PART A
General Mental Ability, Administrative and Psychological Abilities

1. If 2 is added to the first digit of each of the numbers, how many numbers thus formed will be divisible by three?

Two

2. The following question is based on the diagram given below in which the rectangle stands for illiterate, the square stands for employed, the triangle stands for farmer and the circle stands for the backward. Which of the following statements is not true?

Some backward farmers who are employed are not illiterate.
3. Identify the missing square.

4. \text{ba\_ba\_bac\_acb\_cbbc}

   \text{ccba}
5. A, B, N, C, D, O, E, F, P, ?, ?, ?
   G, H, Q

6. If BAG = 71, then VICE = ?
   69

7. In a certain coding system, ‘SHEEP’ is written as ‘GAXXR’ and ‘BLEAT’ as ‘HPXTN’. How can ‘SLATE’ be written in that same coding system?
   GPTNX

8. Each of these questions is based on the following information:
   M % N means M is the son of N. M @ N means M is the sister of N. M $ N means M is the father of N. Which of the following shows the relation that C is the granddaughter of E?
   C @ B % F % E
9. If $P + Q$ means $P$ is the husband of $Q$, $P \div Q$ means $P$ is the sister of $Q$ and $P \times Q$ means $P$ is the son of $Q$, which of the following shows $A$ is the daughter of $B$?

$A \div D \times B$

10. How many days are there in $x$ weeks $x$ days?

$8x$

11. At what time between 5:30 and 6 will the hands of a clock be at right angles?

$43 \frac{7}{11}$ min. past 5

12. Find the remainder when $2^{89}$ is divided by 89.

2
13. What is the minimum number of square marbles required to tile a floor of length 5 metres 78 cm and width 3 metres 74 cm?

187

14. Income of Rahim is Rs. 12000 per month and that of Ami is Rs. 191520 per annum. If the monthly expenditure of each of them is Rs. 9960 per month, find the ratio of their savings.

17:50

15. In a bag, there are a certain number of toy-blocks with alphabets A, B, C and D written on them. The ratio of blocks A:B:C:D is in the ratio 4:7:3:1. If the number of ‘A’ blocks is 50 more than the number of ‘C’ blocks, what is the number of ‘B’ blocks?

350

16. The percentage of values in a set of values which are less than (more than) the median value is

50 percent
17. In case of 15% trimmed mean, the percentage of observations utilised is

None of the above

18. What should come in place of the question marks in $\frac{\sqrt{?}}{2.56} = \frac{100}{?}$?

64

19. The least common multiple of two numbers is 168 and highest common factor of them is 12. If the difference between the numbers is 60, what is the sum of the numbers?

108

20. Suresh invested Rs. 500 in SBI for 2 years. He also invested Rs. 300 in ICICI for 4 years. At the end he received Rs. 220 from both banks as simple interest. What must have been the rate of interest?

10%
21. If X% of Y is 100 and Y% of Z is 200, find the relation between X and Z.

\[ Z = 2X \]

22. A man can do a piece of work in 5 days, but with the help of his son, he can do it in 3 days. In what time can the son do it alone?

\[ 7\frac{1}{2} \text{ days} \]

23. Two trains of length 150 m and 170 m respectively are running at the speed of 40 km/hr and 32 km/hr on parallel tracks in opposite directions. In what time will they cross each other?

\[ 16 \text{ seconds} \]

24. External dimensions of a wooden cuboid are 30 cm × 25 cm × 20 cm. If the thickness of the wood is 2 cm all around, find the volume of the wood contained in the cuboid formed.

\[ 6264 \text{ cm}^3 \]
25. A 5 cm cube is cut into as many 1 cm cubes as possible. What is the ratio of the surface area of the larger cube to that of the sum of the surface areas of the smaller cubes?

\[ 1:5 \]

26. In the given figure, lines PQ, RS, TV intersect at O. If \(x:y:z = 1:2:3\), then find the values of \(x, y, z\).

\( x=30^\circ, y=60^\circ, z=90^\circ \)

27. Find the supplement of the angle \(4/5\) of \(90^\circ\).

\( 108^\circ \)
28. The value of
\[
\frac{1}{1+\sqrt{2}} + \frac{1}{\sqrt{2}+\sqrt{3}} + \frac{1}{\sqrt{3}+\sqrt{4}} + \cdots + \frac{1}{\sqrt{15}+\sqrt{16}}
\]

3

29. For what value of \(*\), the statement
\[
\frac{*}{15} \cdot \frac{*}{135} = 1 ?
\]

45

30. A division of a company consists of seven men and five women. If two of these twelve employees are randomly selected as representatives of the division, what is the probability that both representatives will be female?

5/33

31. Which of the following makes measuring Emotional Intelligence challenging?

(1) and (2) only
32. JURISPRUDENCE is coded in a code as LWTKURTWFPGPEG. What is the code for AMAZINGLY under the same rule?

COCBKPINAA32

33. At the end of a busy day at work, you accidentally send an e-mail containing an attachment with some confidential client information to the wrong person. Which of the following would be the best thing to do?

Immediately send a follow up email to the “wrong” person, or if possible telephone them explaining your mistake. Then send the email to the correct person.

34. Everyone in your department has received a new computer system except for you. What would you do? Please choose the most effective response.

Assume this is a mistake and speak to your manager.
35. If \( \times \) is replaced with +, \( \div \) is replaced with \( \times \), \( - \) is replaced with \( \div \), + is replaced with \( - \), then 
\[
50 \div 10 \times 75 - 25 + 7 = ?
\]

496

36. Identify the wrong number in the following series.

3, 27, 75, 150, 243, 363

150

37. It was Saturday on March 16, 2019. What will be the day of the week on March 16, 2025?

Sunday

38. Pramod walked 100 metres towards East, took a right turn and walked 400 metres. Then he took a left turn and walked 300 metres. In which direction is he now from the starting point?

South-East
Directions: The following pie chart indicates the expenditure of a country on various sports during a particular year. Study the pie chart and answer questions number 39 to 43.

39. The ratio of the total expenditure on football to that of expenditure on hockey is

1 : 1

40. If the total expenditure on sports during the year was Rs.1,20,00,000, how much was spent on basketball?

Rs. 15,00,000
41. The chart shows that the most popular game of the country is Cricket

42. Out of the following, country’s expenditure is the same on Golf and Basketball

43. If the total expenditure on sport during the year was Rs.1,50,00,000, the expenditure on cricket and hockey together was Rs.60,00,000
44. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet of X is folded towards left at the dotted line.

![Diagram]

X 1 2 3 4

2

45. Find the number of squares in the given figure.

![Diagram]

24
46. Which digit will appear on the face opposite to the face with number 4?

![Image of a dice with 2, 3, 5, 6 on one side and 1, 4 on the other side]

46. 4 తొమ్మిది చిత్రంలో అలంపిన మీద నలేమో వింతి?

![Image of a dice with 2, 3, 5, 6 on one side and 1, 4 on the other side]

47. In a drawer there are 4 white socks, 3 blue socks and 5 grey socks. Two socks are picked randomly. What is the possibility that both the socks are of grey colour?

$$\frac{5}{33}$$

47. అనే కట్టల్లో 4 వేల స్కాక్సి, 3 నీలం స్కాక్సి, 5 బూడిడ రంగు స్కాక్సి ఉనాయి. రెండు రెండు స్కాక్సి పొంటమగా తీసుకోవడానికి ఉన్నది?

$$\frac{5}{33}$$

48. A can do a piece of work in 20 days. He works at it for 5 days and then B finishes it in 10 more days. In how many days will A and B together finish the work?

8

48. A ఒక్ ప్నిని 20 రోజులలో చేయగలడు. అతడు ఆప్నిని 5 రోజుల పనిచేశాక్ సేవిత అతడు బాన్ని 10 రోజులు ప్రామాణికంగా ప్రారంభించాడు. అయితే A మొత్తం B ని ఎంత రోజుల ఎవరి ప్రారంభించాడు?

8
49. A person lives in a remote village which is quite far from the city and the bus stop is also three hours away from that village. The villager’s landlord is trying to occupy the poor villager’s land by force. You are the District Magistrate and busy in a meeting called by a State Minister. The villager has come all the way, by bus and on foot, to see you and give an application seeking protection from the powerful landlord. The villager keeps on waiting outside the meeting hall for an hour. You come out of the meeting and are rushing to another meeting. The villager follows you to submit his application. What would you do?

Call one of your senior subordinate officers and ask him/her to solve the villager’s problem.
50. While travelling in an Andhra Pradesh registered commercial taxi from Amaravati to an adjacent city (another State), your taxi driver informs you that as he has no permit for running the taxi in that city, he will stop at its Transport Office and pay the prescribed fee of <50 for a day. While paying the fee at the counter you find that the transport clerk is taking an extra <50 for which no receipt is being given. You are in a hurry for an office meeting. Under such circumstances, what would you do?

Take note of the incident and subsequently report the matter to the concerned authorities.

51. Anjali has been a very bright student in class but in the recent examination she has performed very poorly. She is not even behaving well in the class as well as with her friends. You come to know that she is going through a tragic phase as her father died in a car accident recently. The school principal has asked you to call her mother to inform about her poor performance. In such a situation what will you do?

You will tell her mother that Anjali's poor performance is due to the effect of her father's demise and also counsel her mother how to help her child.
52. You are working as an officer with a government financial institution. As a team leader of a group you have been sent to a village to identify the grass-root financial problems of the villagers. You will

Submit a report after consulting all the group members giving all the details and viewpoints of all members.

53. A religious fair is going to happen in Vijayawada. As a Police Officer of that area you have been asked to organize a stampede-free religious fair around the holy shrine. You will:

Make proper arrangements to control the crowd by deploying police officers at various places.
54. The communication process consists of several steps. In __________, the receiver interprets the message and translates it into meaningful information.

Decoding

55. By choosing to speak from the floor instead of the dais, a speaker can show the audience a sense of

Equality

56. Emotional intelligence is

The ability to monitor one's own and others' feelings and one's thinking and actions
57. What is intuitive decision making based on?
   Instinct

58. Critical thinking concerns
   Determining the quality of our beliefs

59. UNIVERSAL is coded in a code as VRUILSANE. What is the code for ABOLISHED under the same rule?
   LSAODHEBI

60. In a particular code, HOSPITALS is coded as HSOLSAPTI. The code of BIOLOGICALS will be
   BSILOALCOIG
PART B (i)
Science and Technology

61. The National Chemical Laboratory has developed a nanogenerator that could produce electric power when pressure is applied. Which of the following principles or technology is used in this?

Piezoelectric effect

62. Which of the following is the new instrument developed by NASA that could search for signatures of life on Mars?

Bili

63. Common salt besides being used in kitchen can also be used as the raw material for making the following:

(i) Washing soda
(ii) Bleaching powder
(iii) Baking soda
(iv) Slaked lime

Codes:

(i), (ii) and (iv)
64. Magnification produced by a rear view mirror fitted in vehicles is less than one.

65. Which of the following phenomena of light are involved in the formation of a rainbow?

   Refraction, dispersion and internal reflection

66. Which of the following was the first digital wallet company in India?

   MobiKwik

67. ‘OneerTM’ is an Innovative technology for “Drinking Water Disinfection System”
68. Which of the following is a “Fire and Forget” anti-tank missile?

Nag

69. IPv4 and IPv6 are addresses used to identify computers on the Internet.

Number of bits required for IPv4 address is less than number of bits required for IPv6 address

70. The first computer virus is known as

Creeper Virus

71. The use of mobile and wireless applications (e.g., SMS, apps, wearable devices, remote sensing and use of social media, such as Facebook, Twitter and Instagram) for health related purposes describes ______.

m-health
72. What is the full form of Li-Fi network?
   
   Light Fidelity

73. MoU was signed between ISRO’s Telemetry Tracking Command Network and which other organisations on August 6, 2017?
   
   All of the above

74. Where will NASA send its next-generation atomic clock in 2019?
   
   Space

75. ScatSat is for
   
   Weather monitoring

76. What was the Chandrayaan I?
   
   Lunar Probe
77. ISRO opened its 1st visitor’s gallery to watch rocket launches at Andhra Pradesh’s Sriharikota. Its capacity is 5,000.

78. What is ‘Varunastra’?
   A torpedo

79. Jagadish Chandra Bose Centre for Advanced Technology was established with the help of DRDO.

80. Which of the following DRDO’s missile is used to destroy enemy radars and communication facilities?
   Anti-radiation missile.

77. ఇస్రా తన మొదటి ప్రాయటక్ుల గాలరీని ఆంధ్రప్రదేశ్ లో నిశీరహర కోటాలో రాకెట్ లాంచ్ చూడటానిక్ అనుమ్తిస్ోు ంది. దాంటి ఎంత మ్ంది ప్డతార్త?

78. వసానాస్త్ అంటే ________.

79. జగదీశ్ చంద్ర బోస్ సంస్థ అడవీ టెకనాలజి ఎవర ఆహారంతో ఏరపట చేయబడుతోంది?

80. అంటి-రాడియిసన్ మిసిల్ యొక్క ఏ మిసిల్ వాడతార్త?
81. Which materials are used for Superheater tubes?
   Chromium Molybdenum

82. Which is the first State in India to make roof-top rainwater harvesting compulsory for all the houses?
   Tamil Nadu

83. How is Asthma caused in human beings?
   Because of air pollution

84. Two biodiversity hot-spots in India are
   Eastern Himalayas and Western Ghats

85. The Statue of Liberty is green because of
   Oxidized copper
86. A device used to measure the amount of moisture in the atmosphere is called a

Hygrometer

87. The noble gas used for the treatment of cancer is

Radon

88. The Earth’s atmosphere is divided into layers based on the vertical profile of

Air temperature

89. The broad, green part of the leaf is called

Lamina or blade

90. The disease “Itai Itai” is caused by

Cadmium
PART B (ii)
Current Events of Regional, National and International Importance

91. MERA India has been launched to eliminate malaria from India by which year?

2030

92. Divyansh Singh Panwar, who secured 2020 Tokyo Olympic Quota, is associated with which field?

Shooting

93. Where is the headquarters of Centre for Cellular and Molecular Biology (CCMB) located?

Hyderabad

94. The world’s tallest 131 ft indoor waterfall has opened in which of the following countries?

Singapore
95. The London School of Economics and Political Science (LSE) has established a new academic position in honor of which Indian-born philosopher and economist?

Dr. Amartya Sen

96. Which State Government has reduced the tenure of Lokayukta from eight years to five years?

Rajasthan

97. According to Forbes billionaire list 2019, who is the world’s wealthiest person?

Jeff Bezos

98. Who has been appointed as the head of the mediation panel on Ayodhya’s Ram Janmabhoomi – Babri Masjid land dispute case?

Justice F.M.I. Kalifulla
99. Indian archaeologists recently unearthed a rare life-sized stucco sculpture from a Buddhist site in Telangana.

100. Which is the correct descending order of rice producing States in India?

   West Bengal, Uttar Pradesh, Punjab and Andhra Pradesh

101. Which of the following statements is not correct?

   India is the biggest producer of vegetables in the world.

102. The Global Business Summit 2019 was held in New Delhi.
103. Which committee of UNSC designated Pakistan-based Jaish-e-Mohammad Chief Masood Azhar as a global terrorist?

1267 Committee

104. The Supreme Court of India has removed C.B.I Director Ranjit Sinha from 2G Case investigation

105. The last captive white tiger named Bajirao died recently at Sanjay Gandhi National Park

106. Different names of cyclones and places affected are given below. Match the following:

| Cyclone Ockhi | Andhra Pradesh | I |
| Cyclone Gaja | Kerala | II |
| Cyclone Luban | Somalia | III |
| Cyclone Titli | Arabian Peninsula | IV |

II III IV I
According to a recent research study, Global warming can wipe out two times more ocean-dwelling species than land and dwelling species from habitats. This study was conducted by Rutgers University in U.S.

To provide reservations to economically weaker sections, the Lok Sabha has passed the following amendment bill.

124th Constitutional Amendment Bill

The Union Cabinet has approved amendment to the POCSO Act recently. What is the full form of the POCSO?

Protection of Children from Sexual Offences

On the occasion of World Press Freedom Day, the UNESCO conferred World Press Freedom Prize 2019 awarded to two Myanmar journalists, who reported on alleged human rights violations in Myanmar. They are

Kyaw Soe Oo and Wa Lone
111. A science teacher Peter Tabichi has won the prestigious Global Teacher Prize 2019, which honours the world’s best teacher. He belongs to Kenya.

112. The Asian Competitiveness Institute (ACI) has released the Ease of Doing Business Rankings for Indian States. Identify the States in descending order:

Andhra Pradesh, Maharashtra and Delhi

113. Andhra Pradesh has topped Ease of Living Index Rankings under AMRUT in 2018. It was followed by Odisha and Madhya Pradesh.

114. According to UNCTAD’s Trade and Development Report (TDR) 2017, one of the following statements is not correct:

- India and China at their current levels of growth, they will become “growth poles” for global economy in near future.
115. Union Government has constituted a six member committee to look at selling as many as 149 State-owned gas and oil fields. The committee will be headed by Rajiv Kumar.

116. Who is the winner of United Nations Human Rights Prize 2018, in the field of activities for the rights of Women and Girls?

Ms. Rebeca Gyumi

117. How many Municipal Corporations are there in Andhra Pradesh?
118. Who is the first IPS and ITBP woman officer to successfully conquer the South Pole?

   Aparna Kumar

119. Prana Raksha web application has been developed by the Chittoor Police. The app has been designed

   To save the lives of road accident victims and reach out to women in distress.

120. Who has taken charge as the first Chief Justice of Andhra Pradesh in Vijayawada?

   Justice Praveen Kumar