

AFCAT-I

Air Force Common Admission Test

Solved Paper 22-02-2015

Directions (Q.Nos.1-4) Which word or words explains the meaning of the following Idioms.

1. In a jiffy
(a) Outstanding (b) Suddenly
(c) In a fix (d) Appropriate
2. Upto the hilt
(a) Completely (b) Upto the mark
(c) Upto the final decision (d) None of these
3. Man of letters
(a) Who writes too many letters (b) An important person
(c) A politician (d) A literary person
4. Sangfroid
(a) Composure (b) Go on leave
(c) Changed suddenly (d) Make an attempt

Directions (Q. Nos. 5-10) Select the most appropriate word from the options against each number.

As home entertainment, television is rapidly becoming more (5) than any other form. A news broadcast becomes more immediate when people (6) actually see the scene (7) question and the movement of the figures. Films could be viewed in the (8) of the home and a variety of shows are also available. One of the advantages of travel programmes is the (9) of faraway places which many viewers would not (10) see.

5. (a) interesting (b) popular (c) powerful (d) purposeful
6. (a) could (b) would (c) might (d) shall
7. (a) of (b) with (c) as (d) in
8. (a) surroundings (b) assistance
(c) comfort (d) privilege
9. (a) glimpses (b) image (c) portrait (d) picture
10. (a) possible (b) rather (c) else (d) otherwise

Directions (Q.Nos. 11-14) Choose the word which is nearest in meaning to the given word.

11. Sporadic
(a) Epidemic (b) Whirling (c) Occasional (d) Stagnant
12. Genesis
(a) Style (b) Beginning (c) Movement (d) Relevant
13. Intransigent
(a) Authoritative (b) Impersonal
(c) Strenuous (d) Unbending
14. Intimidate
(a) Mislead (b) Misplace
(c) Frighten (d) Demoralize

Directions (Q. Nos. 15-18) Choose the word which is nearly opposite in meaning to the given word.

15. Clemency
(a) Corporal (b) Intolerance (c) Compromise (d) Sensibility
16. Cajole
(a) Nestle (b) Secede (c) Bully (d) Moisten
17. Malevolent
(a) Kindly (b) Vacuous (c) Ambivalent (d) Primitive
18. Purgatory
(a) Reward (b) Celestial (c) Flawless (d) Proximity

Directions (Q.Nos. 19-21) Read the following passage carefully and answer the questions given below it.

Passage

In spring, polar bear mothers emerge from dens with three month old cubs. The mother bear has fasted for as long as eight months but that does not stop the young from demanding full access to her remaining reserves. If there are triplets, the most persistent stands to gain an extra meal at the expense of others. The smallest of the cubs forfeits many meals to stronger siblings. Females are protective of their cubs but tend to ignore family rivalry over food. In 21 years of photographing polar bear, I have only once seen the smallest of triplets survive till autumn.

19. With reference to the passage, the following assumptions have been made.

I. Polar bears fast as long as eight months due to non availability of prey.

II. Polar bears always give birth to triplets.

Which of the assumptions given above is/are true?

- (a) Only I (b) Only II
(c) Both I and II (d) Neither I nor II

20. Female polar bears give birth during

- (a) Spring (b) Summer (c) Autumn (d) Winter

21. Mother bear

- (a) takes sides over cubs
(b) lets the cubs fend for themselves
(c) feeds only their favourites
(d) sees that all cubs get an equal share

Directions (Q.Nos. 22-25) Choose the word that best defines the given phrases.

22. A curtain lecture

- (a) To speak plainly
(b) Vulgar ideas
(c) Private scolding of a husband by his wife
(d) Hate others

- 23. Square pegs in round holes**
 (a) A genuinely helpful person (b) A clever person
 (c) People in the wrong jobs (d) To be perplexed
- 24. In weal and woe**
 (a) By hook or crook (b) During illness
 (c) In prosperity and adversity (d) During the operation
- 25. Globetrotters**
 (a) People against global philosophy
 (b) People indulging in treachery
 (c) Intelligent minds
 (d) Travellers around the world

Directions (Q.Nos. 26-29) Choose the correctly spelt word.

- 26.** (a) Konnoisseur (b) Connoisseur
 (c) Connoisseur (d) Konoisseur
- 27.** (a) Munifisent (b) Munificent
 (c) Munificent (d) Munificient
- 28.** (a) Equanimity (b) Equannimity
 (c) Equanimmisty (d) Equinimity
- 29.** (a) Vetarinary (b) Veteninary
 (c) Veterinary (d) Vetniary

Directions (Q.Nos. 30-65) Choose the most appropriate answer.

- 30.** A, B and C can do a piece of work in 20 days, 30 days and 60 days, respectively. In how many days can A do work, if he is assisted by B and C on every third day?
 (a) 12 (b) 15 (c) 16 (d) 18
- 31.** A man can row $9\frac{1}{3}$ km/h in still water and finds that it takes him thrice as much time to row up than as to row down the same distance in the river. The speed of the current is
 (a) $3\frac{1}{3}$ km/h (b) $3\frac{1}{9}$ km/h (c) $4\frac{2}{3}$ km/h (d) $4\frac{1}{3}$ km/h
- 32.** The speed of a boat in still water is 10 km/h. If it can travel 26 km downstream and 14 km upstream in the same time, the speed of the stream is
 (a) 2 km/h (b) 2.5 km/h (c) 3 km/h (d) 4 km/h
- 33.** If a sum become double in 16 yr, how many times will it be in 8 yr?
 (a) $1\frac{1}{2}$ times (b) $1\frac{1}{3}$ times (c) $1\frac{3}{4}$ times (d) $1\frac{1}{4}$ times
- 34.** In how many years will a sum of ₹ 800 at 10% per annum compounded semi-annually become ₹ 926.10?
 (a) $1\frac{1}{3}$ (b) $1\frac{1}{2}$ (c) $2\frac{1}{3}$ (d) $2\frac{1}{2}$
- 35.** A sells 2 TV sets, one at a loss of 15% and another at a profit of 15%. Find the loss/gain percentage in the overall transaction.
 (a) 2.25 (b) 3
 (c) 4 (d) No profit, no loss
- 36.** A man travelled from a point A to B at the rate of 25 km/h and walked back at the rate of 4 km/h. If the whole journey took 5 h 48 min, the distance between A and B is
 (a) 30 km (b) 24 km (c) 20 km (d) 51.6 km
- 37.** A train travelling at a uniform speed clears a platform 200 m long in 10 s and passes a telegraph post in 5 s. The speed of the train is
 (a) 36 km/h (b) 39 km/h
 (c) 72 km/h (d) 78 km/h
- 38.** The price of sugar increases by 20% due to the festive season. By what percentage should a family reduce the consumption of sugar so that there is no change in the expenditure?
 (a) 20 (b) $18\frac{1}{3}$ (c) $16\frac{2}{3}$ (d) $16\frac{1}{3}$
- 39.** A's salary is 20% lower than B's salary, which is 15% lower than C's salary. By how much per cent is C's salary more than A's salary?
 (a) 44.05 (b) 45.05 (c) 46.05 (d) 47.05
- 40.** The average weight of 5 men is increased by 2 kg when one of the men whose weight is 60 kg is replaced by a new man. The weight of the new man is
 (a) 50 kg (b) 65 kg (c) 68 kg (d) 70 kg
- 41.** A and B can do a piece of work in 18 days, B and C can do it in 24 days, A and C can do it in 36 days. In how many days B alone can finish the work?
 (a) 48 (b) 45 (c) $28\frac{4}{5}$ (d) 144
- 42.** The opposition party status is accorded to a political party in the Lok Sabha only if it captures atleast
 (a) 5% seats (b) 10% seats (c) 15% seats (d) 20% seats
- 43.** Who amongst the following is the author of the book 'A Bend in the River'?
 (a) Chetan Bhagat (b) VS Naipaul
 (c) Kiran Desai (d) Anita Desai
- 44.** 'Long Walk to Freedom' is a book written by
 (a) Sonia Gandhi (b) LK Advani
 (c) Nelson Mandela (d) Benazir Bhutto
- 45.** Which sports personality has been awarded the honorary rank of Group Captain by the IAF?
 (a) Kapil Dev (b) Sania Mirza
 (c) Saina Nehwal (d) Sachin Tendulkar
- 46.** Which country among the following has been declared Ebola-free by WHO?
 (a) Sierra Leone (b) Liberia
 (c) Nigeria (d) Guinea
- 47.** How many Gold medals did India win in the Incheon Asian Games held in Oct 2014?
 (a) 10 (b) 11 (c) 12 (d) 8
- 48.** Who has been appointed as the new Finance Secretary of India?
 (a) Arvind Mayaram (b) Rajiv Mehrishi
 (c) Kaushik Basu (d) Dinesh Gupta
- 49.** Which among the following is India's first long range subsonic cruise missile?
 (a) Agni II (b) Prithvi
 (c) Dhanush (d) Nirbhay
- 50.** The branch of Science that studies cells is called
 (a) Cytology (b) Entomology
 (c) Homoplasic (d) Hormonology

51. How many Vice Presidents are elected at the start of its each regular session of UN General Assembly?
(a) Nine (b) Fifteen (c) Two (d) Twenty one
52. The highest civilian award of India 'Bharat Ratna' has been awarded to only two foreigners so far. One of them is Nelson Mandela. The other is
(a) Marshal Tito (b) Mikhail Gorbachev
(c) Khan Abdul Ghaffar Khan (d) Abdul Wali Khan
53. Sir CV Raman was awarded Nobel Prize for his work connected with which of the following phenomenon of radiation?
(a) Scattering (b) Diffraction (c) Interference (d) Polarization
54. In which city is headquarters of Asian Development Bank located?
(a) Manila (b) Singapore (c) Bangkok (d) Jakarta
55. K-15 missile is
(a) Sub-marine Launched Ballistic Missile (SLBM)
(b) Inter Continental Ballistic Missile (ICBM)
(c) Medium Range Ballistic Missile (MRBM)
(d) Short Range Ballistic Missile (SRBM)
56. India agreed to UN Chief Ban Ki-Moon's offer to remain as a member of the advisory board of one of the following recently
(a) UNCCT (b) UNICEF (c) UNEP (d) UNCTAD
57. Kaziranga National Park is famous for
(a) One-horned Rhinos (b) Tigers
(c) Swamp Deers (Barasingha) (d) Elephants
58. Who was the first Indian to win an individual medal in Olympics?
(a) Milkha Singh (b) PT Usha
(c) Karnam Malleshwari (d) KD Jadhav
59. Who among the following was the Congress President at Madras Session of 1927 when it boycotted the Simon Commission?
(a) Maulana Abul Kalam Azad (b) MA Ansari
(c) Lala Lajpat Rai (d) Subhash Chandra Bose
60. Why did Kalinga prove to be a turning point in the life of Ashoka?
(a) Ashoka annexed Kalinga
(b) It was the starting point of the expansion of his empire
(c) Ashoka became a zealous Buddhist
(d) It enabled Mauryan Empire to reach its climax
61. Which of the following wings was not part of the espionage system described by Kautilya?
(a) Crime Branch (b) Special Branch
(c) Political Branch (d) None of these
62. Alauddin Khalji did not build
(a) Siri Fort (b) Tomb of Jalaluddin
(c) Hauz-i Alai (d) Jamaat Khana Masjid
63. Which of the following dynasties was ruling over North India at the time of Alexander's invasion?
(a) Nanda (b) Maurya
(c) Sunga (d) Kanva
64. Which of the following Inter Continental Ballistic Missiles (ICBMs) is under development in India?
(a) Agni-I (b) Agni-II (c) Agni-IV (d) Agni-VI

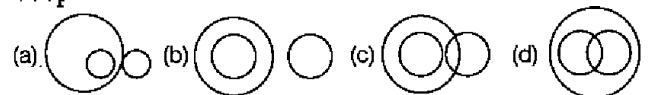
65. Who among the following was adjudged as the Most Valuable Player of the 17th Asian Games held at Incheon, South Korea?
(a) Mary Kom of India (b) Kosuke Hagino of Japan
(c) Ning Zetao of China (d) None of these

Directions (Q.Nos. 66-70) In each of the following questions find out the alternative which will replace the question mark(?).

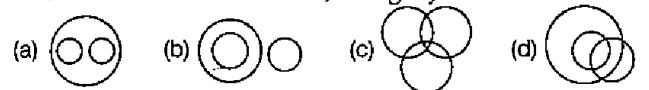
66. East : Orient :: ? : ?
(a) North : Polar (b) North : Tropic
(c) South : Capricorn (d) West : Occident
67. Ignominy : Disloyalty :: ? : ?
(a) Death : Victory (b) Martyr : Man
(c) Fame : Heroism (d) Destruction : Victory
68. Loath : Coercion :: ? : ?
(a) Detest : Caressing (b) Irritate : Caressing
(c) Hate : Antagonism (d) Reluctant : Persuasion
69. Trilogy : Novel :: ? : ?
(a) Rice : Husk (b) Milk : Cream
(c) Serial : Episode (d) Geen : Cartridge
70. Wife : Marriage :: ? : ?
(a) Bank : Money (b) Nationality : Citizenship
(c) Service : Qualification (d) Attendance : Register

Directions (Q.Nos. 71-75) Each of these questions given below contains three elements. These elements may or may not have some interlinkage. Each group of elements may fit into one of these diagrams at (a), (b), (c) or (d). You have to indicate the group of elements which correctly fits into the diagrams

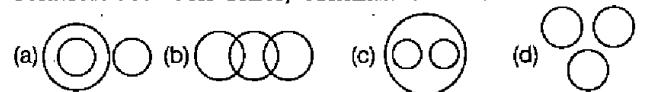
71. Which of the following diagrams indicates the best relation between Doctors, Human Beings and Married People?



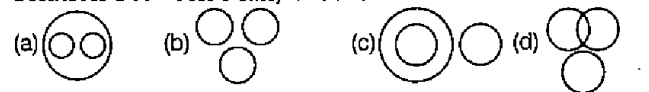
72. Which of the following diagrams indicates the best relation between Children, Naughty and Studious?



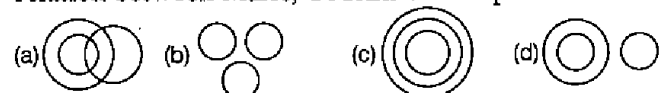
73. Which of the following diagrams indicates the best relation between Thief, Criminal and Police?



74. Which of the following diagrams indicates the best relation between Man, Worker and Garden?

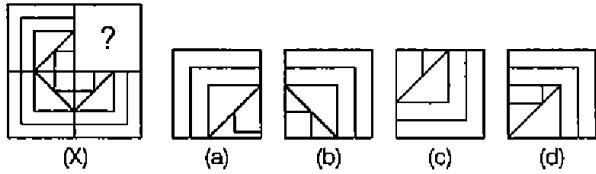


75. Which of the following diagrams indicates the best relation between Males, Cousins and Nephews?

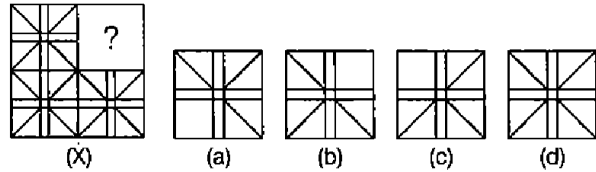


Directions (Q.Nos. 76-80) In each of the following questions, select a figure from amongst the four alternatives, which when placed in the blank space of figure (X) would complete the pattern.

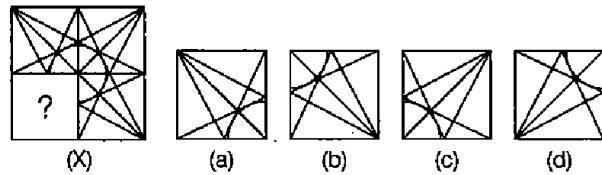
76. Problem Figure Answer Figures



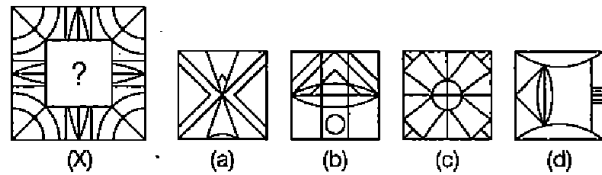
77. Problem Figure Answer Figures



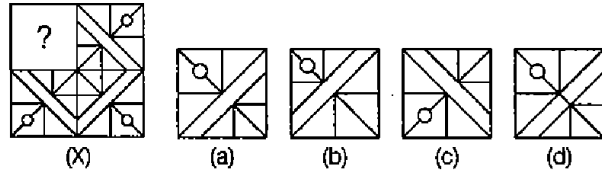
78. Problem Figure Answer Figures



79. Problem Figure Answer Figures

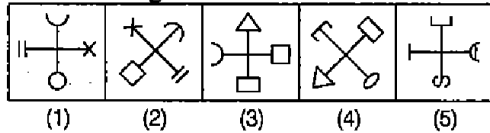


80. Problem Figure Answer Figures

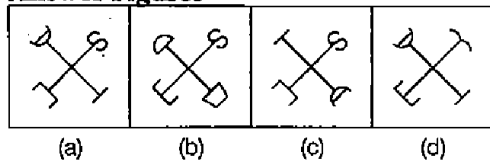


Directions (Q.Nos. 81-85) Each of the following questions consists of five figures marked (1), (2), (3), (4) and (5) called the Problem figures followed by four other figures mark (a), (b), (c) and (d) called the Answer figures. Select a figure from amongst the Answer figures which will continue the same series as established by the five Problems figures.

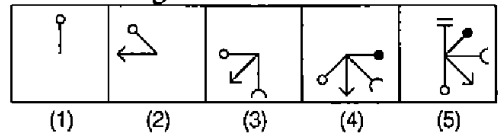
81. Problem Figures



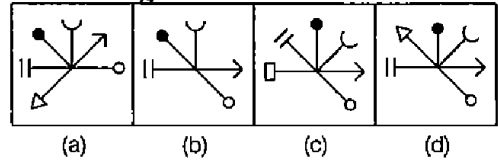
Answer Figures



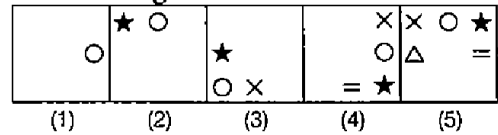
82. Problem Figures



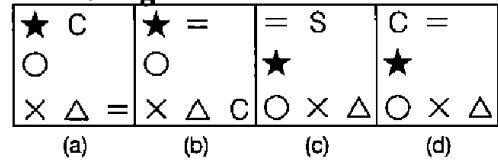
Answer Figures



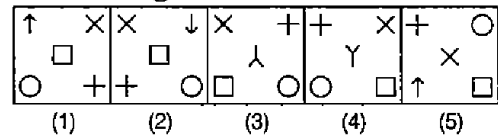
83. Problem Figures



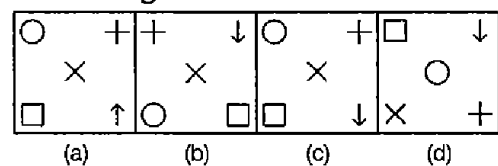
Answer Figures



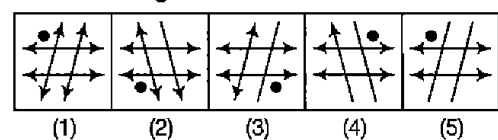
84. Problem Figures



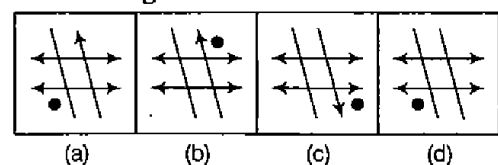
Answer Figures



85. Problem Figures



Answer Figures



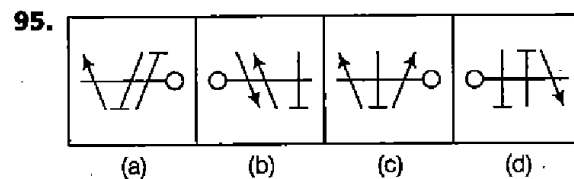
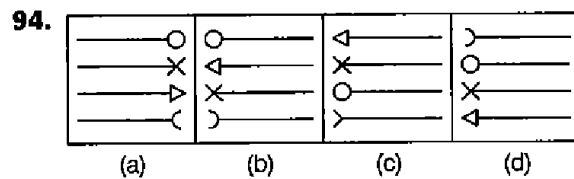
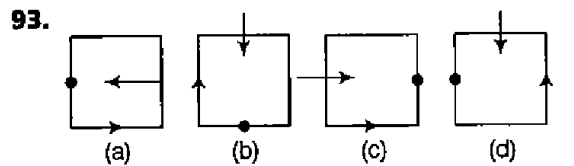
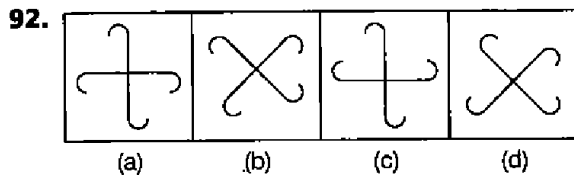
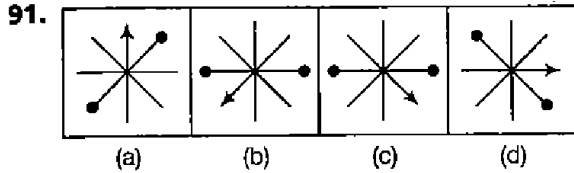
Directions (Q.Nos. 86-90) In each of the following questions, four words have been given out of which three are alike in some manner, while the fourth one is different. Choose the word which is different from the rest.

86. (a) Othello (b) King Lear (c) Oliver Twist (d) Macbeth

87. (a) Nimitz (b) Yamamoto (c) Nelson (d) Montgomery

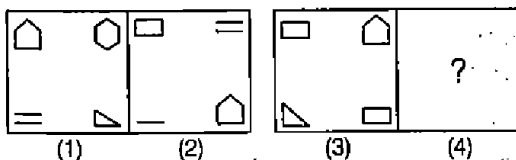
88. (a) Blaze (b) Glint
(c) Simmer (d) Shimmer
89. (a) Aravalli hills (b) Shivalik hill
(c) Mole hills (d) Satpura hills
90. (a) Beaver (b) Alpaca (c) Walrus (d) Koala

Directions (Q.Nos. 91-95) In each problem, out of the four figures marked (a), (b), (c) and (d) three are similar in a certain manner. However, one figure is not like the other three. Choose the figure which is different from the rest.

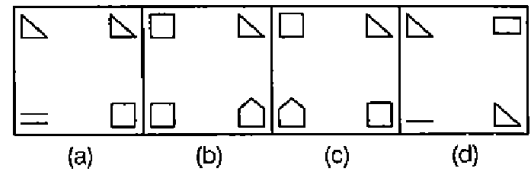


Directions (Q.Nos. 96-100) Each of the following questions consists of two sets of figures. Figures (1) (2), (3) and (4) constitute the problem set while figures (a), (b), (c) and (d) constitute the answer figures. There is a definite relationship between figures (1) and (2). Establish a similar relationship between figures (3) and (4) by selecting a suitable figure from the answer figures that would replace the question mark (?) in figure (4).

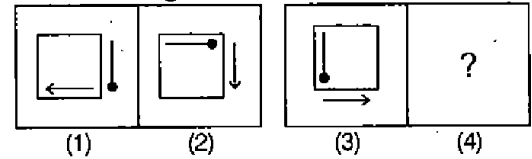
96. Problem Figures



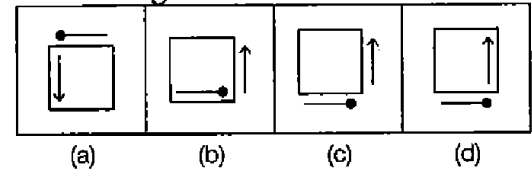
Answer Figures



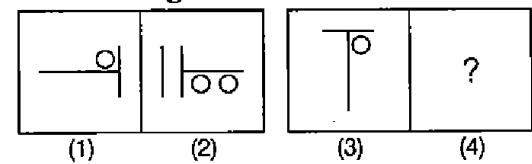
97. Problem Figures



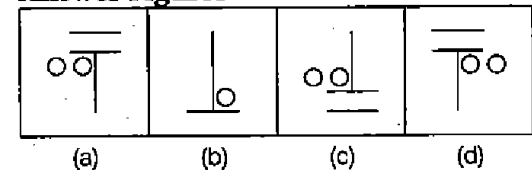
Answer Figures



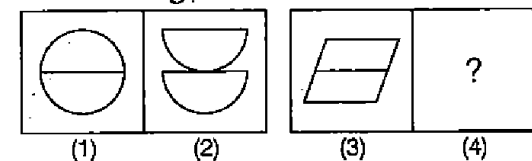
98. Problem Figures



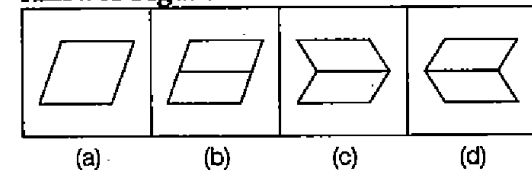
Answer Figures



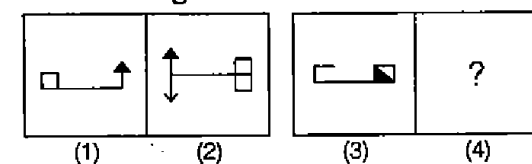
99. Problem Figures



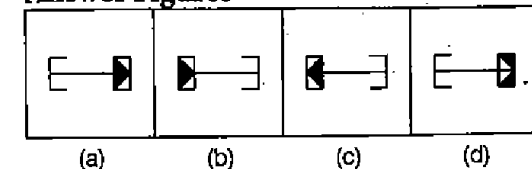
Answer Figures



100. Problem Figures



Answer Figures



Answers

1. (b)	2. (a)	3. (d)	4. (a)	5. (c)	6. (a)	7. (a)	8. (c)	9. (a)	10. (d)
11. (c)	12. (b)	13. (d)	14. (c)	15. (a)	16. (c)	17. (a)	18. (b)	19. (d)	20. (d)
21. (a)	22. (c)	23. (c)	24. (c)	25. (d)	26. (c)	27. (c)	28. (a)	29. (c)	30. (b)
31. (c)	32. (c)	33. (a)	34. (b)	35. (a)	36. (c)	37. (*)	38. (c)	39. (d)	40. (d)
41. (c)	42. (b)	43. (b)	44. (c)	45. (d)	46. (c)	47. (b)	48. (a)	49. (d)	50. (a)
51. (d)	52. (c)	53. (a)	54. (a)	55. (a)	56. (a)	57. (a)	58. (d)	59. (b)	60. (c)
61. (b)	62. (b)	63. (a)	64. (d)	65. (b)	66. (a)	67. (c)	68. (c)	69. (c)	70. (c)
71. (d)	72. (c)	73. (a)	74. (d)	75. (d)	76. (b)	77. (d)	78. (d)	79. (c)	80. (a)
81. (d)	82. (c)	83. (c)	84. (c)	85. (d)	86. (c)	87. (*)	88. (c)	89. (c)	90. (c)
91. (c)	92. (d)	93. (d)	94. (a)	95. (c)	96. (a)	97. (d)	98. (c)	99. (c)	100. (c)

Hints and Solutions

- In a jiffy means 'very soon or suddenly'.
- Upto the hilt means 'completely, fully or entirely'.
- Man of letters means 'a literary person'.
- Sangfroid means 'the ability to remain calm in difficult situations'.
- Powerful here means 'able to control and influence people and events'. Out of the given alternatives it fits the blank appropriately.
- In the context of the sentence 'could' fits the blank appropriately.
- Scene of accident/attack/question/crime etc. is used.
- Out of the given alternatives 'comfort' is an obvious choice in the context of the sentence.
- Glimpse means 'a look at something/somebody for a short time' which is appropriate in the context of the sentence.
- Otherwise is easily the best choice in the context of the sentence.
- Sporadic means 'happening occasionally or at intervals'.
- Genesis means 'beginning or origin of something'.
- Intransigent means 'unwilling to change opinions, stubborn'.
- Intimidate means 'to frighten or threaten somebody'.
- Clemency means 'kindness shown when somebody is being punished; mercy'. Corporal means 'physical punishment'.
- Cajole means 'to make somebody do something by being nice to them'. Bully means 'to use your power or strength to make somebody do something'.
- Malevolent means 'having or showing a desire to harm someone'.
- Purgatory means 'of hell'. Celestial means 'of heaven'.
- Neither I nor II is true.
- Answer can be inferred from the first sentence of the passage.
- All other options are clearly inappropriate.
- A curtain lecture means 'a private scolding of a husband by his wife'.
- Square pegs in round holes means 'people in the wrong jobs/places'.
- In weal and woe means 'in both good and bad times'.
- Globetrotters means 'travelers around the world'.
- The correctly spelt word is Connoisseur.
- The correctly spelt word is Munificent.
- The correctly spelt word is Equanimity.
- The correctly spelt word is Veterinary.

$$30. (A + B + C)\text{'s 3 days work} = \frac{3}{20} + \frac{1}{30} + \frac{1}{60}$$

$$= \frac{9 + 2 + 1}{60} = \frac{12}{60}$$

$\therefore (A + B + C)\text{'s can do the whole work}$
 $= 3 \times 5 = 15 \text{ days}$

(Note A is assisted by B and C every third day.)

31. Suppose speed of the current = x km/h

$$\text{Then, } \left(\frac{28}{3} + x\right) = 3 \times \left(\frac{28}{3} - x\right)$$

$$\Rightarrow \left(\frac{28 + 3x}{3}\right) = 3 \times \left(\frac{28 - 3x}{3}\right)$$

$$\Rightarrow \frac{28 + 3x}{3} = (28 - 3x)$$

$$\Rightarrow 28 + 3x = 84 - 9x$$

$$\Rightarrow 12x = 56$$

$$\Rightarrow x = \frac{56}{12}$$

$$\Rightarrow x = \frac{14}{3} = 4\frac{2}{3} \text{ km/h}$$

32. Suppose speed of the current = x km/h

$$\text{Then, } \frac{26}{10 + x} = \frac{14}{10 - x} \quad (\because \text{Speed of the boat} = 10 \text{ km/h})$$

$$\Rightarrow 260 - 26x = 140 + 14x$$

$$\Rightarrow 40x = 120$$

$$\Rightarrow x = \frac{120}{40} = 3 \text{ km/h}$$

33. Suppose principal amount = ₹ P

$$\text{Then, } 2P - P = \frac{P \times r \times 16}{100} \Rightarrow P = \frac{P \times r \times 16}{100}$$

$$\Rightarrow r = \frac{100}{16} \Rightarrow r = \frac{25}{4} \%$$

$$\text{Again, } SI = \frac{P \times r \times t}{100}$$

$$\Rightarrow x = \frac{P \times 25 \times 8}{4 \times 100} \quad (\text{Suppose SI} = ₹ x)$$

$$\Rightarrow x = ₹ \frac{P}{2}$$

$$\therefore \text{Required times} = P + x = P + \frac{P}{2} = \frac{3P}{2} = 1\frac{1}{2} \times P$$

34. Given, rate of interest = 10% annually
= 5% half-yearly
and time (t) = 2t half-yearly

$$\text{Now, } 92610 = 800 \left(1 + \frac{5}{100}\right)^{2t}$$

$$\Rightarrow \frac{92610}{800} = \left(\frac{21}{20}\right)^{2t}$$

$$\Rightarrow \frac{9261}{8000} = \left(\frac{21}{20}\right)^{2t}$$

$$\Rightarrow \left(\frac{21}{20}\right)^3 = \left(\frac{21}{20}\right)^{2t}$$

$$\Rightarrow 2t = 3$$

$$\Rightarrow t = \frac{3}{2} = 1\frac{1}{2} \text{ yr}$$

35. When an article is sold at the same per cent of profit and loss then always becomes a loss.

$$\begin{aligned} \therefore \text{Loss percentage} &= \frac{(15)^2}{100} \\ &= \frac{225}{100} = 2.25\% \end{aligned}$$

36. Suppose distance between A and B = x km

$$\text{Then, } \frac{x}{25} + \frac{x}{4} = 5 \frac{48}{60}$$

$$\Rightarrow \frac{4x + 25x}{100} = \frac{29}{5}$$

$$\Rightarrow \frac{29x}{100} = \frac{29}{5}$$

$$\Rightarrow x = \frac{100}{5} = 20 \text{ km}$$

37. Suppose length of train = x m

$$\text{Then, } \frac{x + 200}{10} = \frac{x}{5}$$

$$\Rightarrow 2x = x + 200$$

$$\Rightarrow x = 200 \text{ m}$$

$$\begin{aligned} \therefore \text{Speed of the train} &= \frac{200}{5} \text{ m/s} \\ &= 40 \text{ m/s} = 40 \times \frac{18}{5} \text{ km/h} = 144 \text{ km/h} \end{aligned}$$

38. Reduce consumption percentage

$$= \frac{20}{(100 + 20)} \times 100 = \frac{20}{120} \times 100$$

$$= \frac{100}{6} = \frac{50}{3} = 16\frac{2}{3}\%$$

39. Suppose C's salary = ₹ 100

$$\text{Then, } B\text{'s salary} = \frac{100 \times 85}{100} = ₹ 85$$

$$\text{and } A\text{'s salary} = \frac{85 \times 80}{100} = ₹ 68$$

$$\therefore \text{Required percentage} = \frac{100 - 68}{68} \times 100 = 47.05\%$$

40. Total increase weight = 5 × 2 kg = 10 kg

$$\therefore \text{Weight of the new man} = (60 + 10) = 70 \text{ kg}$$

$$41. (A + B)\text{'s 1 day work} = \frac{1}{18}$$

$$(B + C)\text{'s 1 day work} = \frac{1}{24}$$

$$(C + A)\text{'s 1 day work} = \frac{1}{36}$$

$$\begin{aligned} 2(A + B + C)\text{'s 1 day work} &= \frac{1}{18} + \frac{1}{24} + \frac{1}{36} \\ &= \frac{4 + 3 + 2}{72} = \frac{9}{72} = \frac{1}{8} \end{aligned}$$

$$(A + B + C)\text{'s 1 day work} = \frac{1}{8} \times \frac{1}{2} = \frac{1}{16}$$

$$\therefore B\text{'s 1 day work} = \frac{1}{16} - \frac{1}{36} = \frac{9 - 4}{144} = \frac{5}{144}$$

Hence, B alone can finish the work in $\frac{144}{5}$ days or $28\frac{4}{5}$ days.

42. Any political party should get at least 10% seats in Lok Sabha to be a main opposition party.

43. VS Naipaul.

44. Nelson Mandela.

45. Sachin Tendulkar.

46. On 20th Oct, 2014 WHO officially declared that Nigeria is now free of Ebola virus.

47. 11 Gold medals

48. Arvind Mayaram

49. Nirbhay, is India's first long-range subsonic cruise missile. It was test fired on 17th Oct, 2014 from launching station BALASORE. Range of Nirbhay is 1000-1500 km and length is 6 m.

50. Cytology

51. Twenty one

52. 1987, Khan Abdul Ghaffar Khan, who is known also Semant Gandhi from Pakistan (Peshawar).

53. Sir CV Raman awarded by Nobel Prize in 1930 for his work. Scattering of light, this radiation of phenomenon is also known as 'Raman Effect'.

54. Asian Development Bank was established in 1966 in Manila with 67 members.

55. Sub-marine Launched Ballistic Missile (SLBM) K-15 is also known as Sagrika. Range 300-700 km, length 8.5 m.

56. UNCCT—United Nation Center on Counter-Terrorism.

57. One-horned Rhinos.

58. In 1952, Helsinki Olympic Games, KD Jadhav won the first individual Olympic (bronze) medal in free style wrestling in Bantam Weight Category.

59. MA Ansari was the president of Congress in 1927.

60. After Kalinga war, Ashoka became a zealous Buddhist.

62. Tomb of Jalaluddin was not build by Alauddin Khilji.

63. The last king of Nanda dynasties was Dhana Nanda.

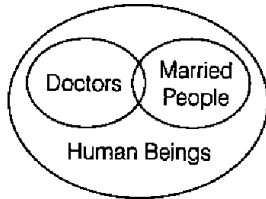
64. Agni-VI is also named as Surya. The range of Agni-VI is 6000-10000 km.

65. Kosuke Hagino (swimming) of Japan.

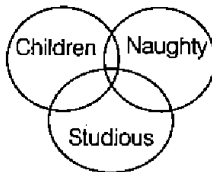
66. As, orient is situated in East direction same as polar is situated in North direction.

67. As, ignominy and disloyalty are the negative qualities of a person same as fame and heroism are the positive qualities of a person.

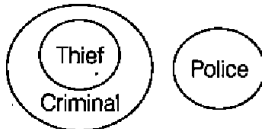
68. As, loath and coercion are the negative qualities in nature same as hate and antagonism are the negative qualities in nature.
69. As, novel is the part of trilogy same as episode is the part of serial.
70. As a female becomes wife after marriage same as we are eligible for service after qualification with the same.
71. All the doctors and married people belong to the group of human beings. While, some doctors can be married people. Venn diagram of such relation is as,



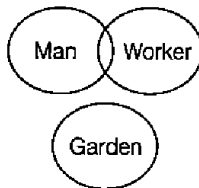
72. Some children are naughty and studious same as some naughty are studious and children, while some studious are children as well as naughty. Venn diagram of such relation is as,



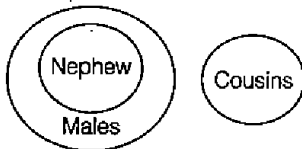
73. Thief belong to the category of criminal, while police is a separate entity. Venn diagram of such relation is as,




74. Some man can be worker, while garden is a separate entity. Venn diagram of such relation is as,



75. All nephews are male, while cousins having male and female both, so cousin is a separate entity. Venn diagram of such relation is as,



76. Answer figure (b) will complete the pattern.
77. Answer figure (d) will complete the pattern.
78. Answer figure (d) will complete the pattern.
79. Answer figure (c) will complete the pattern.
80. Answer figure (a) will complete the pattern.

81. From figure first to second figure (II-X) is rotating 135° anti-clockwise and figure  is rotating itself by 45° clockwise

and (U) is rotating itself as (r) and figure (O) is replaced by the new figure by (□), so an using pattern O answer figure (d) is the next figure.

82. A new line segment is increasing anti-clockwise of the previous line heading with different element. The first line is rotating itself by 45° anti-clockwise in every next step, hence answer figure (c) is the next figure.
83. Elements of the figures are rotating 90° and 135° anti-clockwise alternatively. Hence, answer figure (c) is the next figure .
84. From figure first to figure second, middle element of the figure is the exact water image and the left most elements are placed at the right most place as its water image while right most elements are placed at the left most place as its water image. Hence, answer figure (c) is the next figure.
85. Dot (•) in the figure is rotating one side anti-clockwise and one sign (→) is missing by every figure respectively.
86. Othello, King Lear and Macbeth are the leading characters of story of William Shakespear. While, Oliver Twist was not the leading character of the story.
88. All except simmer are related to the flame of fire while simmer is to cook something by keeping it almost boiling point.
89. Except mole hills all others are mountains, while mole hills are small pill of Earth.
90. Except walrus, all others are land animal, while walrus is a sea animal.
91. Except figure (c), all the figures can be formed by rotating first figure.
92. Except figure (d), all the figures can be formed by rotating the first figure.
93. Except figure (d) in all the figures element '•' and '←' are opposite to each other while in figure (d) it is not so.
94. In figure (a) all the line segments are facing towards East direction while in all other figures line segments are facing towards West direction. Hence, figure (a) is different from the rest.
95. In all other figures except figure (c) line segments are used at once while in figure (c) arrow is used twice. Hence, figure (c) is different from the rest.
96. Left elements of the figure moves to the rightwards topmost element goes to the lowermost and lower most element goes to the lopmost although the left elements are replaced by the new elements. Hence, figure (a) fulfills the condition.
97. Elements of the figure (1) are rotating anti-clockwise and insider element comes outside while outsider element goes inside one out of two elements is replaced by the new element. Hence, answer figure (d) fulfills the condition.
98. Elements of the figure are rotating itself by 180° and a line segment and a 'O' are increasing with respected to the same. Hence, answer figure (c) fulfills the condition.
99. Topmost half part of the figure is placed at the lowermost half part of the figure in reverse order. Hence, figure (c) fulfills the condition.
100. First the figure gets change in mirror image and the changed figure gets changed in water image again. Hence, figure (c) fulfills the condition.