# Airforce Common Admission Test

# (AFCAT)-1/2013

**Directions (Qs. 1 to 5):** *Read the following passage carefully and answer the questions given below:*

We shall go on to the end, we shall fight in France, we shall fight on the seas and oceans, we shall fight with the growing confidence and strength in the air, we shall defend our island whatever the cost may be, we shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the hills. We shall never surrender, and even if this island or a large part of it were subjugated and starving, then our empire beyond the seas would carry on the struggle, until the New World steps forth to the rescue and the liberation of the Old.

**1. On the basis of the passage which of the following statements may be to be correct?**

A. The speaker is encouraging his men for the conquest of France

B. The speaker is an aggressive and maniacal war-monger

C. The speaker is not satisfied with the conquest of the island

D. The speaker is a patriot urging the defence of his motherland

**Ans: D**

**2. The speaker in the passage wants to go on fighting because:**

A. He is a raving lunatic

B. He is in a state of utter despair

C. He expects help from other quarters

D. He is the leader of a suicide squad

**Ans: B**

**3. Which of the following pair of the phrases helps best to bring out the intention of the speaker?**

A. "Go on to the end", "shall never surrender"

B. "Growing confidence", "subjugated and starving"

C. "Subjugated and starving", " fighting on the landing ground"

D. "Fighting in the streets", "subjugated and starving"

**Ans: A**

**4. The passage consists of repetitive patterns in syntax and vocabulary. The effect of this style is that it:**

A. Reveals the speaker's defects in giving a speech

B. Produces the impression of bad poetry

C. Conveys the speaker's helpless situation

D. Reinforces the speaker's basic intention

**Ans: D**

**5. The tone of the speaker is:**

A. Pleading and urging

B. Inspiring and encouraging

C. Discouraging and gloomy

D. Menacing and bullying

**Ans: B**

**Directions (Qs. 6 to 8):** *In each of the following, choose the word most similar in meaning to the word given in capitals.*

**6. Meddle**

A. Disregard

B. Overlook

C. Interfere

D. Free

**Ans: C**

**7. Abjure**

A. renounce

B. Run off secretly

C. Abide

D. Discuss

**Ans: A**

**8. Estrange**

A. Endanger

B. To become puzzling

C. Miscalculate

D. Alienate

**Ans: D**

**Directions (Qs. 9 to 10):** *In each of the following, choose the word most nearly opposite in meaning to the word given in capitals:*

**9. Derogatory**

A. Conferred

B. Immediate

C. Praising

D. Private

**Ans: C**

**10. Wane**

A. Widen

B. Poor

C. Swell

D. Tight

**Ans: C**

**Directions (Qs. 11 to 15):** *In each of the following questions, find out which part has an error.*

**11. The police has (A)/arrested the thief (B)/who broke into my house (C)/last night (D).**

**Ans: A**

**12. The man who (A)/they thought to be (B)/a gentleman turned out (C)/to be a rogue (D).**

**Ans: D**

**13. I told him on his face (A)/that he could not hope (B)/to pass the stringent (C)/Medical examination of the Services Selection Board (D).**

**Ans: B**

**14. Mohan is one of those boys (A)/who has expressed (B)/willingness for joining (C)/the educational tour (D).**

**Ans: B**

**15. I may spend (A)/this summer vacations (B)/with one of my friends (C)/ in the back waters of Kerala (D).**

**Ans: B**

**Directions (Qs. 16 to 20):** *Pick up the most effective word from the given words to fill in the blanks to make the sentence meaningfully complete.*

**16. According to the weather _____ it is going to be cloudy today.**

A. Announcement

B. Indication

C. Prediction

D. Forecast

**Ans: D**

**17. The villagers _____ the murder of their leader by burning the police van.**

A. Protested

B. Avenged

C. Mourned

D. Consoled

**Ans: A**

**18. While on a routine flight, the aircraft was hit by a missile and _____ into flames.**

A. Fired

B. Burst

C. Caught

D. Engulfed

**Ans: D**

**19. Hari got the company car for a _____ price as he was the senior most employee in the company.**

A. Reduced

B. Discounted

C. Fixed

D. Nominal

**Ans: B**

**20. The unruly behavior of the soldiers _____ their commander.**

A. Clashed

B. Aggrieved

C. Incensed

D. Impeached

**Ans: C**

**21. Who accorded the title 'Mahatma' to MK Gandhi?**

A. Sardar Patel

B. Jawaharlal Naidu

C. Sarojini Naidu

D. Rabindranath Tagore

**Ans: D**

**22. The Non Co-operation Movement started in which year?**

A. 1900

B. 1921

C. 1940

D. 1935

**Ans: B**

**23. During the Middle Ages education was confined only to:**

A. Kshatriyas

B. Brahmins

C. Peasants

D. Shudras

**Ans: B**

**24. Who among the following was responsible for the spread of Buddhism in Sri Lanka?**

A. Ashoka

B. Mahavira

C. Prasavanath

D. Chandra Gupta Maurya

**Ans: A**

**25. The elements which have low value of ionization potential are strong:**

A. Oxidising agents

B. Reducing agents

C. Oxidising and Reducing agents depending upon the reactants

D. None of these

**Ans: B**

**26. Wayne Rooney, the famous footballer, hails from which country?**

A. Italy

B. Brazil

C. Argentina

D. England

**Ans: D**

**27. The official song 'WakaWaka' of FIFA World Cup held in the year 2010 at South Africa was sung by which popular singer?**

A. Madonna

B. Destiny Child

C. Shakira

D. Rehanna

**Ans: C**

**28. In the year 2011, the ace badminton player Saina Nehwal was honoured with which sports award?**

A. Dronacharya Award

B. Rajiv Gandhi Khel Ratan Award

C. Arjun Award

D. None of these

**Ans: B**

**29. Term 'Visible Horizon' in astronomy is defiend as:**

A. The circle of contact of the earth and the cone of visual rays passing through the meridian of the place.

B. The circle of contact of the earth and the cone of visual rays not passing through the meridian of the place.

C. The circle of contact of the earth and the cone of visual rays passing through the point of observation.

D. The circle of contact of the earth and the cone of visual rays not passing through the point of observation.

**Ans: C**

**30. NREGA stands for:**

A. National Revenue Engagement Guarantee Association

B. National Revenue Engagement Guarantee Act

C. National Revenue Engagement Guarantee Association

D. National Rural Employment Guarantee Act

**Ans: D**

**31. River Satluj originates from:**

A. Northern slopes of the Kailash range

B. Spring at Verinag

C. Rakas Lake

D. Amarkantak plateau

**Ans: C**

**32. Limonitic ore of which metal?**

A. Iron

B. Aluminium

C. Zinc

D. Cobalt

**Ans: A**

**33. Black revolution relates to which of the following?**

A. Self-dependence in foodgrains production

B. Self-dependence in milk production

C. Self-dependence in petroleum/crude oil

D. None of these

**Ans: C**

**34. Karrar is the unmanned bomber aircraft of**

A. Iraq

B. Iran

C. Turkey

D. Pakistan

**Ans: B**

**35. Who is the author of book 'Keeping the Faith: Memoirs of a Parliamentarian'?**

A. David Omand

B. Raja Shehadeh

C. Raghav Bahl

D. Somnath Chatterjee

**Ans: D**

**36. _____ is a thyroid hormone controls the balance of calcium in the body.**

A. Calcitonin

B. Thyroxine

C. Calmodulin

D. All of these

Ans: D

**37. The cell wall in plants is interrupted by narrow pores carrying fine strands of cytoplasm which interlink the contents of the cells. These strands are called:**

A. Plasmahole

B. Microvilli

C. Plasmodesmata

D. Plasmalemma

**Ans: C**

**38. Who is the cricketer bestowed with an honorary commission in the Territorial Army?**

A. Sachin Tendulkar

B. Kapil Dev

C. Virendar sehwag

D. Harbhajan Sing

**Ans: B**

**39. The transport phenomenon occurs only in _____ state of a gas and is _____ .**

A. Non-equilibrium, irreversible

B. Non-equilibrium, reversible

C. Equilibrium, irreversible

D. Equilibrium, reversible

**Ans: B**

**40. Which of the following compounds from nitrites with nitrous acid?**

A. Primary amines

B. secondary amines

C. Tertiary amines

D. All of these

**Ans: D**

**41. The number whose square is equal to the difference of the squares of 37 and 23 is:**

A. 45.09

B. 28.98

C. 47.09

D. 28

**Ans: B**

**42. The average age of 8 men is increased by 4 years when one of them whose ages is 30 years is replaced by a new man. What is the age of new man?**

A. 55 years

B. 62 years

C. 42 years

D. 69 years

**Ans: B**

**43. A vessel, full of water, weighs 24 kg. When the vessel is ¼ full, it weighs 9 kg. Find the weight of empty vessel.**

A. 4 kg.

B. 5 kg.

C. 8 kg.

D. 3 kg.

**Ans: A**

**44. If a − b = 4 and ab = 45, find the value of $a^3 - b^3$.**

A. 604

B. 370

C. 253

D. 199

**Ans: A**

**45. If a/(a +b) = 15/21, what is (a + b)/(a − b) equal to?**

A. 13/9

B. 23/11

C. 14/5

D. 21/9

**Ans: D**

**46.** $\dfrac{(798+579)^2 - (798-579)^2}{(798+579)} = ?$

A. 2

B. 6

C. 4

D. 8

**Ans: C**

**47. A man's average monthly expenditure for the first four of the year was Rs. 231.25. For the next five months, the average monthly expenditure was Rs. 22.75 more than what it was during the first four months. If the person spent Rs. 605 in all during the remaining three months of the year, find what percentage of his annual income of Rs. 3500 did he save in the year?**

A. 10%

B. 15%

C. 20%

D. 25%

**Ans: C**

**48. The average age of students of a class is 15.8 years. The average age of boys in the class is 16.4 years and that of the girls is 15.4 years. The ratio of the number of boys to the number of girl in the class is:**

A. 1 : 2

B. 2 : 3

C. 3 : 4

D. 3 : 5

**Ans: B**

**49. 18 buckets of water fill a tank when the capacity of each bucket is 18 litres. How many buckets will be needed to file same tank, if the capacity of the bucket is 12 litres?**

A. 12

B. 13.5

C. 24

D. Cannot be determined due to insufficient data

**Ans: A**

**50. Srinivassn invests two equal amounts in two banks giving 8% and 12% rate of interest respectively. At the end of year, the interest earned is Rs. 1500. Find the sum invested in each.**

A. Rs. 8500

B. Rs. 15000

C. Rs. 7500

D. Rs. 17000

**Ans: C**

**51. The simple interest accrued on a sum of money at the end of four years is $1/5^{th}$ of its principal. What is the rate of interest per annum?**

A. 4%

B. 5%

C. 6%

D. Inadequate data

**Ans: B**

**52. A sum of Rs. 2600 is lent out into parts, one at 9% and another at 7%. If the total annual income is Rs. 206, find the money lent at 7%.**

A. Rs. 1400

B. Rs. 900

C. Rs. 1600

D. Rs. 1200

**Ans: D**

**53. In an election between two candidates, 70% of the voters cast their votes. Out of which 2% of the votes were declared invalid. A candidate got 7203 votes which was 60% of the total valid votes. Find the total number of voters enrolled in that election.**

A. 18050

B. 17500

C. 17000

D. 7203

**Ans: B**

**54. If the price of kerosene be raised by 11%, find by how much per cent a house holder must reduce his consumption of kerosene so as not to increase his expenditure?**

A. 11%

B. 9.9%

C. 11.09%

D. 8.25%

**Ans: B**

**55. 75 pupils from a school appeared for an examination and 80% of them passed. Another school entered 10 more pupils than the first school and five pupils less than the first school passed. The pass % of in the second school was:**

A. 75%

B. 84%

C. 72%

D. 64.7%

**Ans: D**

**56. Divide Rs. 80 in the proportion of 3 : 6 : 7.**

A. RS. 10, Rs. 35, Rs. 40

B. Rs. 15, Rs. 30, Rs. 35

C. Rs. 10, Rs. 40, Rs. 35

**Ans: B**

**57. Calculate the amount on Rs. 1875 for 2 years at 4% per annum, compounded yearly.**

A. Rs. 676

B. Rs. 776

C. Rs. 1778

D. Rs. 2028

**Ans: D**

**58. If x varies as y and x = 8 when y = 15, then the value of x when y = 10 is:**

A. 5

B. 15/8

C. 8/15

D. 16/3

**Ans: D**

**59. In a mixture of 60 litres, the ratio of milk and water is 2 : 1. What amount of water must be added to make the ratio of milk and water as 1 : 2?**

A. 42 Litres

B. 56 Litres

C. 60 Litres

D. 77 Litres

**Ans: C**

**60. A sum of Rs. 10,000 is lent partly at 6% and the remaining at 10% p.a. If the yearly interest on the average is 9.2%, the money lent at 10% is:**

A. Rs. 8000

B. Rs. 8500

C. Rs. 5000

D. Rs. 2000

**Ans: D**

**Directions (Qs. 61 to 65):** *Choose the word which is least like the other words in the group*

**61.** A. Garo

B. Khasi

C. Kangra

D. Jayantia

**Ans: C**

**62.** A. Virog

B. Pisces

C. Cancer

D. Orion

**Ans: D**

**63.** A. Shoulder

B. Foot

C. Finger

D. Elbow

**Ans: C**

**64.** A. Canoe

B. Dingy

C. Yacht

D. Igloo

**Ans: D**

**65.** A. Inn

B. Club

C. Motel

D. Hostel

**Ans: B**

**Directions (Qs. 66 to 70):** *The following questions consist of two words that have a certain relationship to each other, followed by four alternatives. Select the best alternative that has the same relationship as the original pair of words*

**66. Liquor : Drink**

A. Bread : Butter

B. Tea : Beverage

C.  Sniff : Inhale

D. Water : Sip

**Ans: D**

**67. Evaporation : Cloud**

A. Mountain : Snow

B. Book : Pages

C. Pressure : Atmosphere

D. Tension : Breakdown

**Ans: D**

**68. Breel : Vial**

A. Book : Reader

B. Brochure : Reader

C. Magazine : Editor

D. Length : Height

**Ans: A**

**69. Cream : Cosmetics**

A. Tiger : Forest

B. Mountain : Valley

C. Magazine : Editor

D. Teak : Wood

**Ans: D**

**70. Carnivore** : **Herbivore**

A. Flesh : Plant

B. Hores : Lion

C. Camel : Giraffe

D. Animal : Bird

**Ans: A**

**Directions (Qs. 71 to 80):** *Three words in bold letters are given in each question, which have something in common among themselves. Out of the four given alternatives, choose the most appropriate description about these three words.*

**71. Hamlet : Macbeth : Faustus**

A. They were Princes.

B. They are plays by Shakespeare.

C. They are characters from various dramas.

D. They were romantic heroes.

**Ans: C**

**72. Vesuvius : Etna : Kilimanjaro**

A. These are sites of volcanoes

B. These are island countries.

C. These are hills of Italy.

D. These lie in polar region.

**Ans: A**

**73. Knot : Watt : Fathom**

A. The terms are used by sailors.

B. The terms are used for installing electricity.

C. The terms are connected with rope.

D. They are units of measurement.

**Ans: D**

**74. Barauni : Digboi : Ankleshwar**

A. They are famous for oil fields.

B. They are famous religious places.

C. They are tourist places of South India.

D. They are famous for handlooms.

**Ans: A**

**75. Knight : Rook : Bishop**

A. These are missionaries.

B. These are churchmen.

C. These are chessmen.

D. These are ranks of military.

**Ans: C**

**76. Abhi Bhattacharya : Utpal Dutt : Satyajit Ray**

A. They are character actors.

B. They are directors of Bengali movies.

C. They are famous poets and writers.

D. These personalities belong to Bengal.

**Ans: D**

**77. Voodoo : Sorcery : Durgapur**

A. They are ancient arts found in sculptures.

B. They are terms connected with black magic.

C. They are ancient scripts.

D. They are means of communication of prehistoric age.

**Ans: B**

**78. Rourkela : Bokaro : Durgapur**

A. They are steel plants.

B. They have coal mines.

C. They have atomic power plants.

D. They are on the sea coast.

**Ans: A**

**79. Spinach : Fenugreek : Celery**

A. These are cactus plants.

B. These are wild plants.

C. These are wild flowers.

D. These are leafy vegetables.

**Ans: D**

**80. Yeats : Ghalib : Kabir**

A. They were social reformers.

B. They were famous poets.

C. They were saints.

D. They were yoga instructors.

**Ans: B**

**Directions (Qs. 81 to 85):** *There are two of figures namely the Problem figures containing five figures 1,2,3,4,5 and answer figures A,B,C,D. You have to select one figure from the Answer figures which will continue the same as given in the Problem figures.*

**81. Problem Figure**
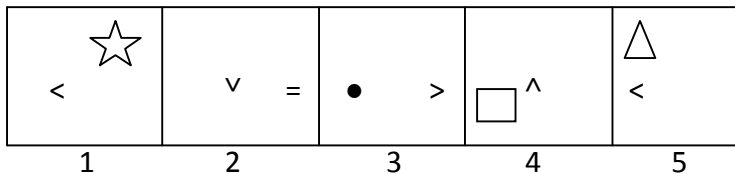


Answer Figures:
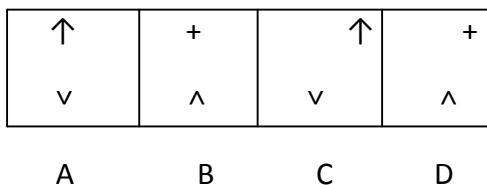
**Ans: A**

**82. Problem Figures:**



|   1   |   2   |   3   |   4   |   5   |

**Answer Figures:**



|   A   |   B   |   C   |   D   |
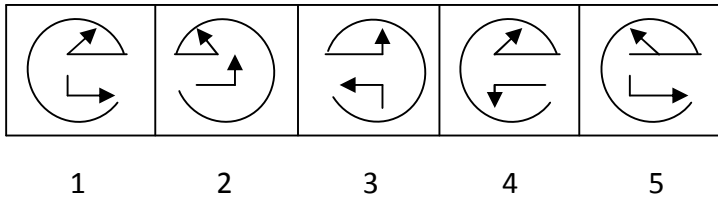
**Ans: D**

**83. Problem Figures:**



|   1   |   2   |   3   |   4   |   5   |

**Answer Figures:**



|   A   |   B   |   C   |   D   |

**Ans:**

**84. Problem Figures:**



|   1   |   2   |   3   |   4   |   5   |
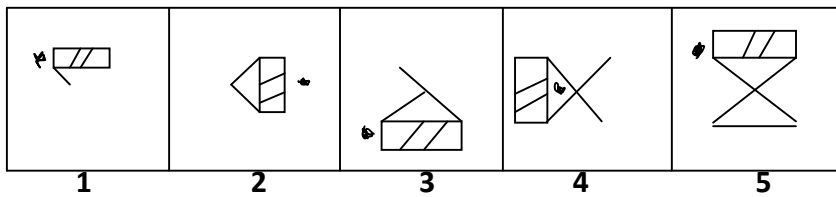
**Answer Figures**
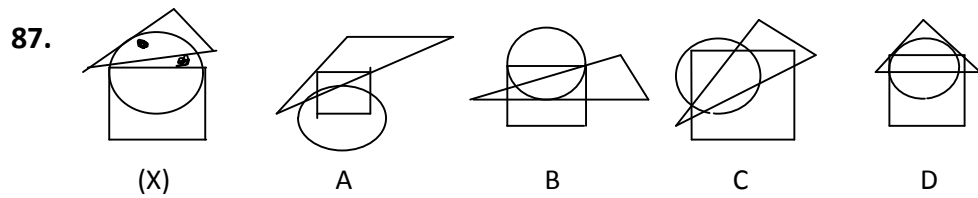
**Ans:**

**85. Problem Figures:**
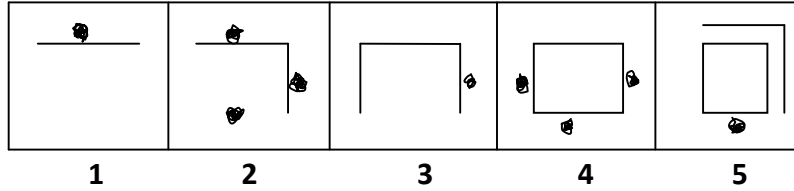


**Answer Figures:**
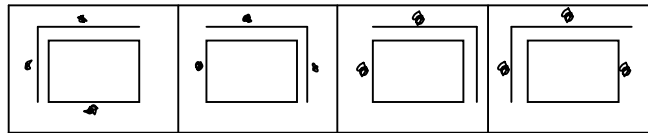


**Ans: A**

**Directions (Qs. 86 to 90):** *The following situations involve a cluster of three or more geometrical figures, having one or more dots placed at any point inside the cluster. This cluster is followed by a set of four alternative figures each composed of a cluster of the same type of figures. Now, for each dot we have to observe the region in which it is enclosed i.e., in which of the geometrical figure this region is common.*
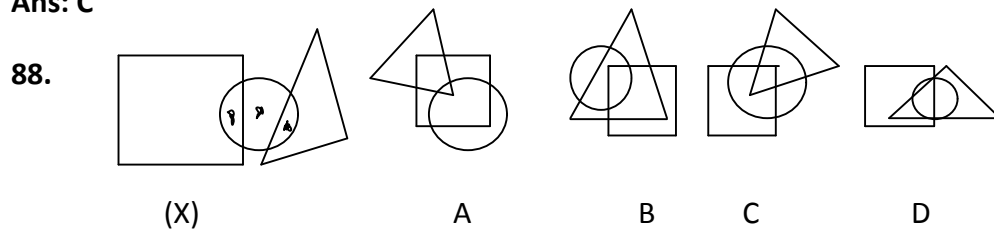
*From amongst the figures marled A, B, C and D, select the figure which satisfies the same conditions of placement of the dot as in Fig. (X)*

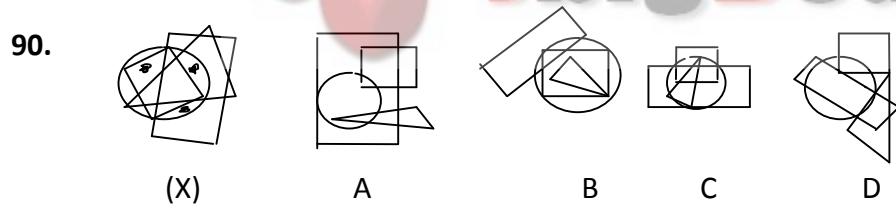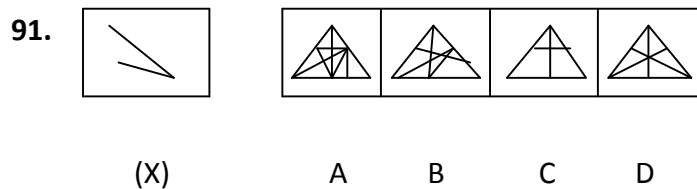**86.**



**Ans: D**

**87.**

(X)          A          B          C          D

**Ans: C**

**88.**

(X)                  A          B          C          D

**Ans: C**

**89.**

(X)          A          B          C          D

**Ans: A**

**90.**

(X)          A          B          C          D
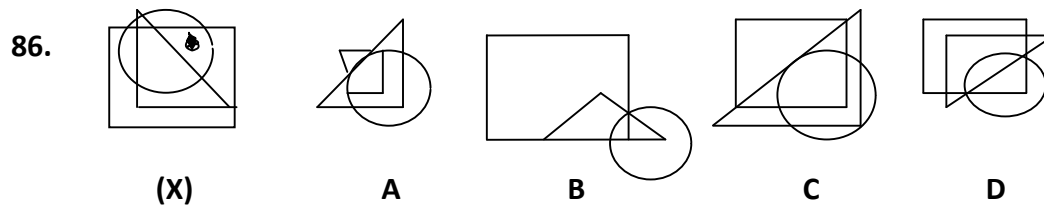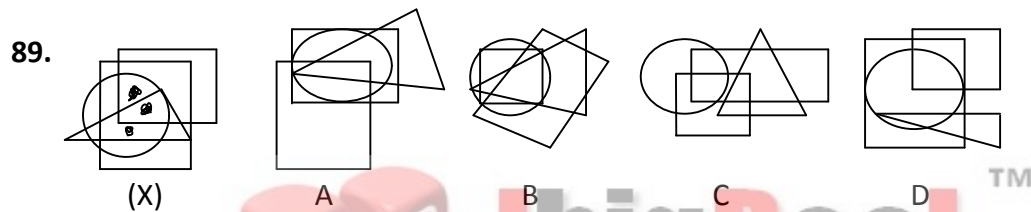
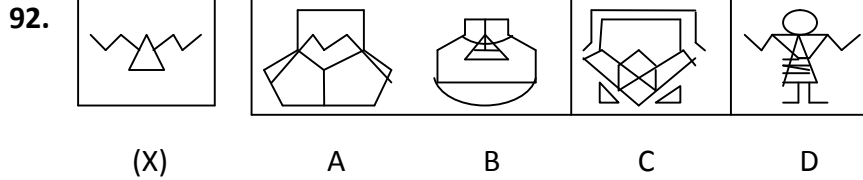**Ans: D**

**Directions (Qs. 91 to 95):** *In this portion, a figure is given as an original figure (X) followed by four answer figures. The original figure is embedded or hidden in one of the answer figures (A, B, C & D). Select the alternative that carries the correct figure which clearly shows the embedded portion of the original figure.*
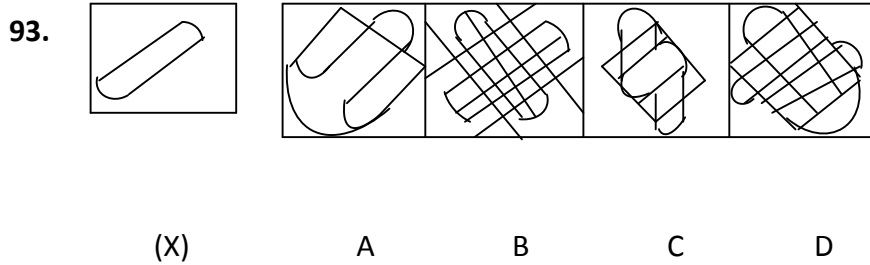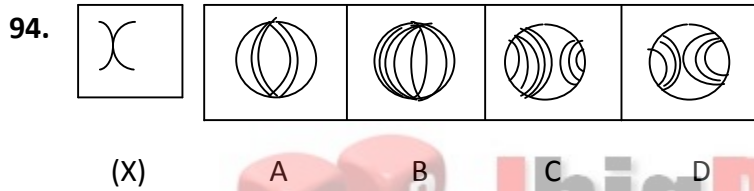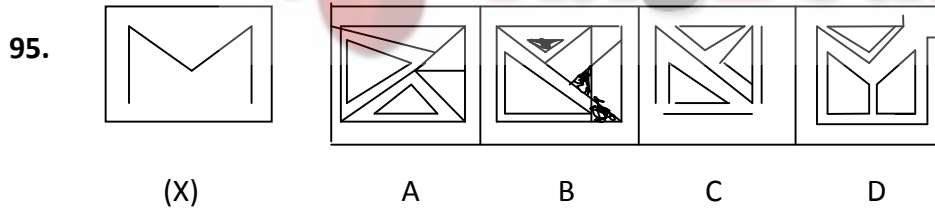
**91.**

(X)          A      B      C      D

**Ans: D**

**92.**

(X)          A          B          C          D

**Ans: D**

**93.**

(X)          A          B          C          D

**Ans: B**

**94.**

(X)          A          B          C          D

**Ans: D**

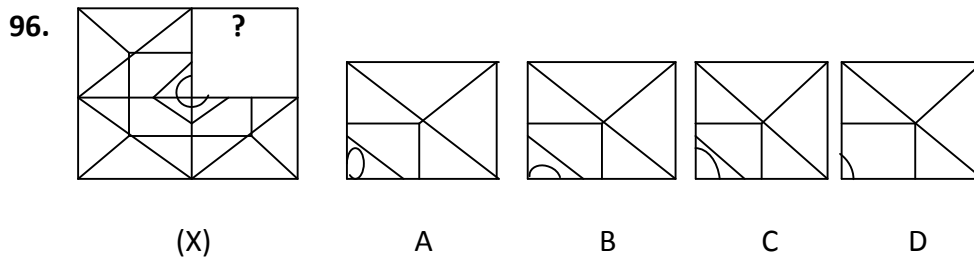**95.**

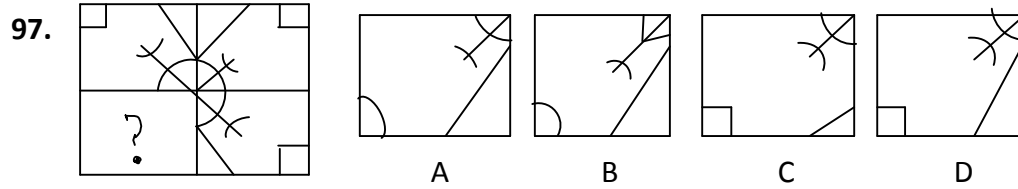(X)          A          B          C          D

**Ans: B**

**Directions (Qs. 96 to 100):** *In each of the following questions, a part of the figure is missing. Find out from the given options A, B, C or D, the right figure to fit in the missing figure (X).*
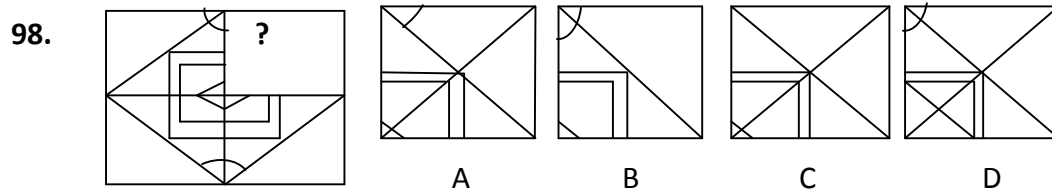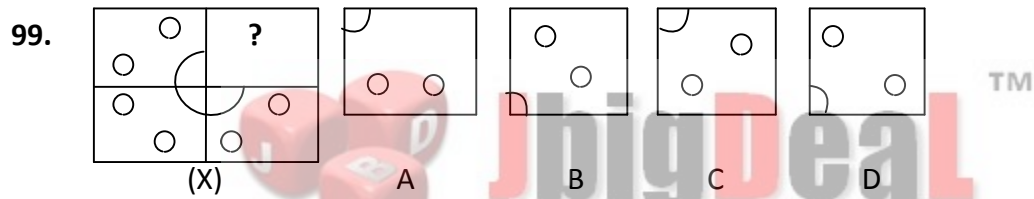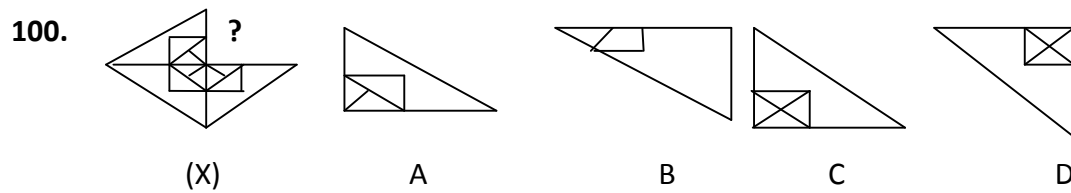
**96.**

(X)          A          B          C          D

**Ans: C**

**97.**



(X)                    A            B            C            D

**Ans: D**

**98.**



(X)                    A            B            C            D

**Ans: B**

**99.**



(X)        A          B        C          D

**Ans: B**

**100.**



(X)            A              B          C              D

**Ans: A**