1. Total No. of Questions - 100. Each Question is of three marks.
2. One mark will be deducted for every wrong answer.

## NUMERICAL ABILITY

1. Which one of the numbers is divisible by 25?
a) 303310
b) 373355
c) 303375
d) 22040
2. If $\frac{3}{5}$ of an estate be worth Rs 53,000, then the value $\frac{3}{11}$ of it is
a) Rs 150000
b) Rs 15000
c) Rs 165000
d) None of these
3. $\frac{1}{2}$ of $\frac{4}{3}$ of a number is $3 \frac{1}{2}$ of 20 . What is the number?
a) $60 \frac{2}{3}$
b) $88 \frac{1}{7}$
c) 90
d) 105
4. A boy rows a boat against a stream flowing at 2 kmph for a distance of 9 km , and then turns round and rows back with the current. If the whole trip occupies 6 hours, find the boy's rowing speed in still water.
a) 4 kmph
b) 3 kmph
c) 2 kmph
d) 5 kmph
5. A boat travels upstream from $B$ to $A$ and downstream from $A$ to $B$ in 3 hours. If the speed of the boat in still water is $9 \mathrm{~km} / \mathrm{hr}$ and the speed of the current is $3 \mathrm{~km} / \mathrm{hr}$, the distance between $A$ and $B$ is
a) 4 km
b) 8 km
c) 6 km
d) 12 km
6. Ratio of the earning of $A$ and $B$ is 4: 7respectively. If the earnings of $A$ increases by $50 \%$ and the earnings of $B$ decreases by $25 \%$ the new ratio of their earnings becomes 8:7 respectively. What are A's earning?
a) Rs. 26,000
b) Rs. 28,000
c) Rs. 21,000
d) Data inadequate
7. Seats for Maths, Physics and Biology are in the ratio of 5:7:8 respectively. There is a proposal to increase these seats by $\mathbf{4 0 \%}, \mathbf{5 0 \%}$ and $\mathbf{7 5 \%}$
respectively. What will be the respective ratio of increased seats ?
a) $2: 3: 4$
b) $6: 7: 8$
c) $6: 8: 9$
d) Cannot be determined
8. A certain sum is lent for $3 y r s$ at $10 \%$ compound interest p.a. if the C.I for the 3rd year is 242. Then what will be the S.I for $4 y r s$ ?
a) 400
b) 800
c) 600
d) 1000
9. If a principal becomes triple in $4 y r s$ at $C$.I then find in how many years it will be nine fold?
a) 8 yrs
b) 12 yrs
c) 10 yrs
d) 16 yrs
10. If $a, b, c, d, e$ are 5 consecutive odd numbers, then their average is.
a) $5(a+4)$
b) $\frac{a b c d e}{5}$
c) $5(a+b+c+d+e)$
d) $a+4$
11. The mean weight of 34 students of a school is $\mathbf{4 2}$ kg . If the weight of the teacher is included, the mean rises by $\mathbf{4 0 0}$ grams. Find the weight of the teacher (in kg).
a) 55 kg
b) 57 kg
c) 66 kg
d) 56 kg
12. If $50 \%$ of $(x-y)=30 \%$ of $(x+y)$, then what percent of $\mathbf{x}$ is $\mathbf{y}$ ?
a) $20 \%$
b) $25 \%$
c) $30 \%$
d) $40 \%$
13. There are 2885 people in a village. Out of which $40 \%$ left the village. How many people left the village?
a) 1470
b) 1731
c) 1991
d) 1750
14. $A$ and $B$ together can finish a job in 24 days, while $A, B$ and $C$ together can finish the same job in8 days. $C$ alone will finish the job in
a) 12 days
b) 14 days
c) 16 days
d) 24 days
15. A, B and C working separately can do a piece of work in 11 days, 20 days and 55 days respectively. In how many days, the work will be completed if $A$ is assisted by $B$ and $C$ on alternate days ?
a) 2
b) 6
c) 4
d) 8
16. Two train 100 meters and 120 meters long are running in the same direction with speeds of 72 km/h and $54 \mathrm{~km} / \mathrm{h}$. In how much time will the first train cross the second ?
a) 50 sec
b) 44 sec
c) 38 sec
d) 42 sec
17. Nilesh goes to school from his village at $2 \mathrm{~km} / \mathrm{hr} \&$ return back at the speed of $4 \mathrm{~km} / \mathrm{hr}$, if he takes 6 hours in all, then what is the distance between the village and the school?
a) 6 km
b) 5 km
c) 4 km
d) None of theses
18. A $\mathbf{2 0 0}$ meter long train crosses a platform of double its length in 36 seconds. What is the speed of the train in kmph?
a) 60
b) 48
c) 64
d) 66
19. The owner of a furniture shop charges his customers $15 \%$ more than cost price. If a customer paid Rs. 9039 for a sofa set, then what is the CP of sofa set?
a) 7680
b) 7860
c) 7880
d) 7660
20. A shopkeeper marks his goods $\mathbf{2 0 \%}$ above his
cost price and gives $15 \%$ discount on the marked price. Find his gain\%.
a) $2 \%$
b) $8 \%$
c) $11 \%$
d) $6 \%$
21. $A$ and $B$ can do a piece of work in 72 days. $B$ and $C$ can do it in 120 days. And $A$ and $C$ can do it in 90 days. When $A, B$, and $C$ work together. How much work is finished by them in 3 days.
a) $\frac{1}{40}$
b) $\frac{1}{30}$
c) $\frac{1}{20}$
d) $\frac{1}{10}$
22. $\frac{\frac{1}{3} \div \frac{1}{3} \times \frac{1}{3}}{\frac{1}{3} \div \frac{1}{3} \text { of } \frac{1}{3}}-\frac{1}{9}=$ ?
a) 0
b) 1
c) $\frac{1}{3}$
d) $\frac{1}{9}$
23. A train is moving with the speed of $180 \mathrm{~km} / \mathrm{hr}$. its speed (in $\mathrm{m} / \mathrm{sec}$ ) is?
a) 5
b) 40
c) 30
d) 50
24. The LCM and HCF of the numbers 28 and 42 are in the ratio?
a) $6: 1$
b) $2: 3$
c) $3: 2$
d) $7: 2$
25. The average of $7,11,15, x, 14,21,25$ is 15 then the value of $x$ is?
a) 3
b) 14.5
c) 12
d) 13.3

## REASONING AND MILITARY APTITUDE TEST

Direction- (26-30) Which is the one that does not belong to the same group
26. Sword, arrow, dagger, trident
a) Sword
b) arrow
c) dagger
d) trident
27. Yen, piece, rouble, dollar, pound
a) yen
b) piece
c) rouble
d) pound
28. Poppy, mustard, sesame, linseed, castor
a) mustard
b) sesame
c) poppy
d) castor
29. a) content
b) Bibliography
c) Press
d) Preface
30. a) Tetanus
b) Pneumonia
c) Tuberculosis
d) Hepatitis

Direction-(31-35) find the similar relation
31. Umpire: Game: : ?
a) Prodigy: Wonder
b) Chef : Banquet
c) Legislator: Electiond) Moderator: Debate
32. Tanning : Leather: : Pyrotechnics: ?
a) Bombs
b) Fireworks
c) Wool
d) Machinery
33. King : Throne : : Rider: ?
a) Chair
b) Horse
c) Seat
d) Saddle
34. Cobbler: Leather: : Carpenter : ?
a) Furniture
b) Wood
c) Hammer
d) Chair
35. Dark : Light : : ?
a) Polluted: Contaminated
b) Accrued: Accumulated
c) III : Diseased
d) Hot: Cold
36. $A$ is the brother of $B, B$ is the brother of $C$. $D$ is the father of $A$. Based on these three statements. Which of the following statements cannot be definitely true?
a) $B$ is the brother of $A$
b) $B$ is the son of $D$
c) $A$ is the brother of $C$
d) $C$ is the brother of $A$
37. Vinay is taller then Hansika, Hansika is taller than Abhay, Aalok is taller than Ashok and Ashok is taller than Vinay. Who is the Shortest in the Group?
a) Aalok
b) Ashok
c) Hansika
d) Abhay
38. a-c a-b c-bc c-bca
a) $b b a b$
b) $\mathrm{b} a \mathrm{~b} a$
c) $a \mathrm{a} b \mathrm{~b}$
d) $\mathrm{bba} a$
39. Statements: Some books are lamps. Some lamps are rods.
Conclusion:
I. Some books are rods.
II. No rod is either book or lamp.
III. All rods are lamps.
a) Only either I or II
b) Only I and III follow
c) Only II and III follow
d) None follows
40. Statements: All tables are boxes. Some boxes are windows.
Conclusion:
I. Some tables are windows.
II. All boxes are tables.
III. No window is table.
a) Non follows
b) Only either I or III follows
c) Only both II and III follow
d) Only I and II follow
41. Which of the following diagrams indicates the best relation between Man, Worker and Garden?
a) 0
b) $\bigcirc \bigcirc$
c) $\bigcirc \bigcirc$
d) 8
42. Which of the following diagrams indicates the best relation between Males, Cousins and Nephews?
a)

b)

c)

d)

43. Relationship among the closes given below. Factory, Machinery, Product

(a)
(b)
(c)
(d)
44. Travellers, Train, Bus

(a)
(b)
(c)
(d)

Direction (45-46) find the odd one out
45.

(a)

(b)

(c)
(d)
46.

47. Find the similar figure.

Question Figures


Answer Figures

48. Complete the figure.

x

(a)

(b)

(c)

(d)
49.

(a)

(b)

(c)

(d)

50.

51. Complete the given series Question figures


Answer Figures

a)

b)

c)
d)

Direction (52-53)- From the given answer figures, select the one in which the question figure is hidden/embedded.
52.

(X)

(a)

(b)

(c)

(d)
53. Question Figure


Answer Figures



C)

d)
34. A waiter's salary consists of his salary and tips During one week his tips were $5 / 4$ of his salary. What fraction of this income came from tips.
a) $4 / 9$
b) $5 / 4$
c) $5 / 8$
d) $5 / 9$
55. What is the mirror image of the given figure? Questions Figures


Answer Figures


## ENGLISH LANGUAGE

DIRECTION (Qs. 56-58): Choose the synonyms/ antonyms of the given words.
56. Forsake
a) Hold
b) Renounce
c) Firm
d) Transparent
57. Jejune
a) Interesting
b) Exciting
c) Boring
d) Joyful
58. Hapless
a) Unfortunate
b) Lucky
c) Fortunate
d) Strife

DIRECTION (Qs. 59-60): Choose the synonyms/ antonyms of the given words.
59. Occult
a) Intelligent
b) Dull
c) Latent
b) Ambiguous
60. Mollify
a) Appease
b) Assuage
c) Irrilate
d) III-fated

DIRECTION (Qs. 61-63): In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'
61. The cattle (a) / is grazing (b)/in the ground.(c) / No error (d)
62. Each of the girls (a)/must carry (b) /their own bag. (c) /no error (d)
63. Gajendrahas sold (a) / many of his furniture's. (b) / in the Sunday Market ( c) / No error (d)

DIRECTION (Qs. 64-65): In the following passage some of the words have been left out. Read the passage carefully
The (64) $\qquad$ playing of loud music has led the angry residents of this vicinity to file a police com-plaint and move court against the organizer's lack of for (65) $\qquad$ the people's need for a peace-ful neighbour-hood.
64. a) peaceful, thought
b) abrupt, hope
c) incessant, consideration
d) fashionable, friendliness
65. a) peaceful, thought
b) abrupt, hope
c) incessant, consideration
d) fashionable, friendliness

DIRECTION(Qs. 66-70): Read the passage carefully and choose the best answer to each question out of the four alternatives.
Nature writing is nonfiction or fiction prose or poetry about the natural environment. Nature writing encompasses a wide variety of works, ranging from those that place primary emphasis on natural history facts (such as field guides) to those in which philosophical interpretation predominate. It includes natural history essays, poetry, essays of solitude or escape, as well as travel and adventure writing.
Nature writing often draws heavily on scientific information and facts about the natural world; at the same time, it is frequently written in the first person and incorporates personal observations of and philosophical reflections upon nature.
Modern nature writing traces its roots to the works of natural history that were popular in the second half of the 18th century and throughout the 19th. An important early figure was the "parson-naturalist" Gilbert White (1720-1793), a pioneering English naturalist and ornithologist. He is best known for his Natural History and Antiquities of Selborne (1789).
66. Nature writing emphasizes on
i. Historical facts about the nature
ii. Philosophical interpretations of the nature
iii. Scientific information and facts

Choose the most appropriate
a) None of the above
b) Only (i) and (ii)
c) All the above
d) Only (i) and (ii)
67. Based on the passage what is period to which the modern nature writing can be traced to
a) 1850 till 1999
b) 1850 to 1899
c) 1750 till 1899
d) 1750 till 1900
68. Which statement summarizes the above passage
a) The passage talks about the life and lessons of Gilbert White, a profound naturalist and ornithologist.
b) The passage talks about how the nature writing is missing in the modern era and needs to be revived.
c) The passage talks about from where the writers draw inspiration for nature writing, and how its importance is diminishing in the modern era.
d) The passage talks about what nature writing is, the different types of nature writing, its style, and about the roots and pioneer of modern nature writing.
69. Which word aptly describes the word "reflections" as used in the passage
a) Opinion
b) Reproduction
c) Images
d) None of the above
70. According to the passage, what kind of works are written as part of nature writing?
i. Natural history essays and essays of solitude or escape
ii. Poetry
iii. Travel and adventure writing

Choose the correct options
a) Only (i)
b) Only (i) and (ii)
c) Only (ii) and (iii)
d) All the above

DIRECTION (Qs. 71-75.): Fill up the blanks with the given options
71. He will impart no information $\qquad$ anyone.
a) from
b) for
c) with
d) to
72. According to the weather $\qquad$ it is going to be cloudy today.
a) announcement
b) indication
c) prediction
d) forecast
73. Jyoti refused to be ......... by her long illness.
a) dispatched
b) dispirited
c) dispersed
d) dispensed
74. The villagers $\qquad$ the murder of their leader by burning the police van.
a) protested
b) avenged
c) mourned
d) consoled
75. He was ......... by nature and so avoided all company.
a) cordial
b) anti-social
c) gregarious
d) timid

DIRECTION (Qs.76-80): Choose the most appropriate options that explains the correct meaning of the following idiom / phrase:
76. Miss the boat
a) Go to sleep
b) It's too late
c) Doing a good job
d) Calm down
77. That's the last straw
a) Patience has run out
b) To get upset
c) Sick
d) Get out of control
78. Break a leg
a) To get something
b) Something common
c) Good luck

## d) Consent

79. Hit the sack
a) Go to sleep
b) Good luck
c) Winning something
d) Out of work
80. On the ball
a) Outstanding effects
b) Doing a good job
c) Passive behaviour
d) Assurance

## GENERAL AWARENESS

81. Which among the following is a place of Indus Valley Civilization located in Larkana district of Sind province in Pakistan?
a) Alamgirpur
b) Harappa
c) Rangapur
d) Mohenjo-Daro
82. The main male God was worshipped by Indus people.
a) Pashupati Shiva
b) Vishnu
c) Brahma
d) Indra
83. Which empire was rulled in Bengal?
a) The Palas
b) The Pratiharas
c) The Rashtrakutas
d) The Chola
84. Which of the following statement is not correct?
a) Dharmpala was the founder of Pala dynasty.
b) Vikramashila University was founded by Dharmpala.
c) Bhoja was the ruler of Pritihara Empire.
d) Krishna III was the last Rashtrakuta king.
85. Which of the following cult was popularised by Chaitanya?
a) Shiva Cult
b) Krishna Cult
c) Eknathwad
d) All of the above
86. Who among the following was/were not disciples of Ramananda?
a) Kabir \& Raidas
b) Sena \& \& Sadhana
c) Dhanna \& Naraharai
d) Tulsidas \& Mirabai
87. Which of the following leader is correctly matched with their magazine?

|  | Person | Magazine |
| :--- | :--- | :--- |
| A. | Devendranath Tagore | Young India |
| B. | Rabindranath Tagore | Patrika |
| C. | M. K. Gandhi | Gitanjali |
| D. | B. G. Tikak | Kesari |

88. Which of the following article of the Indian Constitution deals with the constitution of the

## Parliament of India?

a) Article 73
b) Article 78
c) Article 79
d) Article 72
89. Which of the following article deals with the composition of council of states (Rajya sabha) and the manner of election of its members?
a) Article 82
b) Article 81
c) Article 90
d) Article 80
90. Which of the following are the discretionary powers of the Governor?
a) Selection of Chief Minister
b) Provide advice to the President regarding President's rule in the concerned state.
c) Returning back the bill to the State legislature for reconsideration.
d) All the above
91. National emergency proclamation is issued in case of?
a) Armed rebellion
b) External aggression
c) War
d) All the above
92. Which one of the following rivers is also called the 'Sorrow of Bengal'?
a) The Gandak
b) The Son
c) The Kosi
d) The Damodar
93. The river Narmada origin from--
a) Satpura
b) Brahmagiri
c) Amarkantak
d) Slopes of the Western Ghats
94. Match List-I (Atomic Power Plants) with List-II (States) and select the correct answer using the codes given below the lists:

| List - I |  | List - II |  |
| :--- | :--- | :---: | :--- |
| 1 | Narora | A | Uttar Pradesh |
| 2. | Tarapur | B | Rajasthan |
| 3. | Rawatbhata | C | Tamil Nadu |
| 4. | Kalpakkarn | D | Maharashtra |

Codes:

|  | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ |  | $\mathbf{A}$ | $\mathbf{B}$ | C | D |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) | 1 | 2 | 3 | 4 | b) | 4 | 3 | 2 | 1 |
| c) | 1 | 3 | 4 | 2 | d) | 2 | 3 | 1 | 4 |

95. 1Joule is Equal to
a) $10^{\wedge} 3$ ergs
b) $10^{\wedge} 6$ ergs
c) $10^{\wedge} 7 \mathrm{ergs}$
d) $10^{\wedge} 5$ ergs
96. Optical fiber works on the principle of
a) Interference
b) Refraction
c) Total internal reflection
d) Scattering
97. What are those reflex actions called which involve brain?
a) Reflex arcs
b) Cerebral reflexes
c) Spinal reflexes
d) None of the above
98. The chemical substances which coordinate the activities of living organisms and also their growth are called:
a) Hormones
b) Blood
c) Sodium
d) Cytoplasm
99. Where is the headquarters of the 'National AIDS Control Organisation (NACO)' located?
a) Mumbai
b) Delhi
c) Hyderabad
d) Kolkata
100. The first edition of National Youth Parliament Festival was held in which year?
a) 2015
b) 2017
c) 2019
d) 2020

## ANSWER KEY

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

