A TबP RANKERS Initiative

## SuperGrads Study Material

## Part of the most Comprehensive Classroom Training, Prep Content $\mathcal{E}$ Test Series across the Nation.

## supergrâds

## DUJAT 2020 OFFICIAL PAPER-Shift 3

Direction (Q.1-Q.3): Read the following information carefully and answer the following question.

1. $P, Q, R, S$, and $T$ are five friends.
2. $Q$ is elder to $T$, but not as tall as $R$.
3. $R$ is younger to $P$ and is taller to $S$ and $T$.
4. $P$ is taller to $S$, but younger to $T$.
5. $S$ is elder to $P$ but is shortest in the group.
6. Who among the following is the youngest?
(a) P
(b) Q
(c) $R$
(d) S
7. Which of the following statements is correct?
A. $Q$ is not the tallest
B. $R$ is the tallest
C. T is only taller than S .

Choose the correct answer from the options given below.
(a) A only
(b) A and B only
(c) A,B and C only
(d) None of these
3. Which of the following is the correct order, if T is older to S ?
(a) Q,T,SP,R
(b) Q,S,T,P,R
(c) $R, P, S, T, Q$
(d) $R, P, T, S, Q$

Direction (Q.4-Q.6): Study the diagram given below and answer each of the following question.

4. How many people read both Newspaper and Comics only?
(a) 15
(b) 30
(c) 90
(d) 60
5. How many people do not read Newspapers?
(a) 70
(b) 20
(c) 55
(d) 50
6. How many people read neither comics, nor newspapers?
(a) 10
(b) 25
(c) 85
(d) None of these
7. The set of four figures foms a series such that the fifth figure, when drawn, will be the same as the first figure. Which of the given options can replace the box with the question mark?

(i)
(ii)
(iii)
(iv)

(a)
(b)

(c)

(d)

8. Given below is a pair of related figures and four other options of related figures.

Out of the options, find the one where the figures have the same relationship as in the given figure.

(a)

(b)

(c)

9. From the given options, select the figure to replace the question mark so as to establish the series.

(a)

(b)

(c)
(d)

10. Choose the appropriate Antonym for the word DILAPIDATED from the options below.
(a) wasteful
(b) Expensive
(c) Fragrant
(d) Fresh
11. Choose the appropriate Antonym for the word ENIGMATIC from the options below.
(a) Confused
(b) Loving
(c) Clear
(d) Evil
12. Choose the appropriate Antonym for the word CALUMNY from the options below.
(a) small
(b) carnival
(c) commendation
(d) fresh
13. Read the statement and answer the question that follows:

High levels of fertilizer and pesticides, needed when farmers try to produce high yield of the same crop year after year, pollute water supplies. Experts therefore urge farmers to diversify their crops and to rotate their plantings yearly. To receive governmental price-support benefits for a crop, farmers must have produced that same crop for the past several years.
The statements above, if true, best support which of the following conclusions?
(a) The rules for governmental support of farm prices work against efforts to reduce water pollution
(b) The only solution to the problem of water pollution from fertilizers and pesticides is to take farmland out of production
(c) Farmers can continue to make a profit by rotating diverse crops, thus reducing costs for chemicals, but not by planting the same crop each year
(d) New farming techniques will be developed to make it possible for farmers to reduce the application of fertilizers and pesticides
14. Read the statement and answer the question that follows:

The average normal infant born in the United States weighs between twelve and fourteen pounds at the age of three months. Therefore, if a three-month-old child weighs only ten pounds, its weight gain has been below the United States average.
Which of the following indicates a flaw in the reasoning above?
(a) Average weight gain is not the same as average weight
(b) Weight is only one measure of normal infant development
(c) Some three-month-old children weigh as much as seventeen pounds
(d) It is possible for a normal child to weigh ten pounds at birth

Passage (Q.15-Q.19): Read the following excerpt and answer the questions that follow.
Coral reefs are one of the most fragile, biologically complex, and diverse marine ecosystem on Earth. This ecosystem is one of the fascinating paradoxes of the biosphere: how do clear, and thus nutrient-poor, waters support such prolific and productive communities? Part of the answer lies within the tissues of the corals themselves. Symbiotic cells of algae known as zooxanthellae carry out photosynthesis using the metabolic wastes of the coral thereby producing food for themselves, for their corals hosts, and even for other members of the reef community. This symbiotic process allows organisms in the reef community to use sparse nutrient resources efficiently. Unfortunately for coral reefs, however, a variety of human activities are causing worldwide degradation of shallow marine habitats by adding nutrients to the water. Agriculture, slash- and-burn land clearing, sewage disposal and manufacturing that creates waste by-products all increase nutrient loads in these waters. Typical symptoms of reef decline are destabilized herbivore populations and an increasing abundance of algae and filterfeeding animals. Declines in reef communities are consistent with observations that nutrient input is increasing in direct proportion to growing human populations, thereby threatening reef communities sensitive to subtle changes in nutrient input to their waters.
15. The passage is primarily concerned with:-
(a) Describing the effects of human activities on algae in coral reefs
(b) Explaining how human activities are posing a threat to coral reef communities
(c) Discussing the process by which coral reefs deteriorate in nutrient-poor waters
(d) Explaining how coral reefs produce food for themselves
16. The passage suggests which of the following about coral reef communities?
(a) Coral reef communities may actually be more likely to thrive in waters that are relatively low in nutrients
(b) The nutrients on which coral reef communities thrive are only found in shallow waters
(c) Human population growth has led to changing ocean temperatures, which threatens coral reef communities
(d) The growth of coral reef communities tends to destabilize underwater herbivore populations
17. The author refers to "filter-feeding animals" in order to:-
(a) Provide an example of a characteristic sign of reef deterioration
(b) Explain how reef communities acquire sustenance for survival
(c) Identify a factor that helps herbivore populations thrive
(d) Indicate a cause of decreasing nutrient input in waters that reefs inhabit
18. According to the passage, which of the following is a factor that is threatening the survival of coral reef communities?
(a) The waters they inhabit contain few nutrient resources
(b) A decline in nutrient input is disrupting their symbiotic relationship with zooxanthellae
(c) They are too biologically complex to survive in habitats with minimal nutrient input
(d) Waste by-products result in an increase in nutrient input to reef communities
19. It can be inferred from the passage that the author describes coral reef communities as paradoxical most likely for which of the following reasons?
(a) They are thriving even though human activities have depleted the nutrients in their environment
(b) They are able to survive in spite of an overabundance of algae inhabiting their waters
(c) They are able to survive in an environment with limited food resources
(d) Their metabolic wastes contribute to the degradation of the waters that they inhabit
20. Below are 4 sentences marked $W, X, Y, Z$. You are required to choose one of the 4 alternatives given to determine which would be the most logical sequence of these four sentences.
W. A man handed a pair of trousers to the department store sales assistant and said, "I would like to change this as I no longer like the colour".
$X$. The man replied that he had lost the bill and demanded a refund instead of an exchange.
Y. The assistant said, "May I please see the bill that you would have got while buying this from us?"
Z. The assistant called the store manager who said, "As per our policy, without a receipt, we can neither exchange nor return any item."
(a) YZWX
(b) XWZY
(c) ZXYW
(d) WYXZ
21. Below are 4 sentences marked $W, X, Y, Z$. You are required to choose one of the 4 alternatives given to determine which would be the most logical sequence of these four sentences.
W. It is for this reason that they can be easily translated from one language into another.
X. In fact, many of the proverbs we are familiar with have come to us from different cultures and communities across the world.
Y. Proverbs contain simple and universal truths.
Z. Every community and culture has its own set of proverbs that they have evolved.
(a) WXYZ
(b) YWZX
(c) ZYXW
(d) XZWY

A T®P RANKERS Initiative
22. Below are 4 sentences marked $W, X, Y, Z$. You are required to choose one of the 4 alternatives given to determine which would be the most logical sequence of these four sentences.
W. It resembles a horse with a horn at the center of its forehead.

X . It is believed to have magical properties and can heal sickness.
Y. It is now believed that the unicorn of legend may actually be the Indian one horned rhinoceros.

Z . A unicorn is a mythical creature and is found in ancient legends and fairytales.
(a) XYZW
(b) YZWX
(c) ZWXY
(d) WXYZ
23. Fill in the blanks with the most appropriate pair from among the four choices given. The person who has been working here $\qquad$ the last ten years, suddenly stopped coming to work and has not been seen $\qquad$ Tuesday last.
(a) from, for
(b) since, for
(c) for, since
(d) for, from
24. Fill in the blanks with the most appropriate pair from among the four choices given. It had long been presumed that stone tool making was a hallmark of our $\qquad$ , $\qquad$ the recent discovery, in northwestern Kenya, of 3.3-million-year-old stone tools that are 7,00,000 years older than any other such stone tools ever found suggests it was the more ancient human ancestors who made the cognitive leap needed for crafting such implements.
(a) genius, per contra
(b) genius, additionally
(c) genus, after all
(d) genus, however
25. Fill in the blanks with the most appropriate pair from among the four choices given. It sounds $\qquad$ that if a low carb diet can prevent a second heart attack from occurring, it should also be able to the first occurrence.
(a) realistic, disintegrate
(b) logical, allay
(c) fascinating, foment
(d) reasonable, augment
26. A sentence has been given in active or passive voice. You have to change the voice by choosing the best option from among the four choices given.
Does Darjeeling grow tea?
(a) Is tea exported by Darjeeling?
(b) Is tea grown in Darjeeling?
(c) Do you know if Darjeeling grows tea?
(d) Tea is grown by Darjeeling isn't it
27. A sentence has been given in active or passive voice. You have to change the voice by choosing the best option from among the four choices given.
Since she has not done the preliminary work, the meeting has to be rescheduled.
(a) She did not do the preliminary work and this led to the meeting being rescheduled
(b) I had to reschedule the meeting because of her
(c) The meeting has to be rescheduled since she has not done the preliminary work.
(d) The meeting has been rescheduled because she did not do the work
28. The given pair of words has a specific relationship. From among the 4 choices given, choose the pair with a similar relationship as the one in the question.
benign: kind
(a) active: passive
(b) probity: honesty
(c) infection: injection
(d) summer: ice-cream
29. The given pair of words has a specific relationship. From among the 4 choices given, choose the pair with a similar relationship as the one in the question.
virus: disease
(a) food: hunger
(b) exercise: health
(c) wealth: money
(d) height: weight
30. In a toy shop there are two boxes containing a toy car and a toy truck. The Red box shows the picture of a toy car inside and the Blue box shows the picture of a toy truck inside. The shopkeeper says that there has been an error in the packing and at least one of the boxes is showing false information. Which box contains the toy car?
(a) Red
(b) Blue
(c) No box contains the toy car
(d) Not enough information to decide
31. $X$ is ranked 12 from the top and $Y$ is ranked 14 from the bottom in a class of 35 students. How many students are there between $X$ and $Y$ ?
(a) 8
(b) 9
(c) 7
(d) 6

A TOP RANKERS Initiative
32. Find the alternative which will replace the question mark: KLMN: OHPK:: AXTZ :?
(a) EWWX
(b) ETWW
(c) EACH
(d) ECAH
33. A family has four boys named Amar, Aditya, Arjun, and Aryan, and a girl named Asha. In terms of age, Amar is at the third place, counted from either direction. Asha has at least one younger brother. One boy is older than Asha but younger than Aryan. Asha is the younger sister of Arjun. Aditya is:-
(a) Oldest child
(b) Older than Amar but younger than Aryan
(c) Older than Asha but younger than Arjun
(d) Youngest child
34. Abdul walked 20 m towards East. Then he turned to his left and walked 30 m . He again turned to his left and walked 20 m . He then turned to his right and walked 31 m . At what distance is Abdul from the starting point and which direction is he facing?
(a) 111 m North
(b) 61 m North
(c) 111 m North-West
(d) 61 m North-West
35. For the series: $10,2,4, \ldots, 6,8,10,10,12$, what number should be filled in the blank?
(a) 4
(b) 6
(c) 8
(d) 10
36. Four different positions of a dice are given as follows. Find the number on the face opposite the face showing 4

(i)

(ii)

(iii)

(iv)
(a) 1
(b) 2
(c) 5
(d) 6
37. Which of the following diagrams correctly represents the relationship among Delhi university students, cricket fans, and students living in Delhi hostels?
(a)

(b)

(c)

(d)

38. Find the missing number
49

(i)

(ii)

(iii)
(a) 10
(b) 7
(c) 5
(d) 4

A TबP RANKERS Initiative

## 39. Statements:

All the scholars are teachers.
Some players are teachers.

## Conclusions:

A. All the scholars are players
B. All players are scholars
C. Some teachers are players
D. All teachers are scholars

Which of the conclusions logically follows from the two given statement, taking the given two statements as true?
(a) A and C only
(b) B and D only
(c) C only
(d) D only
40. What day of the week was 25 June 1984?
(a) Saturday
(b) Sunday
(c) Monday
(d) Tuesday
41. A clock is set right at 10 a.m. The clock gains 5 mins in 12 hours. What will be the correct time when the clock indicates 3 p.m. on the following day?
(a) 3:12 p.m.
(b) 3:20 p.m.
(c) 2:48 p.m
(d) 2:40 p.m
42. Find the odd one that does not belong to the group
(a) Skewed
(b) One-sided
(c) Dispersed
(d) Biased
43. Which is the next term in the following series: $1,1,2,3,4,6,9$, ?
(a) 15
(b) 14
(c) 13
(d) 12
44. Ornithology: Birds:: Dendrology:
(a) Skin
(b) Trees
(c) Insects
(d) Animals
45. Count the number of rectangles in the following figure

(a) 4
(b) 5
(c) 6
(d) 7
46. Choose the one that does not belong to the group
(a) 7:20
(b) $4: 12$
(c) $2: 5$
(d) 9:26
47. In a survey for judging the popularity of three mobile phones $A, B$ and $C, 40 \%$ of those up to the age of 25 voted for $A, 30 \%$ voted for $B$ and the rest voted for $C$. Of those above 25 years of age, $30 \%$ voted for $A$ and the remaining voted equally for $B$ and $C$. If half of the participants in the survey were below the age of 25 , which phone is more popular?
(a) Phone A
(b) Phone B
(c) Phone C
(d) Not enough information
48. If $x$ and $y$ are integers, to find the value of $x^{2}+y^{2}$

Statement I: $x+y=8$
Statement II: $x-y=4$
In light of the above statements, choose the correct answer from the options given below.
(a) Statement I alone is sufficient, but statement II alone is not sufficient
(b) Statement II alone is sufficient, but statement I alone is not sufficient
(c) Both statements together are sufficient, but neither statement alone is sufficient
(d) Each statement alone is sufficient
49. Pava is bigger than Java. Java is bigger than Mava. Rava is not as big as Sava but is bigger than Java. Mava is not as big as Java. Who is the smallest?
(a) Java
(b) Pava
(c) Rava
(d) Mava
50. The minimum number of straight lines required to make the given figure are

(a) 14
(b) 15
(c) 16
(d) 17
51. Which of the unfolded figures in the given four options shall certainly result in the folded form given in figure 3 ?

(a)

(b)

(c)

(d)

52. Which of the given options closely represents the "water image" formed if the given combination were standing on water?
(a)

(b)

(c)

(d)

53. Which number should replace the question mark?

| 2 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 3 |$\quad$| 5 | 0 |
| :--- | :--- | :--- |
| 1 | 6 |$\quad$| 6 | 5 |
| :--- | :--- |
| 5 | $?$ |

(a) 2
(b) 3
(c) 4
(d) 6
54. Let $A$ and $B$ be two sets having 3 and 6 elements respectively. What can be the minimum number of elements in $A \cup B$ ?
(a) 3
(b) 6
(c) 9
(d) 18
55. If $\mathrm{f}(\mathrm{x})=\frac{x-1}{x+1}$, than $\mathrm{f}(2 \mathrm{x})$ is :-
(a) $\frac{f(x)+1}{f(x)+3}$
(b) $\frac{3 f(x)+1}{f(x)+3}$
(c) $\frac{f(x)+3}{f(x)+1}$
(d) $\frac{f(x)+3}{3 f(x)+1}$
56. The identity for the binary operator * defined by $\mathrm{a} * \mathrm{~b}=\frac{a b}{2}$ where a and b are non zero rational numbers, is given by:
(a) 1
(b) 0
(c) 2
(d) 3
57. If $\mathrm{x}=\mathrm{i}$, then the value of $x^{x}$ is
(a) $e^{\pi / 2}$
(b) $e^{-\pi / 2}$
(c) 1
(d) 0
58. A Geometric Progression consist of 2 n terms. If the sum of the terms occupying the odd places is $S_{1}$, and that of the terms in the even places is $S_{2}$, then $S_{2} / S_{1}$ is
(a) Dependent on first term
(b) Independent of the common ratio
(c) Independent of the first term and common ratio
(d) Dependent on the common ratio
59. If $a, b, c$ are in arithmetic progression as well as in geometric progression, then
(a) $a=b \neq c$
(b) $a \neq b=c$
(c) $a \neq b \neq c$
(d) $a=b=c$
60. For what value of $\alpha$ and $\beta$, do the following simultaneous equations have an infinite number of solutions?
$x+y+z=5 ; \quad x+3 y+3 z=9 ; \quad x+2 y+\alpha z=\beta$
(a) 2,7
(b) 3,8
(c) 8,3
(d) 7,2
61. The equation $y^{2}-x^{2}+2 x-1=0$ represents
(a) a pair of straight lines
(b) a circle
(c) a parabola
(d) an ellipse
62. the two circles $x^{2}+Y^{2}-2 x-3=0$ and $x^{2}+Y^{2}-4 x-6 y-8=0$ are such that
(a) they touch each other
(b) they intersect each other
(c) One lies inside the other
(d) Neither of the other three options
63. If the roots of the equation $x^{2}-p x+q=0$ differ by unity, then :-
(a) $p^{2}=4 q$
(b) $p^{2}=4 q-1$
(c) $p^{2}=4 q+1$
(d) $p^{2}=2 q$
64. The positive integral root of the equation $x^{4}+\sqrt{x^{4}+20}=20$, is :-
(a) 2
(b) 4
(c) 0
(d) 8
65. If the matrix $A B=0$, then

Statement I: It is not necessary that either $\mathrm{A}=0$ or $\mathrm{B}=0$
Statement II: $\mathrm{A}=0$ or $\mathrm{B}=0$
Statement III: $A=0$ and $B=0$
(a) Statement II is true
(b) Statement I is true
(c) Both Statement I and II are true
(d) Statement III is true
66. The sum of 11 terms of an A.P. whose middle term is 40 , is
(a) 340
(b) 440
(c) 480
(d) 330
67. If commission of spelling mistakes are independent of each other, and the probability of a single spelling mistake in a page from a book is 0.1 , what is the probability of three mistakes on the page?
(a) 0.3
(b) 0.1
(c) 0.001
(d) 0.0333
68. The average age of a family of six is 36 years. The youngest member of the family is 6 years old. The average of the family just before the birth of the youngest member is
(a) 36 years
(b) 30 years
(c) 35 years
(d) 28 years
69. If $-3<\mathrm{x}<4$ and $-2<\mathrm{y}<2$, then range of $(x+y)^{2}$ is:-
(a) $0 \leq(x+y)^{2}<36$
(b) $6<(x+y)^{2}<36$
(c) $0<(x+y)^{2}<36$
(d) $-6 \leq(x+y)^{2}<36$
70. If $f(x)=6 x-3$ and $f(g(x))=21$, then $g(x)$ is
(a) 2
(b) 4
(c) 6
(d) 8
71. What is the sum of the series $0.5+0.55+0.555+0.5555+\ldots \ldots$. Up to $n$ terms?
(a) $\frac{5}{9}\left[n-\frac{2}{9}\left(1-\frac{1}{10^{n}}\right)\right]$
(b) $\frac{1}{9}\left[5-\frac{2}{9}\left(1-\frac{1}{10^{n}}\right)\right]$
(c) $\frac{1}{9}\left[n-\frac{5}{9}\left(1-\frac{1}{10^{n}}\right)\right]$
(d) $\frac{5}{9}\left[n-\frac{1}{9}\left(1-\frac{1}{10^{n}}\right)\right]$

A TबP RANKERS Initiative
72. What is the vector of unit length or thogonal to both the vectors $\vec{\imath}+\vec{\jmath}+\vec{k}$ and $\overrightarrow{2 \imath}+\overrightarrow{3 \jmath}-\vec{k}$ ?
(a) $\frac{-4 l+3 j-\vec{k}}{\sqrt{26}}$
(b) $\frac{-4 l+3 j+\vec{k}}{\sqrt{26}}$
(c) $\frac{\overrightarrow{-3 l+2 j}-\vec{k}}{\sqrt{14}}$
(d) $\frac{-3 l+2 \vec{j}+\vec{k}}{\sqrt{14}}$
73. For two events $A$ and $B$, it is given that $P(A)=3 / 5, P(B)=3 / 10$ and $P(A / B)=2 / 3$, If $\bar{A}$ and $\bar{B}$ are the complementary events of A and B , then $\mathrm{P}(\bar{A} \backslash \bar{B})$ is
(a) $3 / 7$
(b) $3 / 4$
(c) $1 / 3$
(d) $4 / 7$
74. A machine has three parts $A, B$ and $C$ that function independently. The chance of the three parts being defective is $0.02,0.10$ and 0.05 , respectively. The machine stops working if any one of the parts becomes defective. Which of the options is closest to the probability that the machine will not stop working?
(a) 0.06
(b) 0.16
(c) 0.84
(d) 0.94
75. If $\sum_{i=1}^{n}\left(x_{1}-5\right)=20$ then what is the mean $\bar{x}$ ?
(a) $11 / 2$
(b) $2 / 11$
(c) $17 / 3$
(d) $17 / 9$
76. The value of the expression $47 C_{4}+51 C_{3}+\sum_{j=2}^{5} 52-j C_{3}$ is :-
(a) $52 C_{4}$
(b) $51 C_{5}$
(c) $53 C_{4}$
(d) $52 C_{5}$
77. What curve passes through the point $(1,1)$ and has a slope of $2 y / x$ ?
(a) Circle
(b) Parabola
(c) Ellipse
(d) Hyperbola
78. Which of the following is a solution to the differential equation $d p / d t=P(1-P)$ ?
(a) $\mathrm{P}=1 /\left(1+e^{-t}\right)$
(b) $\mathrm{P}=1 /\left(1-e^{-t}\right)$
(c) $\mathrm{P}=1 /\left(1+e^{t}\right)$
(d) $P=1 /\left(1-e^{t}\right)$
79. Consider the function $\mathrm{f}(\mathrm{x}) \frac{a^{(x)+x}-1}{\{x\}+x}$ where [.] denotes the greatest integer function. The value of $\lim _{x \rightarrow 0} f(x)$ is
(a) 0
(b) $\ln (a)$
(c) $1-a^{-1}$
(d) Limit does not exist
80. Which statement regarding the plotted function is true?

(a) $\mathrm{f}(\mathrm{a})>0, \mathrm{f}^{\prime}(\mathrm{a})>0, \mathrm{f}^{\prime}(\mathrm{a})>0$
(b) f (a) $>0, \mathrm{f}^{\prime}($ a $)<0, \mathrm{f}^{\prime \prime}($ a $)<0$
(c) $\mathrm{f}(\mathrm{a})<0, \mathrm{f}^{\prime}(\mathrm{a})<0, \mathrm{f}^{\prime}(\mathrm{a})>0$
(d) $f($ a $)>0, f^{\prime}(a)>0, f^{\prime \prime}(a)<0$
81. The value of the parameter $\alpha$ for which the function $f(x)=1+a x, \alpha \neq 0$ is the inverse of itself, is
(a) -2
(b) -1
(c) 4
(d) 2
82. The value of the derivative of the function $f(x)=|x-1|+|x-3|$, at $x=2$ is
(a) -2
(b) 0
(c) 2
(d) Not defined
83. If $y=4 x-5$ is a tangent to the curve $y^{2}=p x^{3}+q$ at $(2,3)$, then
(a) $p=2, q=-7$
(b) $\mathrm{p}=-2, \mathrm{q}=7$
(c) $p=-2, q=-7$
(d) $p=2, q=7$
84. The function $f$ defined by $f(x)=(x+2) e^{x}$ is
(a) Decreasing for all $x$
(b) Decreasing in $(-\infty,-1)$ and increasing in $(-1, \infty)$
(c) Increasing for all $x$
(d) Decreasing in $(-1, \infty)$ and increasing in ( $-\infty,-1$ )
85. The electricity bill of a certain establishment is partly fixed and partly varies as the number of units of electricity consumed. When in a certain month 540 units are consumed, the bill is Rs. 1800. In another month, 620 units are consumed, and the bill is Rs. 2040. In yet another month, 500 units are consumed. The bill for that month would be:-
(a) Rs 1560
(b) Rs 1680
(c) Rs 1840
(d) Rs 1950
86. 10 men and 15 women together can complete a work in 6 days. It takes 100 days for one man alone to complete the same work. How many days will be required for one woman alone to complete the work?
(a) 90
(b) 225
(c) 145
(d) 150
87. In an examination, $65 \%$ of students passed in Civics and $60 \%$ in History, $40 \%$ passed in both of these subjects. If 90 students failed in History and Civics both, then what is the total number of students?
(a) 600
(b) 650
(c) 700
(d) 750
88. At what price should a shopkeeper mark a radio that costs him Rs 1200 in order that he may offer a discount of $20 \%$ on the marked price and still make a profit of $25 \%$ ?
(a) Rs 1675
(b) Rs 1875
(c) Rs 1900
(d) Rs 2025
89. Who among the following is the current chairman of Insurance Regulatory Development Authority of India (IRDAI)?
(a) S.K Mohanty
(b) UK Sinha
(c) Subhash Chandra Khuntia
(d) Ajay Tyagi
90. What is India's rank in the Human Development Index report released by United Nations Development Programme (UNDP) in the year 2019?
(a) 129
(b) 143
(c) 118
(d) 106
91. Who won the Best Actor Award at Dadasaheb Phalke International Film Festival Awards 2020?
(a) Sushant Singh Rajpu
(b) Rajkummar Rao
(c) Ayushman Khurana
(d) Hrithik Roshan
92. Chandrayaan-2 Mission was launched by Indian Space Research Organisation (ISRO) aboard which Satellite Launch Vehicle?
(a) PSLV-C11
(b) GSLV Mark III
(c) PSLV - XL
(d) GSLV-F11
93. Which one among the following companies has partnered with UNESCO Mahatma Gandhi Institute of Education for Peace (MGIEP) to adopt technology in classrooms?
(a) Tata Consultancy Services
(b) Dell Technologies
(c) Microsoft
(d) Infosys
94. Om Birla is
(a) Speaker of Lok Sabha
(b) Chief Election Commissioner
(c) Famous Indian Industrialist
(d) India's envoy to Pakistan
95. "Unbreakable" is an autobiography of which Indian sports person?
(a) Sachin Tendulkar
(b) P.T. Usha
(c) M.C. Mary Kom
(d) Milkha Singh
96. UDAY is a:-
(a) Scheme related to urban youth
(b) Plan to develop urban infrastructure
(c) Plan to aid ailing electricity distribution companies
(d) Scheme for development of central universities' infrastructure
97. MGNREGA is a scheme wherein
(a) People below poverty line get free health treatment
(b) Cooking gas is supplied in Metro cities at subsidized rate to urban poor
(c) Girl child is given free education and certain amount is deposited in her account
(d) Employment and livelihood is provided to rural labour
98. Which of the following banks have been amalgamated with Punjab National Bank?
(a) Corporation Bank and Andhra Bank
(b) Syndicate Bank and Canara Bank
(c) Oriental Bank of Commerce and United Bank of India
(d) Vijaya Bank and Dena Bank
99. Given that $\frac{+\Delta \quad 0 \quad 0}{5 \Delta \Delta}$ What is the value of $\Delta$ ?
(a) 3
(b) 5
(c) 7
(d) None of these
100. Which of the following cannot be placed on the right side of the bottom scale in order to make it balance?

(a) 4 Triangle
(b) 22 Balls
(c) 2 Triangles and 10 Balls
(d) 2 Squares and 12 Balls

## ANSWER KEY

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

