health
22. In the context of holistic wellbeing, what is the primary role of the "holistic triage"?
- A) Identifying the most critical dimension to focus on
 - B) Balancing all dimensions equally
 - C) Prioritizing physical health over mental and emotional health
 - D) Diagnosing spiritual imbalances
23. Which practice involves the process of "psychoneuroimmunology," contributing significantly to holistic wellbeing according to the passage?
- A) Acupuncture
 - B) Mindful eating
 - C) Pranayama
 - D) Neurofeedback
24. In holistic wellbeing, what does "salutogenesis" primarily focus on promoting according to the passage?
- A) The prevention of diseases
 - B) The creation of a healthy lifestyle
 - C) The origin and maintenance of health
 - D) The treatment of psychological disorders
25. What is the term for a state of complete absorption and focused attention often achieved through activities like meditation or artistic creation, contributing to holistic wellbeing according to the passage?
- A) Flow
 - B) Tranquility
 - C) Zenith
 - D) Equilibrium

Passage for Questions (26-30)

Silk, an embodiment of luxury and artistry, weaves itself into the very fabric of Indian culture. The artisans who breathe life into silk masterpieces are the unsung heroes of our heritage. They don't just craft textiles; they create history. Let's delve deeper into this world of Indian silk and the exceptional artisans behind it.

In the heart of Gujarat, the Patola silk tradition has witnessed a resurgence, thanks to the unwavering commitment of individuals like GajamGovardhana. These double ikat sarees, with their symmetrical patterns, require intricate precision. Govardhana's dedication to preserving this dying art form is a testament to his love for craftsmanship.

Ahimsa silk, often referred to as "peace silk," revolutionizes traditional sericulture. In this process, artisans prioritize the ethical treatment of silkworms, allowing them to complete their life cycle. Such artisans are driven not only by their creativity but also by their respect for all living beings.

The Mysore Silk industry in Karnataka, known for its lightweight, pastel-hued sarees, is a testimony to the fusion of tradition and innovation. The artisans here blend centuries-old techniques with contemporary designs, crafting sarees that are a bridge between timeless elegance and modern style.

Hyderabad's Dhamavaram silk sarees, featuring rich colours and striking contrast borders, are exquisite creations that reflect the meticulous craftsmanship of artisans. These sarees are more than just garments; they are works of art that encapsulate centuries of tradition.

Chanderi silk, a symbol of opulence, is woven with real gold and silver threads, elevating it to a realm of luxury. In Madhya Pradesh, artisans skilfully combine ancient motifs with modern aesthetics, ensuring Chanderi silk remains the epitome of elegance.

26. Who is responsible for the revival of the intricate Patola silk tradition in Gujarat?

- A) GajamGovardhana
- B) Sabyasachi Mukherjee
- C) Raghavendra Rathore
- D) TarunTahiliani

27. What is the distinctive feature of Ahimsa silk?

- A) It is entirely handwoven.
- B) It prioritizes ethical treatment of silkworms.
- C) It is known for its vibrant colours.
- D) It is produced using organic dyes.

28. The Mysore Silk industry is known for:

- A) Heavyweight sarees in bold colours.
- B) Lightweight sarees in pastel shades.
- C) Experimental fusion designs.
- D) Incorporating intricate embroidery.

(92 - II) (A)

(10)

29. Dharmavaram silk sarees are celebrated for their:
- A) Subtle and understated colours.
 - B) Intricate hand-painted designs.
 - C) Rich colours and striking contrast borders.
 - D) Traditional tie-dye patterns.
30. What sets Chanderi silk apart from other silk varieties?
- A) It is entirely hand-painted with intricate designs.
 - B) It is woven with real gold and silver threads.
 - C) It is made from a blend of silk and wool.
 - D) It is known for its eco-friendly production methods.

Passage for Questions (31-35)

An unchecked ego harms us. In our eagerness to present ourselves as the greatest and smartest, we hide our true natures. It is a complex stew of who we are, who we want to be, how we hope to be seen and what we are feeling in any given moment. We are a certain person at home, alone, but we present the world with another version of ourselves. Ideally, the only difference between the two is that our public persona is working harder to be considerate, attentive, and generous. But sometimes our egos intrude. Insecurities make us want to convince ourselves and everyone else that we're special, so we contrive a dishonest version of ourselves in order to appear more knowledgeable, more accomplished, and merely confident. We present this inflated self to others, and we do everything we can to protect it: the self we want others to perceive. Fourth-century monk Evagrius Ponticus (also called Evagrius the Solitary, because sometimes monks get cool nicknames) wrote that pride is "the cause of the most damaging fall for the soul."

Vanity and ego go hand in hand. We put enormous effort into polishing the appearance of the self we present to the world. When we dress and groom for ourselves, it is because we want to feel comfortable and appropriate (easily achieved through a daily "uniform") and even because we appreciate the color or style of certain clothes. But the ego wants more-it wants us to get attention for how we look, a big reaction, praise. It finds confidence and joy in impressing others. There is a meme that shows Warren Buffett and Bill Gates standing side by side. The caption reads, "\$162 Billion in one photo, and not a Gucci belt in sight." I have nothing against Gucci belts, but the point is that if you are satisfied with who you are, you don't need to prove your worth to anyone else.

31. Which of the following is the most suitable Title for this passage?
- A) The Ego is a Mask
 - B) Ego and Vanity
 - C) Starve your ego and Feed your soul
 - D) Big Egos have little Ears

32. What do you infer from the above passage?

- A) You are who you are when everyone is watching.
- B) Don't let your ego overtake your original self.
- C) Only a life lived for others is a life worthwhile.
- D) The great prison people live in, is the fear of what other people think.

33. What do you understand by the term "Contrive"?

- A) Fabricate
- B) Destroy
- C) Natural
- D) Raze

34. Consider the following statements

1. Insecurities make us want to convince ourselves and everyone else that we're special.
2. Insecurity leads to contriving.

Which of the above statements are true

- A) 1 only
- B) 2 only
- C) 1 and 2
- D) Neither 1 nor 2

35. Which of the following means Vanity?

- A) Timidity
- B) Sacrifice
- C) Humility
- D) Excessive self-pride

Passage for Questions (36-40)

My dear Indira, On your birthday you have been in the habit of receiving presents and good wishes. Good wishes you will still have in full measure, but what present can I send you from Naini Prison? My presents cannot be very material or solid. They can be of the mind and spirit. Things that even the high walls of prison cannot stop.

You know sweetheart, how I dislike sermonising and doling out good advice. I have always thought that the best way to find out what is right and what is not right, what should be done and what should not be done, is not by giving a sermon, but by talking and discussing, and out of discussion sometimes a little bit of truth comes out. I have liked my talks with you and we have discussed many things, but the world is wide and beyond our world lie other wonderful and mysterious worlds. None of us need ever be bored or imagine that we have learned everything worth learning and become very wise. But what am I to do then? A letter can hardly take the place of a talk; at best it is a one-sided affair. Imagine that I have made a suggestion to you for you to think over, as if we really were having a talk. In history we read of great periods in the life of nations, of great men and women. Do you remember how fascinated you were when you first read the story of Joan of Arc, and how your ambition was to be something like her? Ordinary men and women are not usually heroic. They think of their bread and butter, of their children, of their household worries and the like. But a time comes when a whole people become interested in a great cause. History helps even simple, ordinary men and women to become heroes. Great leaders have something in them which inspires a whole people and makes them do great deeds. In India, a great leader, full of love for all who suffer and eager to help them, has inspired our people to great actions and noble sacrifices. He has helped to make the starving, the poor and the oppressed free and happy. Bapuji is in prison, but the magic of his message has stolen the hearts of India's millions. Men and women, and even little children, come out of their little shells and become India's soldiers of freedom. In India today we are making history, and you and I are fortunate to see this happening before our eyes and to take some part ourselves in this great drama. If we are to be India's soldiers, we have to respect India's honour, and that honour is a sacred trust. It is no easy matter to decide what is right and what is not. One little test I shall ask you to apply whenever you are in doubt. Never do anything in secret or anything that you would wish to hide. The desire to hide anything means you are afraid, and fear is bad and unworthy of you. Be brave, and all the rest follows.

36. From which prison did Nehru write this letter?

- A) Central Prison, Naini
- B) Central Prison, Ujjain
- C) Central Prison, Gorakhpur
- D) Central Prison, Varanasi

37. Who is addressed as 'Bapuji'?

- A) Neta ji
- B) Gandhiji
- C) Rajaji
- D) Nehruji

38. _____ makes them do great deeds

Find out the meaning of the underlined word

- A) Brave act
- B) Benefit
- C) Behaviour
- D) Misconduct

39. Choose the meaning of the word, 'serene'

- A) Unafraid
- B) Peaceful
- C) Nervous
- D) Kind

40. _____ afraid, serene and unruffled.

The Synonym of the underlined word is

- A) Coward
- B) Nervous
- C) Worried
- D) Not-nervous

41. Which among the following can be the unit digit of one more than the square of a prime number?

- A) 5
- B) 3
- C) 9
- D) 7

Handwritten notes for Q41:

Prime numbers: 2, 3, 5, 7, 11, 13, 17

Squares: 4, 9, 25, 49, 121, 169, 289

Unit digits: 5, 6, 0, 0

42. ABCD is four digit number. In which each letter indicates a different digit. Nine times of this number is another four digit number DCBA. What is the digit value of the letter C?

- A) 1
- B) 8
- C) 2
- D) 3

Handwritten solution for Q42:

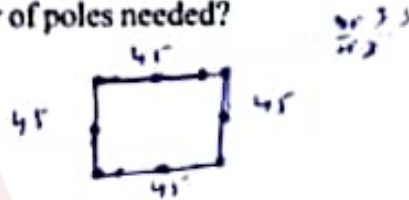
$$9(ABCD) = DCBA$$

$$9000A + 900B + 90C + 9D = 1000D + 100C + 10B + A$$

$$9999A + 899B = 900C + (1000-9)D$$

43. The length of the sides of a square shape land is 45 meters. Poles are to be fixed along its sides with 15 meters distance. What is the number of poles needed?

- A) 16
- B) 15
- C) 12
- D) 18



44. Which among the following is greatest?

- A) 3^{30}
- B) 2^{45}
- C) 5^{20}
- D) 6^{15}

Handwritten calculations for Q44:

$$\frac{3^{30}}{2^{45}} = \left(\frac{3}{2}\right)^{30} > 1$$

$$\frac{3^{30}}{5^{20}} = \left(\frac{3}{5}\right)^{20} < 1$$

$$\frac{3^{30}}{6^{15}} = \left(\frac{3}{2}\right)^{15} > 1$$

45. Which of the following fraction is Greatest

$\frac{9}{25}, \frac{7}{20}, \frac{11}{30}, \frac{5}{12}$?

- A) $\frac{2}{25}$
- B) $\frac{7}{20}$
- C) $\frac{11}{30}$
- D) $\frac{5}{12}$

Handwritten calculation for Q45:

$$\frac{9 \times 101 \times 110}{700}$$

46. A bag contains Rs.2 coins, Rs.5 coins and Rs.10 rupee coins, whose counts are in the ratio 5:4:2. The total amount in the bag are Rs. 500. Then find the number of Rs.5 coins in the bag.

- A) 32
- B) 20
- C) 28
- D) 40

$$\frac{5x}{11} + \frac{4y}{11} + \frac{2z}{11} = 500$$

$$5x + 4y + 2z = 5500$$

$$2x + 5y + 10z = 500$$

$$\left[\frac{5}{11} + \frac{4}{11} + \frac{2}{11} \right] x = x + y + z$$

47. If a carton containing 24 glass is dropped, which of the following cannot be the ratio of unbroken glasses to broken glasses?

- A) 2:1
- B) 3:1
- C) 4:1
- D) 5:1

$$\frac{20}{4} = 5$$

$$\frac{16}{8} = 2$$

48. A invested Rs. 40,000 in a business. After a few months, B joined him with Rs. 60,000. At the end of the year, the total profit was divided between them in the ratio of 1:2. After how many months did B join?

- A) 3 months
- B) 4 months
- C) 5 months
- D) 2 months

$$\frac{40,000 \times 12}{4,10,000} = \frac{60,000 \times x}{1,20,000}$$

49. 60% of the speed of a boat moving downstream is equal to 80% of the speed of that boat moving upstream in that river. If the speed of the river is 8Kmph then what is the speed of the boat?

- A) 80kmph
- B) 56 kmph
- C) 70kmph
- D) 60kmph

$$\frac{60}{100} [u+v] = \frac{80}{100} [u-v]$$

$$6u + 6v = 8u - 8v$$

$$6u + 8v = 8u$$

$$\frac{14v}{2} = 2u$$

$$7v = u$$

50. What is the single discount equal to three successive discounts of 20%, 44% and 25%?

- A) 66.4 %
- B) 33.6 %
- C) 89 %
- D) 76 %

$$100 \times \frac{20}{100} = 80$$

$$80 \times \frac{44}{100} = 35.2$$

$$35.2 \times \frac{25}{100} = 8.8$$

$$100 - 8.8 = 91.2$$

$$100 - 91.2 = 8.8$$

$$100 - 8.8 = 91.2$$

(92 - II) (A)

(16)

51. The selling prices of two products are equal. One product sold at 30% profit and the other product sold at 20% profit. What is the overall profit in this transaction?

- A) 24.8%
- B) 25%
- C) 21%
- D) 50%

$$S.P_1 = S.P_2$$

$$100 = 100$$

$$\frac{70}{100} \times 100 = 70$$

$$\frac{80}{100} \times 100 = 80$$

$$\frac{10}{100} \times 100 = 10$$

$$\frac{20}{100} \times 100 = 20$$

52. A man sold a product at 12.5% loss for Rs. 6300. At what price does he have to sell the product to gain 12.5%?

- A) Rs. 9800
- B) Rs. 5400
- C) Rs. 8100
- D) Rs. 8400

$$\frac{12.5}{100} \times x = 6300$$

$$\frac{12.5}{100} \times x = \frac{6300}{100}$$

$$\frac{12.5}{100} \times 2100 \times 40$$

$$\frac{100}{112.5} \times 6300 = 5400$$

$$\frac{100}{112.5} \times 6300 = \frac{100}{112.5} \times \frac{6300}{1}$$

$$\frac{100 \times 6300}{112.5} = \frac{100 \times 6300}{112.5}$$

$$\frac{100 \times 6300}{112.5} = \frac{100 \times 6300}{112.5}$$

53. A and B run around a circular ground at 4 m/s and 5 m/s respectively from same point in opposite directions. How many times will they meet in 5 minutes after they start. If the circumference of the ground is 450 meters?

- A) 5
- B) 4
- C) 8
- D) 6

$$4 \times 5 = 20$$

$$20 \times 5 = 100$$

$$\frac{100}{450} = \frac{2}{9}$$

$$\frac{2}{9} \times 5 = \frac{10}{9} = 1.11$$

$$1.11 \times 5 = 5.55$$

54. A can complete a work in 12 days. A is twice as efficient as B. In how many days A and B together can complete the work?

- A) 8 days
- B) 9 days
- C) 8 1/3 days
- D) 9 2/5 days

$$\frac{1}{12} + \frac{1}{24} = \frac{2}{24} + \frac{1}{24} = \frac{3}{24} = \frac{1}{8}$$

55. In a factory the efficiency of all workers is equal. To complete a work, one worker works on the first day, two workers on 2nd day, 3 workers on 3rd day and so on. The work completed in 15 days. In how many days the work will be completed, if only 12 workers work on it every day?

- A) 20 days
- B) 10 days
- C) 21 days
- D) 15 days

56. What is the sum of all odd prime numbers which are less than 20?

A) 74

B) 77

C) 81

D) 75

2, 3, 5, 7, 11, 13, 17, 19.

57. In how many ways 15 identical balls can be kept in three baskets such that each basket has at least one ball?

A) 60

B) 30

C) 91

D) 43

A B C

58. In how many ways the letters of the word 'ORANGE' can be arranged, so that the vowels are always alternate?

A) 72

B) 240

C) 720

D) 120

59. What is the number of rectangles in the below picture?



A) 15

B) 24

C) 30

D) 36

60. A coin was tossed 4 times successively. What is the probability that the result in the coin is alternate?

A) 1/8

B) 1/7

C) 3/8

D) 2/7

H T H T

T H T H

$$2^4 = 16$$

$$2/16$$

61. 6 boys A, B, C, D, E, and F are sits around a circular table. What is the probability that exactly two boys sit in between A and B?
- A) $\frac{2}{5}$
 B) $\frac{1}{6}$
 C) $\frac{1}{3}$
 D) $\frac{5}{6}$

62. The inner dimension of a tank are $1.2\text{m} \times 80\text{cm} \times 5\text{m}$. What is the capacity of the tank?
- A) 48000 liters
 ✓ B) 4800 liters
 C) 480 liters
 D) 5000 liters

$$\frac{1.2 \times 0.8 \times 5}{6 \times 0.3} = 4.8 \text{ m}^3$$

$$1 \text{ m}^3 = 1000 \text{ l.}$$

$$4.8 \text{ m}^3 = 4.8 \times 1000$$

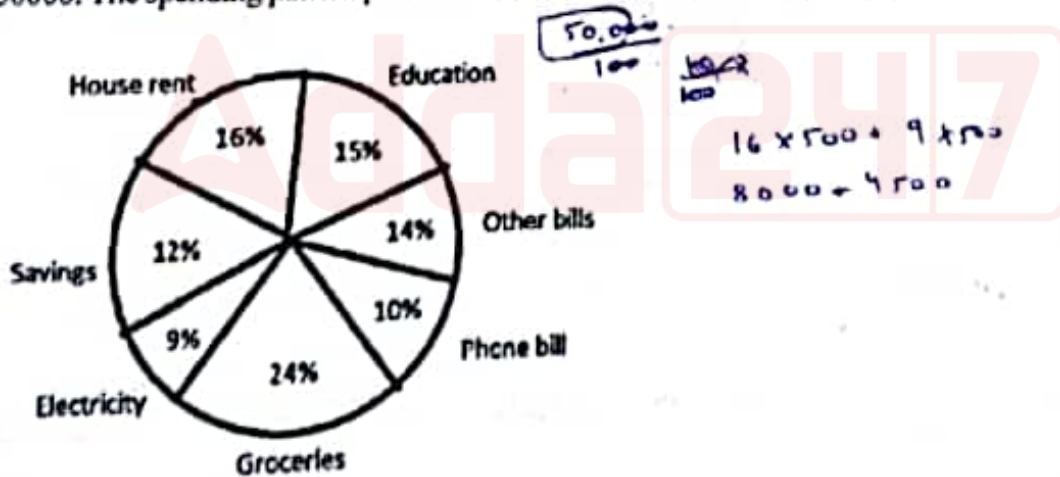
$$= 4800$$

63. Directions for the questions: Select from one of the given choices.
- Is 'X' a perfect square?
- I. The unit digit of x is 6.
 II. The next digit to the unit digit is even.
- A) If statement I alone sufficient to answer the question and II is not sufficient or if statement II alone sufficient to answer the question and I is not sufficient
 ✓ B) If Both I and II together sufficient to answer the question.
 C) If Neither I nor II alone is sufficient to answer the question.
 D) If Either I or II alone is sufficient to answer the question.

0, 2, 4, 6, 8

↑
6

64. Consider the following chart and answer the following. The monthly salary of a man is Rs. 50000. The spending pattern per month of the man is given in the picture

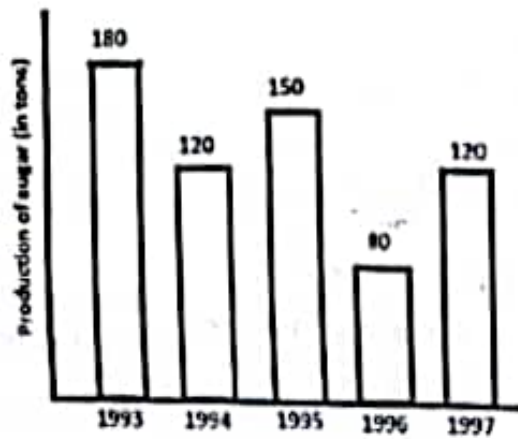


What is the total expenditure of the man on house rent and electricity together?

- A) 15000
 ✓ B) 12500
 C) 12000
 D) 18000

65. Consider the following chart and answer the following.

Production of sugar (in tons) of a company from 1993 to 1997 is given below.



What is the ratio of the production of sugar in 1997 to that in 1996?

- A) 2 : 3
 B) 4 : 3
 C) 3 : 2
 D) 3 : 4

66. The cost price of three products are equal. They are sold at 20%, 25% and 18% profit respectively. What is the over all profit or loss percent?

- A) 63%
 B) 21%
 C) 22.5%
 D) 24%

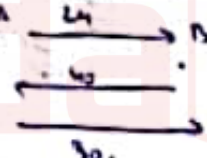
$$\frac{120}{125} \quad \frac{100}{125}$$

$$\frac{118}{125} \quad \frac{100}{125}$$

$$\frac{263}{125}$$

67. A man travel from A to B at 24 kmph and return from B to A at 40 kmph and again travel from A to B at 30 kmph. What is his average speed in this entire journey. (every time he travel at same route)?

- A) 31.3 kmph
 B) 40 kmph
 C) 30 kmph
 D) 24 kmph



68. Pipe A can fill a tank in 20 minutes. Pipe B can fill it in 24 minutes and pipe C can empty a full tank in 40 minutes. Pipes A and B initially opened for 8 minutes then pipe C also opened. How long will it take to fill the whole tank?

- A) 15 minutes
 B) 18 minutes
 C) 25 minutes
 D) 12 minutes

$$\frac{1}{20} = \frac{1}{24}$$

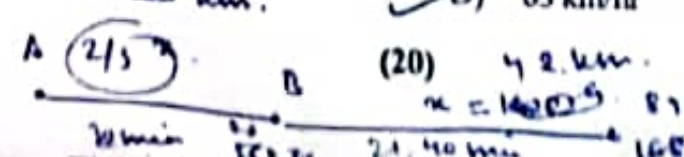
$$\frac{24 - 20}{40} = \left[\frac{11}{24} \right] \times 8$$

$$1 - \frac{11}{24} = \frac{13}{24}$$

$$1 \text{ min} = \frac{24}{13} \times \frac{13}{24}$$

69. Ram travel from A to B and Rahim travel from B to C. The distance between A and B is $\frac{2}{3}$ of the distance between B and C. Ram took 30 minutes and Rahim took 40 minutes to cover their distances. If the speed of Ram is 56 km/hr then what is the speed of Rahim?

- A) 50 km/hr
 B) 40 km/hr
 C) 48 km/hr
 D) 63 km/hr



$$\frac{24}{3} = 28$$

$$\frac{16}{2} = 8$$

$$28 + 8 = 36$$

70. In an isosceles triangle all the three interior angles are prime numbers. What is the value of the largest interior angle?

- A) 149°
- B) 113°
- C) 89°
- D) 101°



$\frac{180}{3} = 60$

71. Select the related word/letters/number from the given alternatives.

CUBE : 16 :: SPHERE : ?

- A) 81
- B) 36
- C) 50
- D) 71

72. Complete the given Series:

5, 3, 10, 9, 20, 27, 40, 81 ?

- A) 80
- B) 88
- C) 91
- D) 166

$\frac{11}{3}$
 $\frac{17}{5}$ $\frac{17}{2}$

73. AB3, EF11, IJ19, ?

- A) MN25
- B) OP31
- C) OP29
- D) MN29

AB --- EF --- JJ --- MN

74. Complete the Series:

CARE, AREC, RECA, ECAR

- A) ARCE
- B) RACE
- C) EARC
- D) ECAR

Madhan's son

75. Pointing to a person, Madhan said, "His only brother is the father of my son's father". How is the person related to Madhan?

- A) Cousin
- B) Uncle
- C) Brother
- D) Son



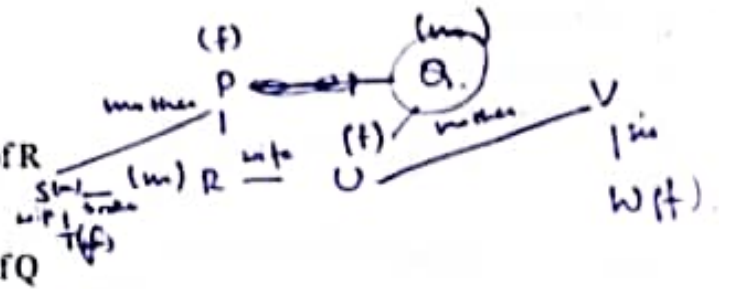
(21)

[P.T.O.]

(92 - II) (A)

76. Directions: In a family there are 8 members P, Q, R, S, T, U, V and W. 8 information points are given below about the family. Based on below information answer the following question

1. P is mother of R
2. U is wife of R
3. S is the only brother of R
4. T is wife of S
5. T is daughter-in-law of Q
6. W is sister of V
7. U is mother of V
8. Q is husband of P



How is Q related to U?

- A) Father
- B) Brother
- C) Father-in-law
- D) Brother-in-law

77. Which among the following years has the same calendar of 2023 for the whole year?

- A) 2030
- B) 2029
- C) 2058
- D) 2034

15 Oct 2023	Sun	31 Oct
16 Oct	Tue	1 Nov
17 Oct	Wed	2 Nov
18 Oct	Thur	3 Nov
19 Oct	Fri	4 Nov
20 Oct	Sat	5 Nov
21 Oct	Sun	6 Nov
22 Oct	Mon	7 Nov
23 Oct	Tue	8 Nov

78. If 23rd March 2027 is Wednesday, what will be the weekday of 23rd March 2028?

- A) Thursday
- B) Tuesday
- C) Friday
- D) Sunday

79. An analog clock shows 5 : 24 Pm. What is the time in its mirror image, if the mirror is placed vertically against the clock?

- A) 6 : 24 PM
- B) 7 : 36 PM
- C) 7 : 38 PM
- D) 6 : 36 PM

80. In a certain code, If 'TABLE' is written as '&2@S#'
 'CHAIR' is written as '%4*+!' Then what is the code for 'TEACHER' = ?

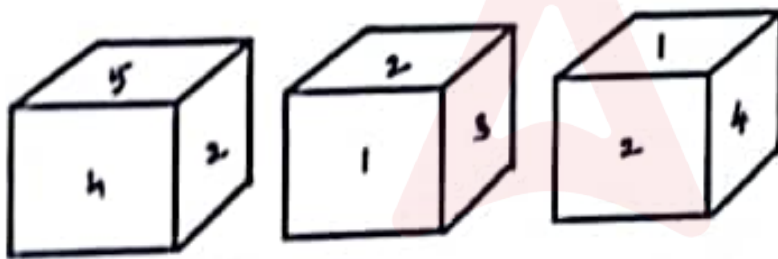
- A) &#**%4##!
- B) &#**@4*5%
- C) &#**@4*5%4
- D) &#**%4##!

2 1# * % ^

81. What is the minimum number of cuts needed to make a cube into 60 equal size pieces?

- A) 8 cuts
- B) 12 cuts
- C) 9 cuts
- D) 10 cuts

82. Different views of a fair die are given. Based on the views given find the number opposite to 6?

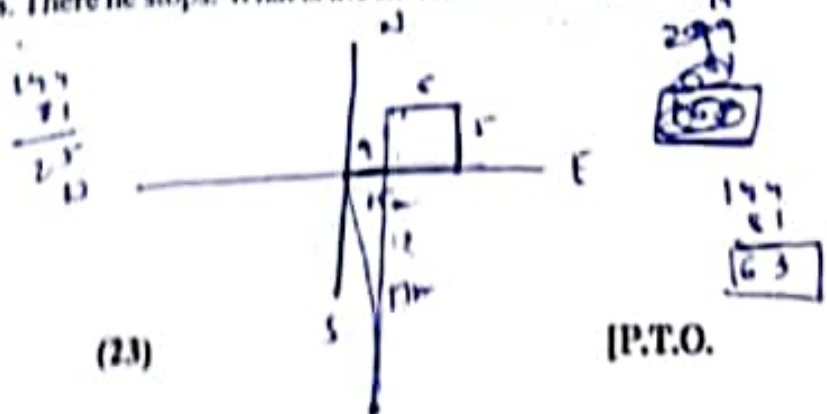


- A) 3
- B) 4
- C) 2
- D) 5

Adda247

83. A boy started from his home and walked 15 meters towards the East. After that he turned left and walked 5 meters. Then he turned left again and walked 6 meters. Then again, he took a left and walked 17 meters. There he stops. What is the shortest distance is he now from his home?

- A) 13 meters
- B) 37 meters
- C) 39 meters
- D) 15 meters



(23)

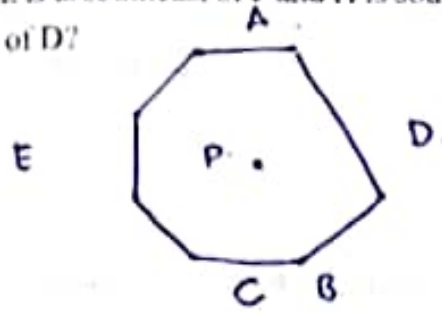
[P.T.O.]

(92 - II) (A)

84. A, B, C, D, E, F, G, H and P are nine boys who played a ball catching game. Eight of nine stand around P at vertices of an octagon shape. P is at the center of the octagon and all the others stand facing P. A is to the north of P and E is to the west of P. D is opposite of E and C is south of A. B is southeast of P and H is southwest of F.

Who is third to the left of D?

- A) H
- B) B
- C) A
- D) C



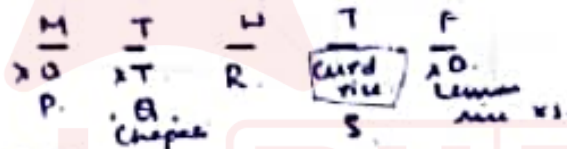
85. Directions: Five friends P, Q, R, S, and T each brings one among the following foods for their friends one day each, which are, Curd rice, Tomato rice, Lemon rice, Poori Chapati. One day a week, Monday through Friday.

- i. T does not bring Poori and does not bring it on Tuesday.
- ii. Q bring Chapati and does not bring it on Monday or Friday
- iii. The friends ate Curd rice on Thursday
- iv. R does not bring poori, and he bring his food on Wednesday
- v. Lemon rice was brought on Friday and not by S.
- vi. P bring his food on Monday.

A - Chapati

Who brought the food on Thursday?

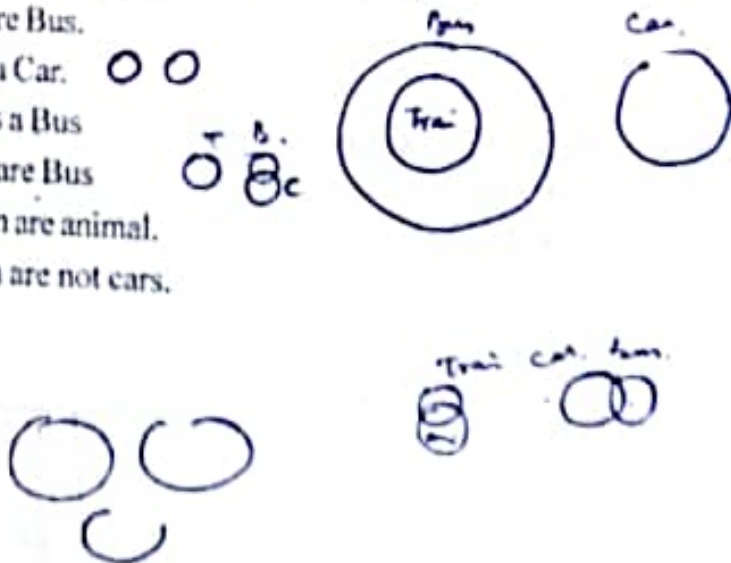
- A) T
- B) P
- C) Q
- D) S



86. In each question, a set of six statements is given, followed by four answer choices. Each of the answer choices has a combination of three statements from the given set of statements. You are required to identify the answer choice in which the third statement logically follows the first two in the same order.

- a. All Train are Bus.
- b. No Bus is a Car.
- c. No Train is a Bus
- d. Some Car are Bus
- e. Some Train are animal.
- f. Some train are not cars.

- A) b d e
- B) a c b
- C) a b f
- D) c d f



(92 - II) (A)

(24)

57. In the following questions, the symbol \$, @, #, © and % are used with the following meanings as illustrated below

- 'A \$ B' means A is smaller than or equal to B'
- 'A @ B' means A is greater than B'.
- 'A # B' means A is greater than or equal to B'.
- 'A © B' means A is smaller than B'.
- 'A % B' means A is equal to B'.

Assume the given statements to be true, find which of the three Conclusions I, II and III given below them is/are definitely true and give your answer accordingly?

Statements : S \$ T, T # M, M @ N, N © O

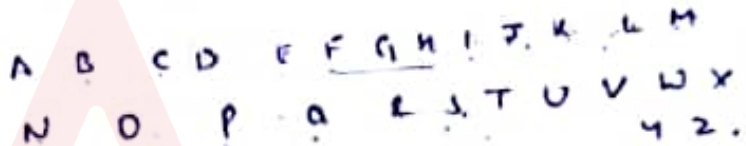
Conclusions : I. N © T II. O @ T III. S \$ M

S ≤ T > M > N < O

||

INFORMATION:

- I. N © T
- II. O @ T
- III. S \$ M
- A) None is true
- B) Only I is true
- C) Only II is true
- D) Only III is true



58. How many such pairs of letters are there in the word QUESTION, each of which has as many letters between them in the word as in the 26 English alphabet in any direction?

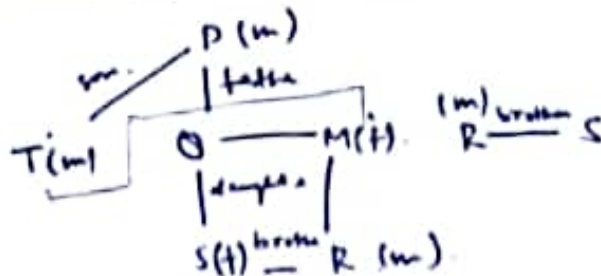
||

- A) Four
- B) Five
- C) Two
- D) Three

Adda247

59. In a family of six members P, Q, R, S, T, and M only one married couple. Study the following information carefully about the family and answer the questions given below:

- i. P is father of Q.
- ii. R is brother of S.
- iii. T is son of P.
- iv. S is daughter of Q.
- v. M is mother of R.

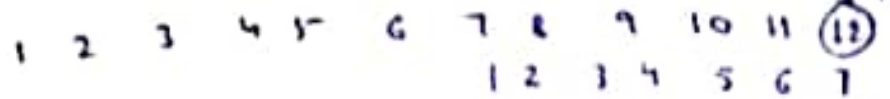


How is T related to M?

- A) wife
- B) Sister-in-law
- C) Brother-in-law
- D) Husband

90. In a Queue, The position of Vijay is 12th from the front and 7th from the last. How many persons are there in the queue?

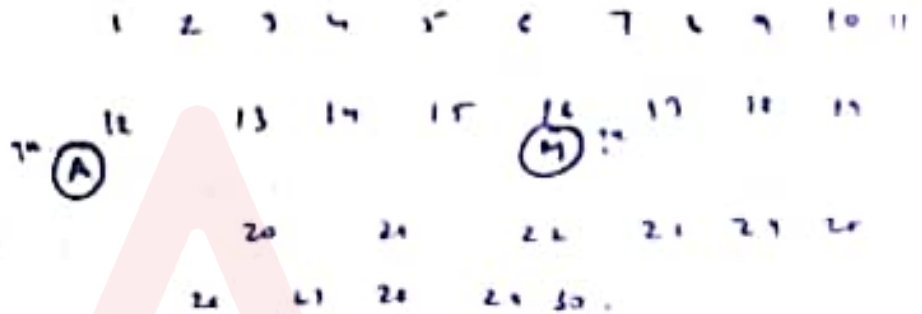
- A) 19
- B) 18
- C) 17
- D) 20



91. In an examination the rank of Antony is 7th among the boys and 12th among the total number of students. Rank of Manisha is 9th among the girls and 16th among the total students. The total number of students in the class is 30. And no student got the same rank in the class.

If the students are arranged based on their ranks how many boys are between Antony and Manisha?

- A) 3
- B) 4
- C) 0
- D) Cannot say



92. In a college party, 5 boys are sitting in a row. N is to the left of K and to the right of M. L is sitting to the right of L but to the left of M, Who is sitting in the middle?

- A) M
- B) R
- C) P
- D) K

L A.
M N K
A M N K.

93. What is the number of rectangles in the below image?



- A) 12
- B) 14
- C) 15
- D) 18

(92 - II) (A)

94. How many instances are there in the following number sequence such that An odd number followed by and preceded by Even number.

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

11

- A) Three
- B) Two
- C) Four
- D) One

95. How many leap years between the years 2090 and 2125?

- A) 9 leap years
- B) 10 leap years
- C) 8 leap years
- D) 12 leap years

2090
2100
2104
2108
2112
2116
2120
2124

Handwritten calculations for Q95:

$$\frac{2125 - 2090}{4} = \frac{35}{4} = 8 \text{ R } 3$$

$$8 + 1 = 9$$

96. Find the wrong number in the below number series:

9, 7, 16, 23, 39, 62, 105, 163

- A) 16
- B) 39
- C) 7
- D) 105

97. Numbers are filled in the first two images follows a particular logic. With the same logic Find the missing number in the third picture.



- A) 8
- B) 9
- C) 12
- D) 4

Handwritten calculation for Q97:

$$\frac{32 \times 17}{2} = \frac{544}{2} = 272$$

$$\frac{40 \times 24}{2} = \frac{960}{2} = 480$$

$$480 - 272 = 208$$

02-II(A)

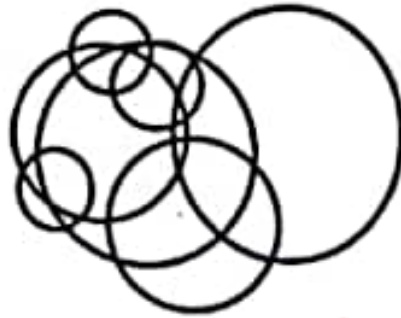
(27)

[P.T.O.]

98. How many such pairs of letters are there in the word INFORMATION each of which has as many letters between them in the word as in the 26 English alphabet in any direction?

- A) Three
- B) One
- C) Two
- D) NONE

99. What is the minimum possible straight lines are needed to draw this below image?



- A) 8
- B) 7
- C) 6
- D) 9

100. Find the number of triangles in this image



- A) 10
- B) 8
- C) 9
- D) 12

(92 - II) (A)

(28)