## Numerical Aptitude (1-25)

### Directions: For each question, four alternatives have been given. Choose the best alternative

- **1.** A 240-metre-long train crosses a platform having length of twice of the Train's length in 40 seconds. What is the speed of the train?
  - (A) 8 metres/sec (B) 22 meters/sec (C) 18 meters/sec (D) 16 metres/sec

2. Two trains start at the same time from points A and B towards each other and after crossing each other, they take 25 hours and 9 hours in reaching points B and A, respectively. Find the ratio of speeds of trains starting from A to that of starting from B.

(A) 5:3 (B) 3:5 (C) 4:5 (D) 5:4

- **3.** A train crosses a platform in 30 seconds and a pole in 18 sec. If speed of train is 45 km/hr, then find the length of platform.
  - (A) 205 m (B) 120 m (C) 150 m (D) 155 m
- Ashok and Mohan can do a piece of work in 12 days. Mohan and Binod together do it in 15 days. If Ashok is twice as good a workman as Binod. In how much time will Mohan alone can do the work?
   (A) 45 days

(A) 15 days (B) 20 days (C) 25 days (D) 35 days

- 5. Two pipes X and Y can fill a tank in 6 hours and 9 hours respectively. If they are turned on alternately for one hour each starting with X, then what is the time taken to fill the tank?
  - (A) 5.25 hours (B) 6.66 hours (C) 7 hours (D) 9 hours
- 6. The ratio between the present ages of Raj & Ravi is 3:7, respectively. After 4 years, Ravi's age will be 39 years. What was Raj's age 4 years ago?
  - (A) 12 Years (B) 13 Years (C) 19 Years (D) 11 Years
- 7. A started a business. After 4 months from the start of the business, B and C joined him. The ratio of the investments of A, B and C was 4: 6: 5. If A's share in annual profit was Rs.250 more than that of C, what was the total annual profit earned?
  - (A) Rs.3740 (B) Rs.3910 (C) Rs.4250 (D) Rs.4900
- 8. A trader has 600 kg of rice, a part of which he sells at 15% profit and the remaining quantity at 20% loss. On the whole, he incurs an overall loss of 6%. What is the quantity of rice he sold at 20% loss?
  - (A) 250 kg (B) 320 kg (C) 420 kg (D) 360 kg
- 9. A water tank has three taps A, B and C. A fills four buckets in 24 minutes, B fills 8 buckets in 1 hour and C fills 2 buckets in 20 minutes. If all the taps are opened together a full tank is emptied in 2 hours. If a bucket can hold 5 liters of water, what is the capacity of the tank? (Taps can be used inlet as well as outlet.)

(A) 140 liters (B) 240 liters

(C) 110 liters

(D) 160 liters

**10.** M said to N —I am twice as old as you were when I was as old as you are the sum of their ages is 63 years. Find the difference of their ages.

(A) 27 years (B) 21 years (C) 9 years (D) 6 years

- **11.** In 120 litres of mixture of milk and water, water is only 25%. The milkman sold 20 litres of this mixture and then he added 16.2 litres of pure milk and 3.8 litres of pure water in the remaining mixture. What is the percentage of water in the final mixture?
  - (A) 21% (B) 22% (C) 23% (D) 24%
- **12.** Sharma bought 963 articles and sold 900 of them for the price he paid for 963 articles. He sold the remaining articles at the same price per article as the other 900. The percentage gain on the entire transaction is
  - (A) 7% (B) 8% (C) 9% (D) 10%



- **13.** A and B can independently finish a piece of work in 36 days and 45 days respectively. They started working together and after few days A left. After that B could finish the remaining work in 36 days. After how many days of working did A leave?
  - (A) 6 days (B) 5 days
  - (C) 3 days (D) 4 days
- **14.** A person was given a salary increment of 25%, then again after one month he was given another increment of 25%. Now what percent extra salary does he get compared to his initial salary?
  - (A) 50% (B) 55.5%
  - (C) 56.25% (D) 64%
- 15. (935421 × 625) =?
  - (A) 575648125 (B) 584638125
  - (C) 584649125 (D) 585628125
- **16.** A grocer has a sale of Rs. 6435, Rs. 6930, Rs. 7522, Rs. 7230 and Rs. 8500 for 5 consecutive months. How much sale must he have in the sixth month so that he gets an average sale of Rs. 6500?
  - (A) Rs. 4183 (B) Rs. 5991
  - (C) Rs. 6001 (D) Rs. 6991
- **17.** The age of Sachin is 4 times that of his son. Five years ago, Sachin was nine times as old as his son was at that time. The present age of the Sachin is
  - (A) 25 years (B) 36 years
  - (C) 32 years (D) 48 years
- **18.** A bag contains 6 black and 8 white balls. One ball is drawn at random. What is the probability that the ball drawn is white?

(A) 3/4 (B) 4/7 (C) 1/8 (D) 9/52

**19.** A man on tour travels first 160 km at 64 km/hr and the next 160 km at 80 km/hr. The average speed for the first 200 km of the tour is

(A) 35.55 km/hr (B) 36 km/hr (C) 44.44 km/hr (D) 40.11 km/hr

- **20.** The average of 25 results is 18. The average of first twelve of them is 14 and that of last twelve is 17. Find the thirteenth result.
  - (A) 87 (B) 78 (C) 49 (D) 55
- **21.** On 8<sup>th</sup> Dec. 2007 Saturday falls. What day of the week was it on 8 Dec. 2006?

(A) Sunday (B) Thursday (C) Tuesday (D) Friday

22. The angle between the minute hand and the hour hand of a clock when the time is 8.30, is

(A) 80° (B) 75° (C) 60° (D) 105°

**23.** A sum of Rs. 12,500 amounts to Rs. 15,500 in 4 years at the rate of simple interest. What is the rate of interest?

- (A) 3%
   (B) 4%
   (C) 5%
   (D) 6%

   **24.** 65% of ? = 20% of 422.50
  - (A) 84.5 (B) 130 (C) 139.425 (D) 200
- **25.** A rectangular parking space is marked out by painting three of its sides. If the length of the unpainted side is 9 feet, and the sum of the lengths of the painted sides is 37 feet, then what is the area of the parking space in square feet?
  - (A) 46 (B) 81 (C) 126 (D) 252



	General Knowledge (26-40)							
26.	49 <sup>th</sup> Annual Meeting of the Asian Development Bank (ADB) held at							
	<ul><li>(A) Paris (France)</li><li>(C) Frankfurt (German</li></ul>	y)	• • •	London (England New Delhi (India)	,			
27.	ISRO Chairman Dr. K. Sivan has announced that the organization is well prepared to meet the targets of launching Gaganyaan manned mission to outer space by							
1	<ul><li>(A) December 2020</li><li>(C) December 2022</li></ul>		· · ·	December 2021 December 2023				
28.	Indira Gandhi Centre fo	or Atomic Research, estat	olishe	ed in 1971, is locat	ed at?	?		
	(A) Indore	(B) Kolkata	(C)	Trombay	(D)	Kalpakkam		
29.	People for the Ethical T (A) UK	reatment of Animals (PE (B) Germany		s animal rights org Canada		tion based in- USA		
30.	Which river is known as	s the 'Chandrabhaga' in H	limad	chal Pradesh?				
	<ul><li>(A) Ravi</li><li>(C) Sutlej</li></ul>		• • •	Chenab Jhelum				
31.	The First Battle of Pani	pat was fought between						
	<ul><li>(A) Hem Chandra and</li><li>(C) Humayun and She</li></ul>		• • •	Babar and Rana Babar and Ibrahir	•			
32.	international public hea	The World Health Organization is a specialized agency of the United Nations that is concerned with international public health. It was established on which of the following year?						
	(A) 1948	(B) 1945	(C)	1992	(D)	1913		
33.		ted to which of the followi						
	(A) Chess	(B) Shooting	(C)	Boxing	(D)	Archery		
34.	Earth Summit (Save Ea	, , ,			(D)			
	(A) UNESCO	(B) UNCED	( )	WHO	( )	UNICEF		
35.		has become India's bigge						
00	(A) Saudi Arabia	(B) Iraq		Iran	(U)	The UAE		
36.	(A) May 8	bserved on which of the (B) January 12		March 18	(D)	April 17		
37.	What is the meaning of		(0)		(0)	, phi m		
07.	(A) Payees		(B)	Products		Уx		
	(C) Payments		• •	Pending		$\mathbf{V}$		
38.	. Who among the following is not a recipient of Bharat Ratna?							
	<ul><li>(A) Vinobha Bhave</li><li>(C) Lal Bahadur Shastri</li></ul>			<ul><li>(B) Sardar Vallbhabhai Patel</li><li>(D) Dr.S. Radhakrishnan</li></ul>				
39.	Which of the following organisation releases India's Financial Stability Report?				?			
	<ul><li>(A) Finance Ministry</li><li>(C) Reserve Bank of Ir</li></ul>	(B) International Monetary Fund (D) State Bank of India						
40.	What is full form of NIT	I Aayog?						
	<ul><li>(A) National Institution</li><li>(B) National Institute for</li><li>(C) National Institution</li></ul>	or Transforming in India						

(C) National Institution of Transforming India(D) National Institution for Transfer India

## Data Interpretation (41-45)

Directions (Questions 41-45): Study the following table carefully to answer the questions that follow.

	Locality	Total number of people	Percentage			
	Locality		Men	Women	Children	
	А	2820	45	30	25	
~ ~	В	1560	35	45	20	
	С	3600	44	38	18	
	D	4250	64	26	10	
	E	4400	38	43	19	

- 41. What is the total number of men and children staying in locality D together?
  - (A) 4135
  - (B) 4315
  - (C) 1530
  - (D) 3145
- 42. The number of women staying in which locality is the highest?
  - (A) C
  - (B) E
  - (C) A
  - (D) B
- 43. What is the total number of children staying in localities C and D together?
  - (A) 1285
  - (B) 1073
  - (C) 1125
  - (D) 1605
- **44.** What is the respective ratio of number of men staying in locality A to the number of men staying in locality C?
  - (A) 171: 146
  - (B) 176: 141
  - (C) 141: 176
  - (D) 146: 171
- **45.** Total number of people staying in locality E forms approximately what percent of the total number of people staying in locality A?
  - (A) 181
  - (B) 132
  - (C) 156
  - (D) 144

UI-QP-02

## ENGLISH (46-75)

**Directions (Questions 46- 51):** In each of these questions below select the word that comes closest to being the same in meaning to the given word.

- 46. Calibre
  - (A) Capacity
  - (C) Flexibility
- 47. Recreation
  - (A) Relax
  - (C) Relieve
- 48. Fallacy
  - (A) Truth
  - (C) Delusion
- 49. Jaded
  - (A) Renewed
  - (C) Depressed
- 50. Tranquil
  - (A) Violent
  - (C) Peaceful
- 51. Quarantine
  - (A) Seclude
  - (C) Socialize

(B) Plausibility
(D) Anonymity
(B) Entertainment
(D) Exercise
(B) Veracity
(D) Confusion
(B) Exhausted
(D) Unrelated
(B) Furious
(D) Solict

(B) Befriend

(D) Generous

**Directions (Questions 52-56):** Read the following passage carefully to answer the questions that follow:

Marie was born in 1867 in Warsaw, Poland, where her father was a Professor of Physics. At an early age, she displayed a brilliant mind and a blithe personality. Her great exuberance for learning prompted her to continue with her studies after high school. She became disgruntled, however, when she learned that the university in Warsaw was closed to women. Determined to receive a higher education, she defiantly left Poland and in 1891 entered the Sorbonne, a French university, where she earned her master's degree and doctorate in physics.

Marie was fortunate to have studied at the Sorbonne with some of the greatest scientists of her day, one of whom was Pierre Curie. Marie and Pierre were married in 1895 and spent many productive years working together in the physics laboratory. A short time after they discovered radium, Pierre was killed by a horse-drawn wagon in 1906. Marie was stunned by this horrible misfortune and endured heart-breaking anguish. Despondently she recalled their close relationship and the joy that they had shared in scientific research. The fact that she had two young daughters to raise by herself greatly increased her distress.

Curie's feeling of desolation finally began to fade when she was asked to succeed her husband as a physics professor at the Sorbonne. She was the first woman to be given a professorship at the world-famous university. In 1911 she received the Nobel Prize in chemistry for isolating radium. Although Marie Curie eventually suffered a fatal illness from her long exposure to radium, she never became disillusioned about her work. Regardless of the consequences, she had dedicated herself to science and to revealing the mysteries of the physical world.

- **52.** Marie had a bright mind and a \_\_\_\_\_ personality.
  - (A) Strong (B) light-hearted
  - (C) Humorous (D) Strange
- 53. When she learned that she could not attend the university in Warsaw, she felt\_\_\_\_\_
  - (A) Hopeless
  - (C) Depressed

- (B) Annoyed
- (D) Worried
- [**A**–6]



54.	Marie by leaving Poland and travelling to F	rance to enter the Sorbonne.				
	<ul><li>(A) challenged authority</li><li>(C) behaved</li></ul>	<ul><li>(B) showed intelligence</li><li>(D) was distressed</li></ul>				
55.	she remembered their joy together.					
	<ul><li>(A) Dejectedly</li><li>(C) Tearfully</li></ul>	<ul><li>(B) Worried</li><li>(D) Happily</li></ul>				
56.	Her began to fade when she returned to th	e Sorbonne to succeed her husband.				
	<ul> <li>(A) misfortune</li> <li>(B) anger</li> <li>(C) wretchedness</li> <li>(D) disappointment</li> </ul>					
<b>Directions (Questions 57-61):</b> Pick out the most effective word(s) from the given words to fill in the blank to make the sentence meaningfully complete.						
57.	If you smuggle goods into the country, they may	be by the customs authority.				
	(A) possessed	(B) confiscated				
	(C) punished	(D) fined				
58.	The non-cooperative attitude of the members can	n only the image of the society.				
	(A) spoil	(B) improve				
	(C) degrade	(D) defame				
59.	Government buildings are on the Republic of	lay.				
	(A) enlightened	(B) lightened				
	(C) illuminated	(D) glowed				
60.	The criminal seems to have acted in the three					
	<ul><li>(A) coalition</li><li>(C) collision</li></ul>	<ul><li>(B) collusion</li><li>(D) cohesion</li></ul>				
61.	The more your action and thought are allied and					
01.	(A) integrated					
	(B) divergent	×				
	(C) unravelled	*				
	(D) invincible					
		questions four alternatives are given for the				
	m/phrase italicised and underlined in the sentement meaning of idiom/phrase.	ence. Choose the alternative which best expresses				
62.	I met him after a long time, but he gave me the c	old shoulder.				
-	(A) scolded me	(B) insulted me				
	(C) abused me	(D) ignored me				
63.	The cricket match proved to be a <u>big draw</u> .					
	(A) a keen contest	(B) a huge attraction				
	(C) a lovely spectacle	(D) a game without any result				
64.	The sight of the accident made <i>my flesh creep</i> .					
	(A) draw my attention	(B) confused me				
	(C) frightened me	(D) worried me				
65.	Mohan always keeps himself to himself					
	<ul><li>(A) is too busy</li><li>(C) is unsocial</li></ul>	<ul><li>(B) is selfish</li><li>(D) does not take sides</li></ul>				
		(D) does not lake slues				

[A-7]

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**Directions (Questions 66-70):** In questions given below, a part of the sentence is italicised and underlined. Below are given alternatives to the italicised part which may improve the sentence. Choose the correct alternative. In case no improvement is needed, option 'D' is the answer.

- 66. If the room had been brighter, I would have been able to read for a while before bed time.
  - (A) If the room was brighter
  - (B) If the room are brighter
  - (C) Had the room been brighter
  - (D) No improvement
- 67. his powerful desire brought about his downfall.
  - (A) His intense desire
  - (B) His desire for power
  - (C) His fatal desire
  - (D) No improvement

### 68. Will you lend me few rupees in this hour of need?

- (A) Lend me any rupees
- (B) Lend me few rupees
- (C) Lend me a few rupees
- (D) No improvement
- 69. He found a *wooden broken chair* in the room.
  - (A) wooden and broken chair
  - (B) broken wooden chair
  - (C) broken and wooden chair
  - (D) No improvement
- 70. He could not *look* anything in the dark room.
  - (A) look at
  - (B) see
  - (C) see through
  - (D) No improvement

# **Directions (Questions 71-75):** In each question below choose the word that means the exact OPPOSITE of the given words in Capital.

- 71. RELINQUISH
  - (A) Abdicate
  - (C) Posses
- 72. QUIESCENT
  - (A) Active
  - (C) Weak
- 73. STARTLED
  - (A) Amused
  - (C) Endless
- 74. CULPABLE
  - (A) Defendable
  - (C) Careless
- **75.** COMMISSIONED
  - (A) Started
  - (C) Finished

- (B) Renounce
- (D) Deny
- (B) Dormant
- (D) Unconcerned
- (B) Relaxed
- (D) Astonished
- (B) Blameless
- (D) Irresponsible
- (B) Closed
- (D) Terminated



## Reasoning & General Aptitude (76-100)

**Directions (Questions 76-80):** Find out which of the answer choice completes the same relationship with the third word that is not paired:

- **76.** Candle lamp floodlight
- hut cottage ?
  - (A) tent
  - (B) city
  - (C) dwelling
  - (D) house
- 77. EXPLORE : DISCOVER
  - (A) read : skim
  - (B) research : learn
  - (C) write : print
  - (D) think : relate
- 78. Yard is to inch as quart is to
  - (A) gallon
  - (B) ounce
  - (C) milk
  - (D) liquid
- 79. Pen is to poet as needle is to
  - (A) thread
  - (B) button
  - (C) sewing
  - (D) tailor
- 80. Artist is to painting as senator is to
  - (A) attorney
  - (B) law
  - (C) politician
  - (D) constituents

#### Directions (Questions 81-83): Fill in the blanks in the series by looking at the letter pattern.

- 81. CMM, EOO, GQQ, \_\_\_\_, KUU
  - (A) GRR
  - (B) GSS
  - (C) ISS
  - (D) ITT
- 82. BCB, DED, FGF, HIH, \_\_\_\_
  - (A) JKJ
  - (B) HJH
  - (C) IJI
  - (D) JHJ
- 83. QAR, RAS, SAT, TAU, \_\_\_\_\_
  - (A) UAV
  - (B) UAT
  - (C) TAS
  - (D) TAT



**Directions (Questions 84-88):** Three of the words are in the same classification and the remaining one is not. Find that odd one out.

(B) Peso

(D) Euro

84.

- (A) Dollar
- (C) Ounce

85.

- (A) Geometry
- (B) Algebra
- (C) Calculus
- (D) Thermodynamics

86.

- (A) Square
- (B) Triangle
- (C) Rectangle
- (D) Cuboid

87.

- (A) Fish
- (B) Snake
- (C) Crocodile
- (D) Whale

88.

- (A) Spoon
- (B) Sword
- (C) Knife
- (D) Fork

## Directions (Questions 89-93): Read carefully and choose the correct option.

- **89.** Six friends are sitting in a circle and are facing the centre of the circle. Hari is between Prakash and Pankaj. Priti is between Mukesh and Lalit. Prakash is to the left of Mukesh. Who is to the second right of Hari?
  - (A) Lalit

(C) Yellow

(B) Mukesh

(C) Prakash

- (D) None of these
- **90.** If white is called blue, blue is called red, red is called yellow, yellow is called green, green is called black, black is called violet and violet is called orange, what would be the colour of human blood?
  - (A) Red

- (B) Green(D) Violet
- 91. In a certain code, TRIPPLE is written as SQHOOKD. How is DISPOSE written in that code?
  - (A) CHRONRD
  - (C) ESJTPTF

- (B) DSOESPI
- (D) ESOPSID
- 92. If DELHI is coded as 73541 and CALCUTTA as 82589662, how can CALICUT be coded?
  - (A) 5279431
    - (B) 5978213 (D) 8543691
- **93.** Pointing to a photograph, Vipul said, "She is the daughter of my grandfather's only son." How is Vipul related to the girl in the photograph?
  - (A) Father

(C) 8251896

(C) Cousin

- (B) Brother
- (D) Uncle



### Directions (Questions 94-95): Find the statement that is true according to the given information:

- **94.** Vincent has a paper route. Each morning, he delivers 37 newspapers to customers in his neighbourhood. It takes Vincent 50 minutes to deliver all the papers. If Vincent is sick or has other plans, his friend Thomas, who lives on the same street, will sometimes deliver the papers for him.
  - (A) Vincent and Thomas live in the same neighbourhood.
  - (B) It takes Thomas more than 50 minutes to deliver the papers.
  - (C) It is dark outside when Vincent begins his deliveries.
  - (D) Thomas would like to have his own paper route.
- **95.** Tim's commute never bothered him because there were always seats available on the train and he was able to spend his 40 minutes comfortably reading the newspaper or catching up on paperwork. Ever since the train schedule changed, the train has been extremely crowded, and by the time the doors open at his station, there isn't a seat to be found.
  - (A) Tim would be better off taking the bus to work.
  - (B) Tim's commute is less comfortable since the train schedule changed.
  - (C) Many commuters will complain about the new train schedule.
  - (D) Tim will likely look for a new job closer to home.

#### **Directions (Questions 96-100):** Identify the next number in the Series:

**96.** 350 334 366 318 ? 302

- (A) 382
- (B) 395
- (C) 376
- (D) 354
- **97.** 164 84 44 24 14 ?
  - (A) 7
  - (B) 4
  - (C) 5
  - (D) 9
- **98.** 5 47 20 79 ?
  - (A) 288
  - (B) 394
  - (C) 265
  - (D) 256

**99.** 12?691845

- (A) 5
- (B) 6
- (C) 2
- (D) 4

**100.** 41 42 45 54 81 ?

- (A) 194
- (B) 162
- (C) 134
- (D) 146