

AFCAT I 2021 Memory Based

Previous Year Questions

###COMMON###1###1###Select the alternative to fill in the given blank. ###DONE###

1.

We are _____ by her beauty.

- A. Blowed over
- B. Blown at
- C. Blowed
- D. Blown away

###COMMON###2###2###Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **opposite** in meaning to the underlined word and mark your response accordingly. ###DONE###

2.

KINDLE

- A. Spark
- B. Extinguish
- C. Ignite
- D. Torch

###COMMON###3###3###Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **opposite** in meaning to the underlined word and mark your response accordingly. ###DONE###

3.

THRIFTY

- A. Frugal
- B. Sparing
- C. Extravagant
- D. Economical

###COMMON###4###4### Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **nearest** in meaning to the underlined word and mark your response accordingly. ###DONE###

4.

ANTIPATHY

- A. Liking
- B. Affinity
- C. Kindliness
- D. Animosity

###COMMON###5###5### Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **nearest** in meaning to the underlined word and mark your response accordingly. ###DONE###

5.

TRUNCATE

- A. Elongate
- B. Decrease
- C. Extend
- D. Lengthen

6. Given below are some idioms/phrases followed by four alternative meanings to each. Choose the response (A), (B), (C) or (D) which is the most appropriate expression and mark your response in the Answer Sheet accordingly.

To Bury the hatchet

- A. To bury a dead body
- B. To leave someone/something.
- C. To end a business deal.
- D. To end a quarrel or conflict

7. Given below are some idioms/phrases followed by four alternative meanings to each. Choose the response (A), (B), (C) or (D) which is the most appropriate expression and mark your response in the Answer Sheet accordingly.

To turn over a new leaf.

- A. To forget someone
- B. To write on a leaf
- C. To make a fresh start
- D. To plant a new tree.

###COMMON###8###8### Select the most appropriate meaning for the given Idiom/Phrase. ###DONE###

8.

To give currency

- A. To make someone or something popular
- B. To give a loan
- C. To earn big profits
- D. To pay for your sins

###COMMON###9###9### Select the most appropriate meaning for the given Idiom/Phrase. ###DONE###

9.

To get cold feet

- A. To get too tired
- B. To go to the toilet
- C. To feel too frightened
- D. To feel too cold

###COMMON###10###10###Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **opposite** in meaning to the underlined word and mark your response accordingly. ###DONE###

10.

AUSTERITY

- A. Unimportance
- B. Exactness
- C. Formalness
- D. Rigidity

###COMMON###11###11###Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **opposite** in meaning to the underlined word and mark your response accordingly. ###DONE###

11.

VIVIDLY

- A. Sharply
- B. Vague
- C. Distinctly
- D. Clearly

###COMMON###12###12###Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **nearest** in meaning to the underlined word and mark your response accordingly. ###DONE###

12.

FACADE

- A. Truth
- B. Actuality
- C. Reality
- D. Pretence

###COMMON###13###13###Select the most appropriate meaning of the given idiom/phrase. ###DONE###

13.

To miss the boat

- A. To be patient
- B. To wait for something
- C. To work late in the night
- D. To fail to take advantage of an opportunity.

###COMMON###14###14###Select the most appropriate meaning of the given idiom/phrase. ###DONE###

14.

To get cold feet

- A. To get rid of something
- B. Lack of confidence or courage.
- C. To get too cold
- D. To get rejected

###COMMON###15###15###Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **nearest** in meaning to the underlined word and mark your response accordingly. ###DONE###

15.

ELOQUENT

- A. Inarticulate
- B. Apathetic
- C. Introvert
- D. Expressive

###COMMON###16###16###Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **nearest** in meaning to the underlined word and mark your response accordingly. ###DONE###

16.

PACIFY

- A. Inflame
- B. Calm
- C. Provoke
- D. Enrage

###COMMON###17###17### Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **opposite** in meaning to the underlined word and mark your response accordingly. ###DONE###

17.

INEVITABLE

- A. Avoidable
- B. Inescapable
- C. Assured
- D. Fated

###COMMON###18###18### Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **nearest** in meaning to the underlined word and mark your response accordingly. ###DONE###

18.

ELUDE

- A. Meet
- B. Confront
- C. Avoid
- D. Encounter

###COMMON###19###19### Select the most appropriate meaning of the given idiom/Phrase. ###DONE###

19.

To spill the beans

- A. To reveal secret information
- B. To learn how to cook
- C. To have no money at all

D. To attract someone's attention

###COMMON###20###20###Select the most appropriate meaning of the given idiom/Phrase. ###DONE###

20.

To keep one's head above the water

- A. To be unable to sleep
- B. To complete a task successfully
- C. To stay out of trouble
- D. To learn to swim well

###COMMON###21###21###Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **opposite** in meaning to the underlined word and mark your response accordingly. ###DONE###

21.

BELLIGERENT

- A. Hostile
- B. Friendly
- C. Aggressive
- D. Threatening

###COMMON###22###22###Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **opposite** in meaning to the underlined word and mark your response accordingly. ###DONE###

22.

VIGILANCE

- A. Inattention
- B. Watchful
- C. Aware
- D. Alert

###COMMON###23###23###Each item in this section consists of a sentence with an underlined word followed by four options. Select the

option that is **opposite** in meaning to the underlined word and mark your response accordingly. ###DONE###

23.

BLISSFUL

- A. Euphoric
- B. Miserable
- C. Joyful
- D. Elated

###COMMON###24###24### Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **nearest** in meaning to the underlined word and mark your response accordingly. ###DONE###

24.

INDUSTRIOUS

- A. Careless
- B. Lethargic
- C. Diligent
- D. Indolent

###COMMON###25###25### Each item in this section consists of a sentence with an underlined word followed by four options. Select the option that is **nearest** in meaning to the underlined word and mark your response accordingly. ###DONE###

25.

MITIGATE

- A. Diminish
- B. Intensify
- C. Aggravate
- D. Incite

26. A candidate got 35% vote and lost the election by 450 votes. Then the number of the total voter?

- A. 1200
- B. 1500

- C. 900
- D. 1800

27. A shopkeeper marked 30% more than the cost price and gave a discount of 20%. Find the profit percentage:

- A. 10%
- B. 12%
- C. 15%
- D. 20%

28. What will be $\sqrt{29^2 - 2 \times 100 \times 24}$ equal to:

- A. 504
- B. 416
- C. 480
- D. 420

29. What will be $23 \div 46 \times 7.5 + 512 - 251$ equal to:

- A. 250
- B. 264.75
- C. 261
- D. 3.75

30. A student deposits Rs.8000 in a bank. He pays 10% of the interest as fee in the college and remains Rs.900. Find the rate of the interest?

- A. 25 %
- B. 12.5 %
- C. 6.5 %
- D. 8 %

31. A policeman started to chase a thief who was running away from 7:00 PM at 9:00 PM. If the speed of the police and the thief are 4.5 kmph and 6 kmph. Then find the time when policeman catches the thief?

- A. 4 hr
- B. 5 hr
- C. 6 hr
- D. 8 hr

32. A man deposits Rs.3903 in a bank at 4% of interest rate in two schemes. And he gets an equal amount after 7 years and 9 years. Then find the amounts?

- A. 1875:2028
- B. 2028:1875
- C. 1301:2602
- D. 2602:1301

33. A man goes 12 km upstream and 28 km downstream in 5 hours. Find the speed of the stream?

- A. 2 kmph
- B. 1.6 kmph
- C. 1.4 kmph
- D. 1.8 kmph

34. A man goes 32 km upstream and 40 km downstream in 10 hr. Again he goes 38 km upstream and 50 km downstream in 12 hr. then find the speed of the stream?

- A. 8
- B. 10
- C. 12
- D. 15

35. If the average weight of 22 toys is increased by 2 if two of them whose average weight is one-third of the previous are removed. Then the average weight of 20 toys are?

- A. 30
- B. 32
- C. 28
- D. 24

36. If profit is 40% for selling an item. If the cost price and selling price are increased by Rs.50 and Rs.20 then profit decreases to 20%. Find the cost price?

- A. Rs.100
- B. Rs.150
- C. Rs.200

D. Rs.120

37. A person buys petrol at the rate of 45, 60 and 90 rupees per litre for three successive years. What is the average petrol he bought if he spent 6000 rupees per year?

- A. 133.34 litre
- B. 120 litre
- C. 100 liter
- D. 66.67 liter

38. If $10.99 \times 10.99 + 10.99 \times x + 0.03 \times 0.03$ then what should be the value of x for this to be perfect square?

- A. 0.08
- B. 0.06
- C. 0.8
- D. 0.6

39. If 28016 is divided by 412 then the quotient is 68. Then what will the quotient when 28.016 is divided by 0.68?

- A. 0.412
- B. 41.2
- C. 4.12
- D. 412

40. A man's will has 35L to be given to his daughters of ages 13 and 16 at the rate of 10% when they both turn 21. They get the same amount, then what will be the amount that the elder daughter receives?

- A. 17 L
- B. 20 L
- C. 25 L
- D. 30 L

41. A man runs on a square track of 35 m in length with a speed of 9 kmph. What is the total time taken by him to complete a round of the track?

- A. 52 sec
- B. 54 sec

- C. 56 sec
- D. 58 sec

42. A man bought two T.V. sets and sold at Rs.3,75,000 for each with 20% profit and 20% loss. Then how much profit or loss gain by that man?

- A. 4% gain
- B. 4% loss
- C. 8% gain
- D. Neither profit nor loss

43. A girl goes 6 km against the stream and 10 km with the stream at the same time. If the speed of the stream is $\frac{5}{18} m/s$, then speed of girl in the still water?

- A. 2 kmph
- B. 3 kmph
- C. 4 kmph
- D. 6 kmph

44. Yakshagana is a traditional dance and theatre form of which state?

- A. Karnataka
- B. Andhra Pradesh
- C. Tamil Nadu
- D. Maharashtra

45. Where is the capital of Zimbabwe?

- A. Abuja
- B. Makati
- C. Nairobi
- D. Harare
- E. None of the above

46. Indian Independence Act was passed on which date?

- A. 16 July 1947
- B. 3 June 1946
- C. 15 August 1947

D. 14 August 1947

47.The word SHIRT written as FUVEG then PARTY will be written as:

- A. CNEGL
- B. DMFFM
- C. BOEGL
- D. DMEKM

48.Sculptor : Atelier

- A. Painter : Portrait
- B. Miner : Quarry
- C. Poet : Sonnet
- D. Man : House

49.vandalism : property

- A. Perjury : Testimony
- B. Implication : Crime
- C. Perjury : Testimony
- D. Testify : Reputation

50.Hockey : Game :: Latin : ?

- A. Country
- B. Currency
- C. Language
- D. Capital

51.Newton : force :: Pascal :

- A. Work
- B. Energy
- C. Pressure
- D. Weight

52.Engine : Car

- A. Lense : Microscope
- B. Day : Night

- C. Picture : Frame
- D. Club : Member

53.India: Lotus :: Iris: ?

- A. Australia
- B. Germany
- C. Japan
- D. France

54.Cell : Cytology :: Insect : ?

- A. Cymology
- B. Entomology
- C. Phycology
- D. Physiognomy

55.Bihu : Assam :: Kathakali : ?

- A. Kerala
- B. Tamilnadu
- C. Andhra Pradesh
- D. Karnataka

56.Anthropology : Human Body :: Histology : ?

- A. tissues of the body
- B. Fungus
- C. Algae
- D. History

57.Water : Oxygen :: Salt : ?

- A. Hydrogen
- B. Hydrochloric Acid
- C. Sodium
- D. Chlorine

58.Haemoglobin : red :: Chlorophyll :?

- A. Black
- B. Blue
- C. Green
- D. yellow

59.Odd one out

- A. Superior
- B. Victory
- C. Michigan
- D. Nile

60.Odd one out:

- A. Kiwi
- B. Kangaroo
- C. Giant panda
- D. Royal bengal tiger

61.Odd one out

- A. Pancreas
- B. Pituitary
- C. Thalamus
- D. Exocrine

62.Odd one out

- A. Temperature : Fahrenheit
- B. Distance : Meter
- C. Newton : Force
- D. Luminous : Candela

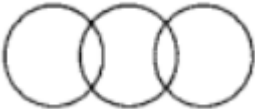
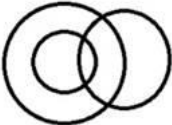

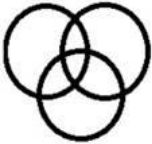
63.Odd one out

- A. nebula
- B. red giant
- C. dwarf
- D. planet



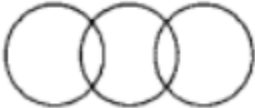
64.Odd one out

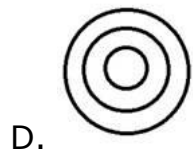
- A. Hirakud
- B. Sutlej
- C. Bhakra nangal
- D. Tehri

65. Venn diagram between girl, athlete and singer?

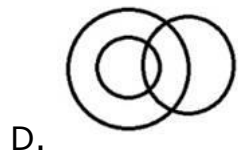
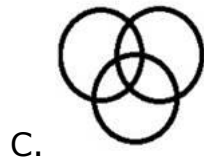
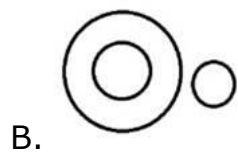
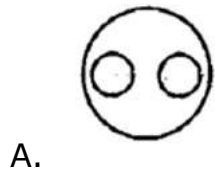
- A. 
- B. 
- C. 
- D. 

66. Venn diagram instrumentalist, vionalist and musician?

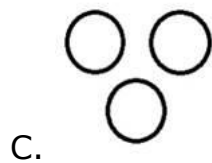
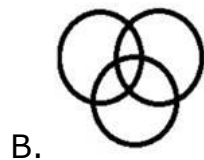
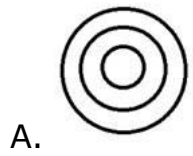
- A. 
- B. 
- C. 

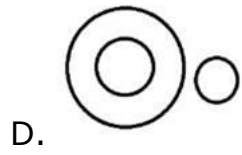


67. Venn diagram between men, rodents, living beings?

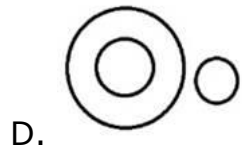
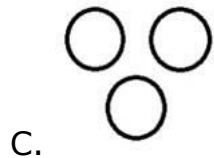
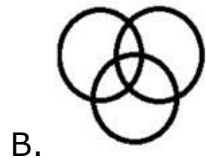
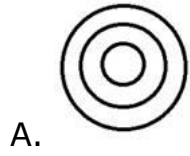


68. Venn diagram between vertebrate, non-vertebrate and turtle?

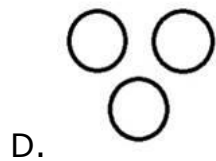
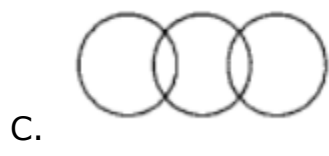
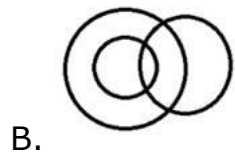
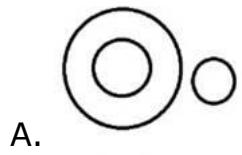




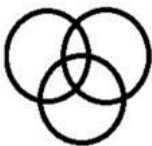
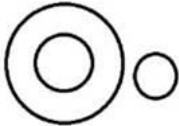
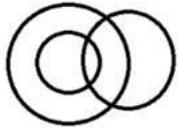
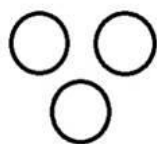
69. Venn diagram between navy, commodore and captain?




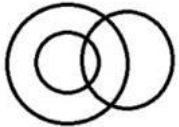
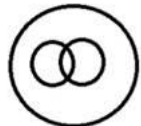
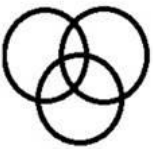
70. Venn diagram between bird, squirrel and sparrow?



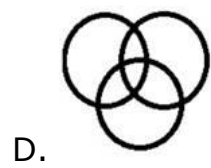
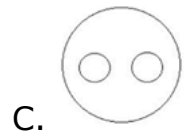
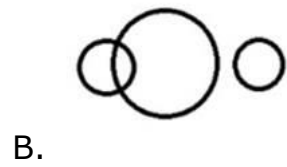
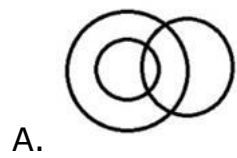
71. Venn diagram between sparrow, bird and mice?

- A. 
- B. 
- C. 
- D. 

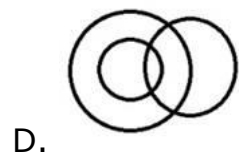
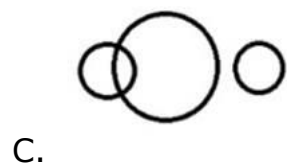
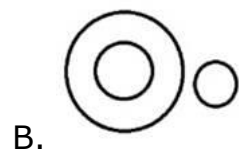
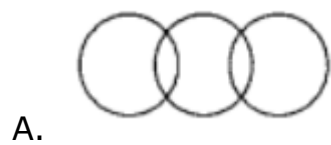
72. Venn diagram between human being, males and engineers?

- A. 
- B. 
- C. 
- D. 

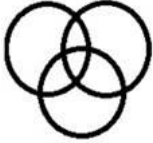
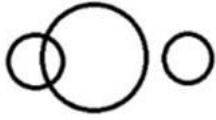

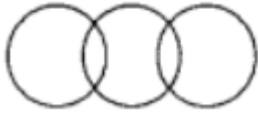
73. Venn diagram between dividend, profit and bonus?




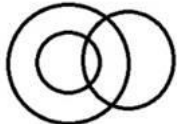
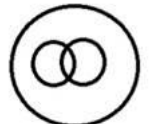
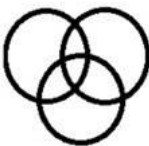
74. Venn diagram between medicine, male and surgeon?



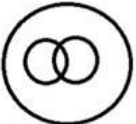
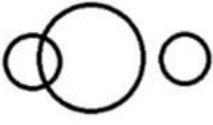
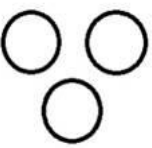
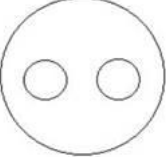
75. Venn Diagram between celestial body, moon and natural satellite?

- A. 
- B. 
- C. 
- D. 

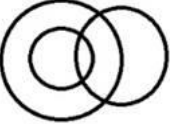
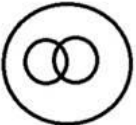
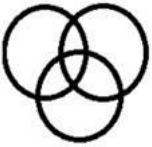
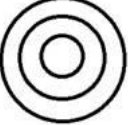
76. Venn Diagram between ostrich, bird, albatrosses?

- A. 
- B. 
- C. 
- D. 

77. Venn diagram between Acetic Acid, vitamin-C and Calcium?

- A. 
- B. 
- C. 
- D. 

78. Venn Diagram between woman, widow and mother?

- A. 
- B. 
- C. 
- D. 

79. Joust is related to which sports?

- A. Basketball
 B. Volleyball
 C. Tennis

D. Baseball

80. India participated for the first time in the Olympics in which year?

- A. 1900
- B. 1930
- C. 1920
- D. 1908

81. Vault of death was performed by which Indian athlete?

- A. Deepa Malik
- B. Hima Das
- C. Dipa Karmakar
- D. Devendra Jhajharia

82. Santosh trophy is related to which sports?

- A. Football
- B. Cricket
- C. Tennis
- D. Badminton

83. Who is the first Indian badminton player to win an Olympic medal?

- A. Prakash Padukone
- B. Saina Nehwal
- C. P V Sindhu
- D. P Kashyap

84. Which of the following is not an organ of the UN?

- A. ECOSOC
- B. UNSC
- C. General Assembly
- D. Permanent Court of Justice

85. Which of the following is an Advance heavy attack Helicopter bought from USA?

- A. Cheetah
- B. Kamov
- C. Chinook
- D. Guardian

86. Who is the author of the book *What if?*

- A. Randall Munroe
- B. Kate Beaton
- C. Zach Weinersmith
- D. Douglas Adams

87. Which of the following is the traditional cloth painting in Bihar?

- A. Nirmal Paintings
- B. Patachitra Paintings
- C. Batik art
- D. Madhubani paintings

88. Which substance is used in Pencil?

- A. Graphene
- B. Graphite
- C. Bitumen
- D. Charcoal

89. The smallest Mountain Peak in the world is located in

- A. Australia
- B. Antarctica
- C. South America
- D. Africa

90. Which metal is liquid at Room temperature?

- A. Bromine
- B. Sodium
- C. Potassium
- D. Mercury

91.The Innermost and darkest part of the shadow of an eclipse is known as

- A. Totality
- B. Penumbra
- C. Umbra
- D. None of these

92.Which gas has the highest concentration in the atmosphere?

- A. Oxygen
- B. Carbon Dioxide
- C. Hydrogen
- D. Nitrogen

93.The length of day and night is equal on which day?

- A. Summer solstice
- B. Equinox
- C. Winter Solstice
- D. All of these

94.Which Continent is also called White Continent?

- A. North America
- B. Europe
- C. Antarctica
- D. Australia

95.Where is the capital of Slovenia?

- A. Ljubljana
- B. Tbilisi
- C. Bratislava
- D. Tirana

96.Who was the Mughal Emperor when Shivaji founded the Maratha Empire?

- A. Muhammad Shah
- B. Bahadur Shah
- C. Aurangzeb

D. Farrukhsiyar

97. Jama Masjid was built by

- A. Shah Jahan
- B. Akbar
- C. Jahangir
- D. Humayun

98. Indus Valley civilization belongs to which age?

- A. Paleolithic Age
- B. Bronze age
- C. Mesolithic age
- D. None of the above

99. Who was the first woman CM of India?

- A. Sarojini Naidu
- B. Vijayalaxmi Pandit
- C. Sucheta Kriplani
- D. J Jayalalitha

100. Who was the first Viceroy of free India?

- A. Lord Mountbatten
- B. C Rajagopalachari
- C. Lord Wavell
- D. Rajendra Prasad

Solution

1. Ans. D.

Option D is the correct answer to fill in the blank.

Blown away means to be very impressed.

2. Ans. B.

Extinguish is the correct antonym.

Spark, Ignite and torch means catch fire or cause to catch fire.

3. Ans. C.

The correct antonym is - Extravagant.

Thrifty means using money and other resources carefully and not wastefully.

Frugal - sparing or economical as regards money or food.

Sparing - moderate; economical.

Economical - giving good value or return in relation to the money, time, or effort expended.

4. Ans. D.

Animosity is the correct synonym for antipathy.

Antipathy means a deep-seated feeling of aversion.

Liking, Affinity and Animosity are the antonyms for Antipathy.

5. Ans. B.

Decrease is the correct synonym for truncate.

Truncate means shortened.

Elongate - make (something) longer, especially unusually so in relation to its width.

Extend - cause to cover a wider area; make larger.

Lengthen - make or become longer.

6. Ans. D.

Option D - To end a quarrel or conflict is the correct meaning of the given idiom.

7. Ans. C.

Option C - To make a fresh start is the correct meaning of the given idiom.

8. Ans. A.

The correct meaning of the given idiom is option A - To make someone or something popular.

9. Ans. C.

Option C - **To feel to frightened** is the correct meaning of the given idiom

10. Ans. A.

Unimportance is the correct antonym for austerity.

Austerity means sternness or severity of manner or attitude.

Unimportance - the state or fact of lacking in importance or significance.

Exactness - the quality of being accurate or correct; precision.

Formalness - a manner that strictly observes all forms and ceremonies.

Rigidity - inability to be bent or be forced out of shape.

11. Ans. B.

Vague is the correct antonym for vividly.

Vividly means in a way that produces powerful feelings or strong, clear images in the mind.

Vague means of uncertain, indefinite, or unclear character or meaning.

Sharply, Distinctly and Clearly mean Vividly.

12. Ans. D.

Pretence is the most appropriate synonym for facade.

Facade means a deceptive outward appearance.

Pretence means a false display of feelings, attitudes, or intentions.

Truth, Actuality and Reality are antonyms for Facade.

13. Ans. D.

Option D - To fail to take advantage of an opportunity.

14. Ans. B.

Option B- **Lack of confidence or courage** is the correct meaning of the given idiom.

15. Ans. D.

Option D - Expressive is the correct synonym for eloquent.

Inarticulate - unable to express one's ideas or feelings clearly or easily.

Apathetic - showing or feeling no interest, enthusiasm, or concern.

Introvert - a shy, reticent person.

16. Ans. B.

Option B - Calm is the correct synonym for Pacify.

Inflame - make (someone) very angry.

Enrage - stimulate or give rise to (a reaction or emotion, typically a strong or unwelcome one) in someone.

Provoke - provoke or intensify (strong feelings, especially anger) in someone.

17. Ans. A.

Avoidable is the correct antonym for Inevitable.

Inevitable means certain to happen; unavoidable.

Inescapable - unable to be avoided or denied.

Assured - confident.

Fated - be destined to happen, turn out, or act in a particular way.

18. Ans. C.

Avoid is the correct synonym for elude.

Meet, Confront and Encounter all are antonyms.

19. Ans. A.

The correct meaning of the given idiom is - To reveal secret information.

20. Ans. C.

To stay out of trouble is the correct meaning of the given idiom.

21. Ans. B.

Friendly - is the correct antonym.

Belligerent -hostile and aggressive.

Hostile - showing or feeling opposition or dislike; unfriendly.

Aggressive - ready or likely to attack or confront; characterized by or resulting from aggression.

Threatening- having a hostile or deliberately frightening quality or manner.

22. Ans. A.

Inattention is the correct antonym for vigilance.

Vigilance is the state of being watchful or alert for danger or some other kind of trouble.

Inattention means lack of attention; distraction.

Watchful - watching someone or something closely; alert and vigilant.

Alert- the state of being watchful for possible danger.

Aware - having knowledge or perception of a situation or fact.

23. Ans. B.

The correct antonym for blissful is - Miserable.

Euphoric- characterized by or feeling intense excitement and happiness.

Joyful - feeling, expressing, or causing great pleasure and happiness.

Elated - ecstatically happy.

24. Ans. C.

The correct synonym for Industrious is Diligent

Diligent means having or showing care and conscientiousness in one's work or duties.

Careless, lethargic and Indolent are opposite for industrious.

25. Ans. A.

Option A - Diminish is the correct synonym for mitigate.

Intensify - become or make more intense.

Aggravate - make (a problem, injury, or offence) worse or more serious.

Incite - encourage or stir up (violent or unlawful behaviour).

26. Ans. B.

he got 35% and other candidate got 65% vote. Then

$$65\% - 35\% \equiv 450$$

$$1\% \equiv 15$$

$$100\% \equiv 1500$$

27. Ans. B.

let the cost price = x

Then, marked price = $1.4x$

And selling price = $0.8 \times 1.4x = 1.12x$

Hence, profit = $0.12x$ and profit percentage = 12%

28. Ans. A.

$$\Rightarrow \sqrt{29^2 - 2 \times 200 \times 24}$$

$$\Rightarrow \sqrt{841 - 400 \times 24}$$

$$\Rightarrow \sqrt{441 \times 24}$$

$$\Rightarrow 21 \times 24$$

$$\Rightarrow 504$$

29. Ans. B.

$$\Rightarrow 23 \div 46 \times 7.5 + 512 - 251$$

$$\Rightarrow \frac{23}{46} \times 7.5 + 261$$

$$\Rightarrow 3.75 + 261$$

$$\Rightarrow 264.75$$

30. Ans. B.

let he deposits at $r\%$ of interest rate, then

$$\text{Interest} = \frac{8000 \times r \times 1}{100} = 80r$$

He pays 10% as fee and 90% remains as Rs.900.

$$0.9 \times 80r = 900 \Rightarrow r = 12.5\%$$

31. Ans. C.

let after t hr policeman catches the thief. They both must have run an equal distance. So,

$$(t + 2) \times 4.5 = t \times 6 \Rightarrow t = 6 \text{ hr}$$

32. Ans. B.

let he deposits Rs. x and Rs. y in two schemes at 4% rate for 7 years and 9 years.

$$\text{Then } x + y = 3903 \dots(i)$$

And

$$x\left(1+\frac{4}{100}\right)^7 = y\left(1+\frac{4}{100}\right)^9$$

$$\frac{x}{y} = \frac{676}{625} \quad \dots(ii)$$

After solving the above equations, we get $y = 1875$ and $x = 2028$.

33. Ans. B.

let the speed of the man is x kmph and the speed of the stream is y kmph. Then

$$\text{time, } 5 = \frac{12}{x-y} = \frac{28}{x+y}$$

$$\text{Or } x-y = 2.4 \quad \text{and} \quad x+y = 5.6$$

After solving the above equations, we get the speed of the stream is 1.6 kmph.

34. Ans. A.

let the speed of the man is x kmph and the speed of the stream is y kmph. Then

$$10 = \frac{32}{x-y} + \frac{40}{x+y} \Rightarrow 16X + 20Y = 5 \quad \dots(i) \quad \left[\frac{1}{x-y} = X, \frac{1}{x+y} = Y \right]$$

$$\text{And } 12 = \frac{38}{x-y} + \frac{50}{x+y} \Rightarrow 19X + 25Y = 6 \quad \dots(ii)$$

$$\text{By both equations, we get } X = \frac{1}{x-y} = \frac{1}{4} \Rightarrow x-y = 4$$

$$\text{And } Y = \frac{1}{x+y} = \frac{1}{20} \Rightarrow x+y = 20$$

After solving, we get the speed of the stream is 8 kmph.

35. Ans. B.

Let the average weight of 22 toys are x , then the average weight of 20 toys will be $x+2$ and the average weight of 2 toys will be $\frac{x}{3}$. So,

$$22 \times x = 20 \times (x+2) + 2 \times \frac{x}{3}$$

$$\frac{4x}{3} = 40$$

$$x = 30$$

Hence, the average weight of 20 toys will be 32.

36. Ans. C.

let the cost price = x

Then, the selling price = $1.4x$

New cost price = $x+50$

New selling price = $1.4x+20$

Now profit,

$$\frac{(1.4x+20)-(x+50)}{x+50} = 20\%$$

$$\frac{0.4x-30}{x+50} = \frac{1}{5}$$

$$2x-150 = x+50$$

$$x = 200$$

37. Ans. C.

quantity of petrol he bought in first year = $\frac{6000}{45} \text{ l} = 133.33 \text{ l}$

quantity of petrol he bought in second year = $\frac{6000}{60} \text{ l} = 100 \text{ l}$

quantity of petrol he bought in third year = $\frac{6000}{90} \text{ l} = 66.67 \text{ l}$

so average = $\frac{133.33+100+66.67}{3} = 100 \text{ l}$

38. Ans. B.

$$\Rightarrow 10.99 \times 10.99 + 10.99 \times x + 0.03 \times 0.03$$

$$\Rightarrow (10.99)^2 + (0.03)^2 + 2(10.99)\left(\frac{x}{2}\right)$$

For this to be a perfect square $\frac{x}{2} = 0.03 \Rightarrow x = 0.06$

39. Ans. B.

given that $\frac{28016}{412} = 68$

Dividing both side by 1000,

$$\frac{28016}{412 \times 1000} = \frac{68}{1000}$$

$$\frac{28.016}{412} = \frac{0.68}{10}$$

$$\frac{28.016}{0.68} = \frac{412}{10} = 41.2$$

40. Ans. B.

total amount = 35 L

Let he give to younger and elder daughter a amount of x and y . They take 12.5 years and 5 years to be 21. The rate of interest is 10%, then

$$x\left(1 + \frac{10}{100}\right)^8 = y\left(1 + \frac{10}{100}\right)^5$$

$$\frac{x}{y} = \left(\frac{10}{11}\right)^3$$

$$\frac{y}{x} = \frac{1331}{1000}$$

As $x + y = 35L$ then $x = 15L$ and $20L$

41. Ans. C.

The perimeter of the track = $4 \times 35 = 140m$

Speed of the man = $9 \text{ kmph} = 2.5 \text{ mps}$

Total time is taken by him to complete around $= \frac{140}{2.5} = 56 \text{ sec}$

42. Ans. B.

Let the cost prices of T.V. sets are Rs. x and Rs. y . and selling prices are Rs. 3,75,000 for each with 20% profit and 20% loss. Then cost prices are

$$x = \frac{375000}{1.2} = 312500 \quad \text{and} \quad y = \frac{375000}{0.8} = 468750$$

Now, the total cost price of two T.V. sets $= x + y = 781250$

And the total selling price of the two T.V. sets $= 2 \times 375000 = 750000$

So, he gets the loss, loss percentage $= \frac{781250 - 750000}{781250} \times 100\% = 4\%$

Or

$$\text{Loss percentage} = \left[(20) + (-20) - \frac{(20) \cdot (-20)}{100} \right] \% = 4\%$$

43. Ans. C.

let the speed of the girl is x kmph. And speed of stream $= \frac{5}{18} \text{ m/s} = 1$ kmph

$$\text{Then time, } t = \frac{6}{x-1} = \frac{10}{x+1} \Rightarrow x = 4 \text{ kmph}$$

44. Ans. A.

* Yakshagana is a musical dance drama of Karnataka. Singing and drumming merge with dancing, and words with gestural interpretation, and players clad in costumes of striking colour and contours are parts of the dance form.

* In Yakshagana music and speech go hand in hand and both could reach a good distance without our modern sound system.

* It is believed that the art form of Yakshagana was originated in South Canara District of Karnataka and Kasaragod District of Kerala.

45. Ans. D.

* Harare, formerly Salisbury, capital of Zimbabwe, lying in the northeastern part of the country.

* The city was founded in 1890 at the spot where the British South Africa Company's Pioneer Column halted its march into Mashonaland; it was named for Lord Salisbury, then British prime minister.

46. Ans. A.

* Indian Independence Bill was introduced in the British Parliament on July 3, 1947, and the Bill was passed on July 16, 1947. The Royal assent was granted on July 17, 1947, enforcing the Indian Independence Act, 1947.

* This Act became the legal basis for independence and partition of India.

47. Ans. A.

SHIRT ----- FUVEG

A B C D E F G H I J K L M

↑ ↑ ↑ ↓ ↓

N O P Q R S T U V W X Y Z

PARTY ----- CNEGL

A B C D E F G H I J K L M

↓ ↑ ↑ ↑ ↑

N O P Q R S T U V W X Y Z

48. Ans. B.

The sculptor works at atelier. Similarly, a miner works at quarry.

49. Ans. C.

Vandalism is the name given to fraud in matters relating to the property. Similarly, perjury is the name given to fraud in matters relating to the testimony.

50. Ans. C.

Hockey is a game; likewise, Latin is a language.

51. Ans. C.

Newton is unit of force similarly, Pascal is unit of Pressure.

52. Ans. A.

Engine is a part of Car. Similarly lense is a part of microscope.

53. Ans. D.

Iris is the national flower of France.

54. Ans. B.

Study of cell know as cytology similarly study of insect know as entomology.

55. Ans. A.

Bihu is the classical dance of Assam and kathakali is the dance of Kerala.

56. Ans. A.

As anthropology is a study of the human body. And Histology is the study of tissues of the body.

57. Ans. C.

when water compound gets ionized, then oxygen gets negative ion. Just like this, when salt gets ionized, the chlorine gets ionized.

58. Ans. C.

Hemoglobin forms an unstable, reversible bond with oxygen. In its oxygenated state it is called oxyhemoglobin and is bright red.

Chlorophyll gives plants their green color.

59. Ans. D.

nile is the river and the other is the lake.

60. Ans. C.

All except giant panda, are national animal.

61. Ans. C.

All except Thalamus, are secreting glands.

62. Ans. C.

Newton : Force pair is different.

As in each pair first is the quantity and the second is unit.

63. Ans. A.

Nebula are different other two are the celestial body.

i) A nebula is an interstellar cloud of dust, hydrogen, helium and other ionized gases.

ii) A red giant is a luminous giant star of low or intermediate mass.

iii) dwarf planet is "a celestial body orbiting a star that is massive enough to be rounded by its own gravity but has not cleared its neighbouring region of planetesimals and is not a satellite.

64. Ans. B.

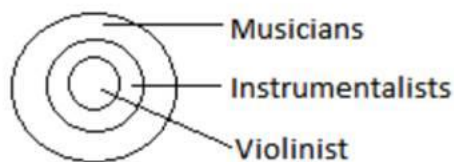
Sutlej is a river and the other three are dam name.

65. Ans. D.

Some girls may be singer while some are not and some singer may be athletes while some are not.

66. Ans. D.

All Violinist are instrumentalists. All instrumentalists are musicians.



67. Ans. A.

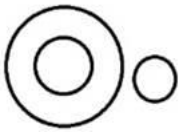
Men and rodents are living beings but are separate entities. Thus living beings will be denoted by a bigger circle with men and rodents represented by separate smaller inside the bigger circle.



68. Ans. D.

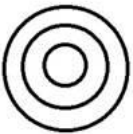
Vertebrate have a backbone and non-vertebrate don't have a backbone.

And turtle have a backbone.



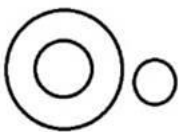
69. Ans. A.

Commodore command more than one ship and captain can only command one ship at a time and both comes under navy.



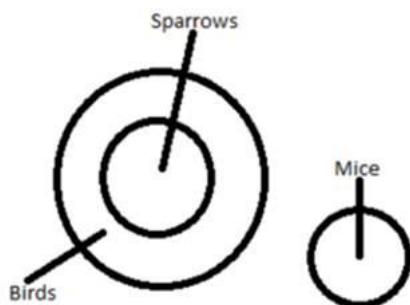
70. Ans. A.

Sparrow is a birds and squirrel is not a bird.



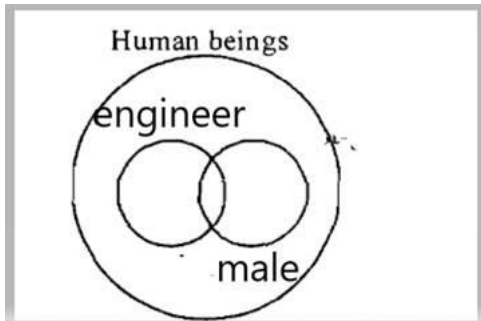
71. Ans. B.

All sparrows are birds. But, mice are entirely different.



72. Ans. C.

Every male and engineer are human beings. A male may be an engineer and vice-versa.



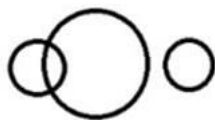
73. Ans. C.

Bonus and dividend are different from each other but both are parts of profit.



74. Ans. C.

A surgeon may be male or a male may be a surgeon but medicine is different. So,

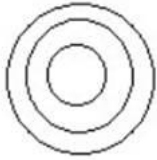


75. Ans. C.

A natural satellite is any celestial body in space that orbits around a larger body. Moons are called natural satellites because they orbit planets.

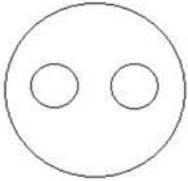
By definition, a celestial body is any natural body outside of the Earth's atmosphere. Easy examples are the Moon, Sun, and the other planets of our solar system

So,



76. Ans. A.

Both ostrich and albatrosses are birds but are different birds and found at different places. So,



77. Ans. D.

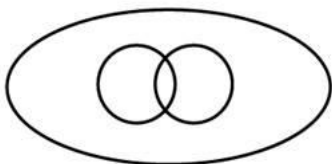
Vitamin-C contains acetic acid and Calcium but Calcium and Acetic acid are different.

So,



78. Ans. B.

As we know, mother and widow are women, but both are necessarily not related to each other. So



79. Ans. B.

* Jousting in volleyball is when the ball is falling somewhere near the centerline of the net, and both teams are able to make a play on it. It needs to be somewhere on the net.

* Often, middles are the ones who need to know how to joust, but all front row players will benefit from learning this skill.

* In a joust, players from both sides will jump up and try to make a winning play on the ball.

80. Ans. A.

India first participated at the Olympic Games in 1900, with a lone athlete (Norman Pritchard) winning two medals- both silver- in athletics. It first sent a team to the Summer Olympic Games in 1920, and has participated in every Summer Olympic Games since then.

81. Ans. C.

* At Rio 2016, Dipa Karmakar became the first woman gymnast to represent the country at an Olympic Games, and inspired many with her huge-hearted performances that left her a whisker away from stepping onto the podium.

* Also known as the 'vault of death', the Produnova is considered one of the most difficult moves to execute in gymnastics and involves a handspring followed by two and half somersaults.

* Dipa Karmakar is one of only five women ever to have executed it successfully.

82. Ans. A.

The Santosh Trophy is an association football knock-out competition contested by the regional state associations and government institutions under the All India Football Federation, the sport's governing body in India. The Services lifted the Santosh Trophy (2020) by defeating Punjab by 1-0 in the final at Ludhiana.

83. Ans. B.

The first Indian woman to win a medal in Badminton at the Olympics is Saina Nehwal. In the year of 2012 game she won the bronze medal at the London.

84. Ans. D.

The UN has six principal organs:

- the General Assembly (the main deliberative assembly);
- the Security Council (for deciding certain resolutions for peace and security);
- the Economic and Social Council (ECOSOC) (for promoting international economic and social co-operation and development);
- the Secretariat (for providing studies, information, and facilities needed

by the UN);

- the International Court of Justice (the primary judicial organ);
- the United Nations Trusteeship Council (inactive since 1994).

85. Ans. C.

The Boeing CH-47 Chinook is an American twin-engined, tandem rotor, heavy-lift helicopter developed by American rotorcraft company Vertol and manufactured by Boeing Vertol.

The CH-47 is among the heaviest lifting Western helicopters. Its name, Chinook, is from the Native American Chinook people of Washington State.

Indian Air Force inducted first batch of Chinook helicopters procured from the US in 2019.

86. Ans. A.

"*What If? Serious Scientific Answers to Absurd Hypothetical Questions*" is a non-fiction book by Randall Munroe in which the author answers hypothetical science questions sent to him by readers of his webcomic, xkcd.

The book contains a selection of questions and answers originally published on his blog What If?, along with several new ones.

87. Ans. D.

* The art of Madhubani painting is the traditional style developed in the Mithila region, in the villages around Madhubani, Bihar.

* This style of painting has been traditionally used by the women of the region, though today men are also involved to meet the demand.

* The work is done on freshly plastered mud walls.

* For commercial purposes, it is now being done on paper, cloth, etc.

* The paintings are basically of religious nature.

88. Ans. B.

* Graphite, an allotrope of Carbon is used in making the Pencils.

* Most pencil cores are made of graphite mixed with a clay binder which leaves grey or black marks that can be easily erased.

89. Ans. A.

Mount Wycheproof is the world's smallest registered mountain. Located in Australia's Terrick Terrick Range, Mount Wycheproof stands 486 ft (148 meters to the rest of the world) above sea level, which is not bad as far as small mountains go. The catch is that it only rises 141ft (43 meters, I suppose) above its surroundings.

90. Ans. D.

* Mercury is liquid at room temperature.

* Mercury is the only metal that remains liquid at room temperature. And are found in deposits throughout the world mostly in cinnabar.

* Mercury is used in various instruments like thermometer, barometer, manometer etc.

91. Ans. C.

During an eclipse, two shadows are cast. The first is called the umbra. This shadow gets smaller as it goes away from the sun. It is the dark center of the eclipse shadow. The second shadow is called the penumbra. The penumbra gets larger as it goes away from the sun.

92. Ans. D.

Composition of air in the atmosphere:

According to NASA, the gases in Earth's atmosphere include:

- Nitrogen — 78 percent
- Oxygen — 21 percent
- Argon — 0.93 percent
- Carbon dioxide — 0.0325 percent
- Trace amounts of neon, helium, methane, krypton and hydrogen, as well as water vapour.

93. Ans. B.

An equinox is commonly regarded as the instant of time when the plane of Earth's equator passes through the geometric center of the Sun's disk.

This occurs twice each year, around 20 March and 23 September. The day and night are of equal length on this day, all around the world.

94. Ans. C.

Antarctica is known as white continent because it remains covered with snow and thick ice sheets all year round.

95. Ans. A.

Balkan countries and their capital

* Slovenia. Ljubljana.

* Croatia. Zagreb.

* Bosnia. Sarajevo.

* Romania. Bucharest.

* Bulgaria. Sofia.

* Macedonia. Skopje.

* Albania. Tirana.

* Kosovo. Pristina.

96. Ans. C.

Maratha Empire was founded in the year 1674 by Chhatrapati Shivaji Maharaj. At that time, Aurangzeb was the Mughal Emperor. The active hostility between the two ultimately became a cause for the collapse of the Mughal empire.

97. Ans. A.

Jama Masjid was built by Shah Jahan in Delhi between the time period of 1644-1656. The main architect of this masjid is Ustad Kahlil. This is the largest mosque in India. It was originally called Masjid-i-Jahan-Numa, meaning 'mosque commanding view of the world'.

98. Ans. B.

Civilization is belongs to Bronze Age (Chalcolithic Age). The known extent of this civilization in the west is up to Sutkagendor in Baluchistan; Alamgirpur (Uttar Pradesh) in the east; Daimabad (Maharashtra) in South; and Manda (Jammu & Kashmir) in

the north. It is also called as Harappan Civilization because site was first discovered through excavation in 1921 under the supervision of Daya Ram Sahni.

99. Ans. C.

- Sucheta Kriplani was India's first woman Chief Minister.
- She served as the head of the Uttar Pradesh government from 1963 to 1967.
- She was the fourth chief minister of Uttar Pradesh.

100. Ans. A.

Lord Mountbatten was the first Viceroy and Governor General of free India. In this role, he was the chosen representative of King George VI, empowered to govern on his behalf in the then British colony. He was succeeded by C Rajagopalachari in 1948.