### **APTITUDE TEST (Verbal):**

### Intruction:

- 1. Questions = 55 Time = 60 minutes along with that an essay to write in the same sheet in another 10 minutes.
- 2. No sectional cut off
- 3. No negative marking.

4	. Offline (paper & pen) test		
Direc	tions for Questions 1-3: Choose the option which will correctly fill	the blank.	
1.	If you look the window you can see the traffic moving	the road	_ afast
	pace		
	A. at, across, in		
	B. through, along, at		
	C. over, across, at		
	D. at, along , in		
	Answer: B		
2.	Sheela ran blindly_ the road and was nearly knocked	a lorr	y.
	A. at, out, in		
	B. across, along, at		
	C. through, across, at		
	D. across, down , by		
	Answer: B		
3.	I stood the bridge and watched the flowing water	it and the	sky
	A. on, under, above		
	B. across, under, at		
	C. through, under, above		
	D. on, down , above		
	Answer: B		
Direc	tions for Questions 4-6: Choose the word nearest in meaning to the	ne word in ITA	LICS from
the g	iven options		
4.	A bone got stuck in his <i>gullet</i>		
	A. Chest		
	B. Throat		
	C. Stomach		
	D. Molars		
	Answer: B		
5.	It is a <i>scandal</i> that the murderer was declared innocent		
	A. talk		
	B. Disgraceful action		
	C. Rumour		
	D. Silly notion		
	Answer: B		

6.	The police need <i>tangible</i> proof of his guilt before they can act against him.		
	A. Emphatic		
	B. Convincing		
	C. Clear and certain		
	D. Strong		
	Answer: C		
Direc	tions for Questions 7-10: Choose the answer option which will correctly fill the blank.		
7.	I saw man walking along road. He was not ordinary man		
	A. the,the,a		
	B. a,the,a		
	C. the, a, an		
	D. a, the, an		
	Answer: D		
8.	Yesterday I heard interesting story which is best I have ever heard.		
	A. a, an		
	B. the,a		
	C. an, the		
	D. the, an		
	Answer: C		
9.	What strange name to give cat		
	A. a,a		
	B. a,an		
	C. a,the		
	D. the, an		
	Answer: A		
10.	postman has putletter underdoor		
	A. the,the,the		
	B. a,the,a		
	C. the, a, the		
	D. a, the, an		

**Directions for Questions 11-16:** Read the passage and answer the questions that follow on the basis of the information provided in the passage.

Everyone conforms to infancy, infancy conforms to nobody, so that one babe commonly makes four or five out of the adults who prattle and play to it. So God has armed youth and puberty and manhood no less with its own piquancy and charm, and made it enviable and gracious and its claims not to be put by, if it will stand by itself. Do not think the youth has no force, because he cannot speak to you and me. Hark! In the next room his voice is sufficiently clear and emphatic. It seems he knows how to speak to his contemporaries. Bashful or bold, then, he will know how to make us seniors very unnecessary.

The healthy attitude of human nature can be seen in the nonchalance of boys who are sure of a dinner, and would disdain as much as a lord to do or say ought to conciliate one. A boy is in the parlor what the pit is in the playhouse; independent, irresponsible, looking out from his corner on such people and facts as pass by, he tries and sentences them on their merits, in the swift, summary way of boys, as good, bad, interesting, silly, eloquent, troublesome. He never cumbers himself regarding consequences, about interests and he gives an independent, genuine verdict. You should court him: he will not court you. But the man is, as it were, clapped into jail by his consciousness. As soon as he has once acted or spoken with eclat, he is a committed person, watched by the sympathy or the hatred of hundreds, whose affections

must now enter into his account. There is no Lethe for this. Ah, that he could pass again into his neutrality.

These are the voices, which we hear in solitude, but they grow faint and inaudible as we enter into the world. Everywhere society is conspiring against the manhood of every one of its members. Society is joint - stock company, in which members agree, for the better securing of his bread to each shareholder, to surrender the liberty and culture of the eater. The virtue in most request is conformity. It is averse to self-reliance. What it loves is names and customs and not realities and creators.

Whosoever is a man has to be a nonconformist. He who would gather immortal palms must not be hindered by the name of goodness, but must explore if it be goodness. Nothing is at last sacred but the integrity of your own mind.

No law can be sacred to me but that of my nature. Good and bad are but names very readily transferable to that to this; the only right is what is after my constitution, the only right is what is after me constitution, the only wrong what is against it. A man is to carry himself in the presence of all opposition as if everything were titular and ephemeral but he. I am ashamed to think how easily we capitulate to badges and names, to large societies and dead institutions. Every decent and well-spoken individual affects and sways me more than is right. I ought to go upright and vital, and speak the rude truth in all ways.

I shun father and mother and wife and brother, when my genius calls me. I would write on the lintels of the doorpost, whim. I hope it is somewhat better than whim at last, but we cannot spend the day in explanation. Except me not to show cause why I seek or why I exclude company. Then, again, do not tell me, as a good man did not to-day, of my obligation to put all poor men in good situations. Are they my poor? I tell thee, thou foolish philanthropist, that I grudge the dollar, the time, the cent, I give to such men as do not belong to me and to whom I do not belong. There is a class of person to whom by all spiritual affinity I am bought and sold; for them I will go to prison, if need be; but your miscellaneous popular charities; the education at collage of fools; the building of meeting - house to the vain end to which many now stand; alms to sots; and the thousandfold Relief Societies; - though I confess with shame I sometimes succumb and give the dollar, it is a wicked dollar which by and by I shall have the manhood to withhold.

If you refuse to conform, you can experience the displeasure of the world. Hence, a man should know how to estimate a sour face. Then by - standers look askance on him in the public street or in the friend's parlor. In case this aversion originates from contempt and resistance similar to his own, it might result in a sad countenance; but the sour faces of the multitude, like their sweet faces, have no deep cause, but are caused by reasons as diverse as the direction of the wind and what he reads in the newspapers. Yet is the discontent of the multitude more formidable than that of the senate and the collage.

Another factor, which frightens us from self - trust in our consistency; a reverence for our past act or word, because the eyes of others have no other data for computing our orbit than our past acts, and we are loath to disappoint them.

But why should you keep your head over your shoulder? Why drag about this corpse of your memory, lest you contradict somewhat you have stated in this or that public place? Suppose you should contradict yourself; what then?

This is a rather silly consistency in our minds, which is adored by little statesmen and philosophers and divines. Uniformly a great soul has almost nothing to do, he could just occupy himself with his shadow on the wall. Speak what you think now in hard words; and to-morrow speak what tomorrow thinks in hard words again, though it contradict everything you said to-day. - "Ah, so you shall be sure to be misunderstood." - Is it so bad, then, to be misunderstood? Pythagoras was misunderstood, and Socrates, and Jesus, and Luther, and Copernicus, and Galileo, and Newton, and every pure and wise spirit that ever took flesh. What can be considered to be truly great is to be misunderstood.

11. Which of the following statements would best describe the main theme of the above passage?

- "A foolish consistency is the hobgoblin of little mind."
- "Eternal youth means eternal independence."
- "Whoso would be a man must be a nonconformist."
- "Colleges are designed to educate fools."
- E. "Infancy conforms to nobody."

Answer: C

- 12. When is the period during which we are most nonconformist?
  - A. infancy
  - B. puberty
  - C. youth
  - D. manhood
  - E. old age

Answer: A

- 13. In his statement "What can be considered to be truly great is to be misunderstood" the author means:
  - A. One should refrain from saying, what one exactly means
  - B. Being misunderstood, equals being great
  - C. All great man have always been misunderstood
  - D. Even though a person might be considered inconsistent, he shouldn't hesitate to change his mind if he feels the need to.
  - E. It is seldom, that nice people succeed

Answer: D

- 14. As inferred from the passage, the refusal of young people to cater to accept public opinion is:
  - A. A feature of the rebelliousness of youth
  - B. A healthy attitude of human nature
  - C. A manifestation of deep seated immaturity
  - D. Simply bad manners
  - E. Part of growing up

Answer: B

- 15. "Society is a joint-stock company etc." is one way which the author shows
  - A. The anti-culture attitude of the public
  - B. Society is highly organized and structured
  - C. The self-rejection of society
  - D. The lack of room for solitude in our world
  - E. The public's interest in the stock market

Answer: C

- 16. "I would write on the lintels of the doorpost, whim." What does the author mean by this statement:
  - A. That one should renounce his immediate family
  - B. That signposts have an important educational function in our society
  - C. That an impulsive action may have a subsequent rational explanation
  - D. That one must never be held responsible for what one says and does
  - That everyone should do foolish things occasionally

#### Answer : C

**Directions for Questions 17-20:** Read the passage and answer the questions that follow on the basis of the information provided in the passage.

Certain scraps of evidence bear out those who hold a very high opinion of the average level of culture among the Athenians of the great age. Pericles's funeral speech is undoubtedly the most famous evidence from Athenian literature, that its level was indeed high. However, Pericles was a politician, and it is possible that he was flattering his audience. We know that thousands of Athenians sat hour after hour in the theater listening to the plays of the great Greek dramatists. The Greek plays, particularly the tragedies, maintained an extremely high intellectual level throughout, with no letdowns, no concessions to the lowbrows or to the demands of "realism", like the gravediggers scene in Shakespeare's Hamlet. The musicand dancing seen in these plays were also of an equally high level. The best modern parallel can be seen in the restrained, difficult opera of the 18th century. The comparison is no doubt dangerous, but can you imagine almost the entire population of an American city (in suitable installments, of course) sitting through performances of Mozart's Don Giovanni or Gluck's Orpheus? Perhaps the Athenian masses went to these plays because of a lack of other amusements. They could at least understand something of what went on, since the subjects were part of their folklore. Undoubtedly the theme of grand opera is not part of the folklore of the American people.

- 17. From the passage it is evident that the author seems to question the sincerity of
  - A. politicians
  - B. playwrights
  - C. opera goers
    D. "low brows"

  - E. gravediggers.

#### Answer : A

- 18. According to the author the average American
  - A. Enjoys Hamlet

  - B. Loves folkloreC. Is not able to understand grand opera
  - D. Seeks a high cultural level
  - E. Lacks entertainment.

#### Answer: C

- 19. From the passage, we can say that the author's attitude toward Greek plays is one of

  - A. Qualified approvalB. Grudging admiration
  - C. Studied indifference
  - D. Partial hostility
  - Great respect.

#### Answer: E

- 20. The author makes a suggestion that Greek plays
  - A. Were demanding on the actors
  - B. Flattered their audiences
  - C. Were focussed on a limited audience
  - D. Were dominated by music and dancing
  - E. Stimulated their audiences.

Answer : E

### **Section 2 - Analytical Ability**

Intruction:

No. of Questions: 20 Duration in Minutes: 20

21. There are 4 boys and 3 girls. What is the probability the boys and girls sit alternately?

**Answer: 1/35** 

**Solution:** Total number of ways in which boys and girls can sit alternately =

4! × 3!

Total number of ways in which they can sit = 7!

Probability = 
$$\frac{4! \times 3!}{7!} = 1/35$$

22. Two trains are 2 kms apart. Speed of one train is 20m/s and the other train is running at 30 m/s .Lengths of the trains are 200 and 300m. In how much time do the trains cross each other?

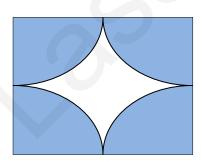
Answer: 50 seconds

**Solution:** Total distance to cross each other = 2500 m

Relative speed = 20 + 30 = 50 m/s Time taken = 2500/50 = 50 seconds

23. Four horses are tethered at the four corners of a square of side 14cm such that two horses along the same side can just reach each other. They were able to graze the area in 11 days. How many days will they take in order to graze the left out area?

Answer: 3
Solution:



Area of colored region where horses can graze =  $4 \times \pi \times (14/2)^2/4 = 154$ Area of left out region =  $14 \times 14 - 154 = 42$ So time required to graze left out area =  $11 \times 42 / 154 = 3$ 

- 24. Let A and B be two solid spheres such that the surface area of B is 300% higher than the surface area of A. The volume of A is found to be k% lower than the volume of B. The value of k must be
  - A. 85.5
  - B. 92.5
  - C. 90.5

D. 87.5

Answer: D

**Solution:** Let radii of A and B are r and R respectively.

Surface area of A =  $4 \pi r^2$ Surface area of B =  $4 \pi R^2$  $4 \pi R^2 = 4 \pi r^2 (1+300/100)$ or, R= 2rVolume of A =  $4/3 \pi r^3$ Volume of B =  $4/3 \pi R^3$ 

 $4/3 \pi R^3 (1-k/100) = 4/3 \pi r^3$ or,  $8r^3 (1-k/100) = r^3$ or, k = 700/8 = 87.5

25. If the ratio of work done by (x-1) men in (x+1)days to the work done by (x+2)men in (x-1)days is 9:10, then x is equal to

- A. 5
- B. 6
- C. 7
- D. 8

Answer: D

Solution: Let work done by (x-1) men in (x+1) days be y

Work done by (x+2) men in (x-1) days =  $\frac{y \times (x+2)(x-1)}{(x-1)(x+1)}$ 

$$y: \frac{y \times (x+2)(x-1)}{(x-1)(x+1)} = 9:10$$

or, 
$$\frac{x+1}{x+2} = \frac{9}{10}$$

or, 
$$10x + 10 = 9x + 18$$

or, 
$$x = 8$$

26. The amount of water (in ml) that should be added to reduce 9 ml lotion, containing 50% alcohol, to a lotion containing 30% alcohol, is:

- A. 5 ml
- B. 4 ml
- C. 3 ml
- D. 6 ml

Answer: D

**Solution:** In 9ml lotion there is 4.5ml alcohol and 4.5ml water.

Let x ml water is added.

Alcohol = 4.5ml Water = (4.5+x)ml

$$4.5/(4.5+4.5+x) = 30/100$$

or, 
$$450 = 270 + 30x$$

or, 
$$30x = 180$$

- 27. The average age of 8 persons in a committee is increased by 2 years when two men aged 35 years and 45 years are substituted by two women. The average age of these two women is:
  - A. 52 years
  - B. 56 years
  - C. 48 years
  - D. 44 years

Answer: C

**Solution:** Let the average age of committee of 8 person be x

Total sum of ages = 8x

Now when two men are replaced by two women (of average age y say)

Sum of ages = 8x - (35+45) + (2y)

[8x-80+2y]/8 = x + 2

or, y = 48

- 28. A mixture of 40 liters of milk and water contains 10% water. How much water should be added to this so that water may be 20% in the new mixture?
  - A. 6.5 liters
  - B. 5 liters
  - C. 4 liters
  - D. 7.5 liters

Answer: B

Solution: In mixure of 40 litres water = 4 litres Milk = 36 litres

Let x litres of water is added.

Now total volume = 40 + x

Water = 20% = (40+x)/5

or, (40+x)/5 = 4 + x

or, 40 + x = 20 + 5x

or, x = 5

- 29. If the price of gold increases by 30%, find by how much the quantity of ornaments must be reduced so that the expenditure may remain the same as before?
  - A. 30%

B. 23
$$\frac{1}{3}$$
%

- C. 20%
- D. 19%

Answer: B

**Solution**: Let initial price and quantity are 100 and 100 units respectively.

Now price is increased to 130 for 100 units of gold

Let quantity is reduced by x %. So in 100 unit of ornament gold = 100-x

Expenditure= (100-x)×130 /100

 $(100-x)\times130/100 = 100$ 

$$100-x = 10000/130$$
or  $x = 23\frac{1}{3}$ 

30. A box contains 5 brown and 4 white socks. A man takes out two socks. The probability that they are of the same color is:

A 5/18

B 1/6

C 5/108

C 4/9

Answer: D

**Solution:** Probability = 
$$\frac{{}^5C_2}{{}^9C_2} + \frac{{}^4C_2}{{}^9C_2} = 10/36 + 6/36 = 4/9$$

31. Which of the following will come in place of the Question Mark (?) in the following sequence?

6C7, 8F10, 11J14, 15O19, ?

A 25U20

B 20U25

C 20U24

D 19U25

Answer:B

**Solution:** C+3=F F+4=J J+5=O O+6=U 6+2=8 8+3=11 11+4=15 15+6=21 7+3=10 10+4=14 14+5=19 19+6=25

- 32. If Table is called Chair, Chair is called Cot, Cot is called Pot and Pot is called Filter, where does a person sit.
  - A. Pot
  - B. Cot
  - C. Chair
  - D Filter

Answer: B

Solution: A person sits on a Chair. Chair is Cot here

- 33. Pointing to a photograph Arun said, 'she is the mother of my brother's son's wife's daughter.' How is Arun related to the lady?
  - A. Uncle
  - B. Daughter-in-law
  - C. Cousin

#### D. None of these

Answer: B

**Solution:** Arun's brother's son = Arun's nephew Arun's nephew's wife = Arun's daughter-in-law

Arun's daughter-in-law's daughter's mother = Arun's daughter-in-law

- 34. I am facing west. I turn 45° in the clockwise direction and then 180° in same direction and then 270° anticlockwise. Which direction am I facing now?
  - A. South-west
  - B. South
  - C. West
  - D. North-West

Answer: A

**Solution:** After turning 45° clockwise, Direction = North-west

After turning 180° clockwise, Direction = South-east
After turning 270° anticlockwise, Direction = South-west

- 35. After a get-together every person present shakes the hand of every other person. If there were 105 hands-shakes in all, how many persons were present in the party?
  - A 15
  - B 14
  - C 13
  - D 16

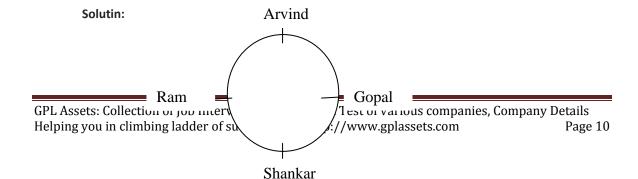
#### Answer:A

**Solution:** Number of handshakes =  ${}^{n}C_{2}$  = n(n-1)/2

n(n-1)/2 = 105or n = 15

- 36. Four friends were playing a game of cards sitting in a circle. Shankar was right to Ram and Gopal was left to Arvind. Which one of the following pairs were partners?
  - A Ram and Shankar
  - B Gopal and Shankar
  - C Ram and Arvind
  - D Gopal and Ram

Ans:D



#### Gopal and Ram are parteners.

- 37. A boy goes to see a film and finds a man who is his relative. The man is the husband of the sister of his mother. How is the man related to the boy?
  - A. Brother
  - B. Nephew
  - C. Uncle
  - D. None of these.

Answer: C

Solution: Sister of mother - Aunt. Aunt's husband - Uncle

38. In a month of 31 days, the third Wednesday falls on the 15th. What will be the last day of that month?

A Fifth Thursday B Fifth Wednesday C Fourth Sunday D Fifth Friday

Answer: D

**Solution:** 29<sup>th</sup> will be 5<sup>th</sup> Wednesday. SO 31<sup>st</sup> will be 5<sup>th</sup> Friday

- 39. A class consists of 100 students, 25 of them are girls and 75 boys; 20 of them are rich and remaining poor; 40 of them are fair complexioned. The probability of selecting a fair complexioned rich girl is:
  - A. 0.05
  - B. 0.04
  - C. 0.02
  - D. 0.08

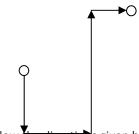
Answer: C

**Solution:** Probability =  $25/100 \times 20/100 \times 40/100 = 0.02$ 

- 40. Ram walks 10M South from his house, turns left and walks 23M. Again turns left and walks 40M, then turns right and walks 5M to reach his school. In which direction is the school from his house?
  - A East
  - **B** North-East
  - C South-West
  - D North

**Answer: B** 

**Solution:** 



**Directions for Questions 41-44:** Follow the directions given below to answer the questions that follow.

Your answer for each question below would be:

- A, if ALL THREE items given in the question are exactly ALIKE.
- B, if only the FIRST and SECOND items are exactly ALIKE.
- C, if only the FIRST and THIRD items are exactly ALIKE.
- D, if only the SECOND and THIRD items are exactly ALIKE.
- E, if ALL THREE items are DIFFERENT.
- 41. 11100110101.1110, 11100110101.1110, 1111001101.1110

Answer: B

42. 1156894.5656, 1156894.5656, 1158694.5656

Answer: D

43. 0485-2584621, 0485-2584821, 0485-2584621

Answer: C

44. LLEEJILLJIFIIJ, LILEEJLLJIFIIJ ,LLEEJLILJIFIIJ

Answer: E

**Directions for Questions 45 to 47:** Answer the questions on the basis of the information given below. Seven varsity basketball players (A, B, C, D, E, F, and G) are to be honoured at a special luncheon. The players will be seated on the dais in a row. A and G have to leave the luncheon early and so must be seated at the extreme right. B will receive the most valuable player's trophy and so must be in the centre to facilitate presentation. C and D are bitter rivals and therefore must be seated as far apart as possible.

- 45. Which of the following cannot be seated at either end?
  - A. C
  - B. D
  - C. F
  - D. G

Answer: C

- 46. Which of the following pairs cannot be seated together?
  - A. B&D
  - B. C&F
  - C. D&G
  - D. E & A

Answer: D

- 47. Which of the following pairs cannot occupy the seats on either side of B?
  - A. F&D
  - B. D&E
  - C. E&G
  - D. C&F

#### Answer: C

**Directions for Questions 48 to 50:** Answer the questions on the basis of the information given below.

A, B, C, D, E, and F are a group of friends. There are two housewives, one professor, one engineer, one accountant and one lawyer in the group. There are only two married couples in the group. The lawyer is married to D, who is a housewife. No woman in the group is either an engineer or an accountant. C, the accountant, is married to F, who is a professor. A is married to a housewife. E is not a housewife.

- 48. Which of the following is one of the married couples?
  - A. A & B
  - B. B&E
  - C. D&E
  - D. A & D

Answer: D

- 49. What is E's profession?
  - A. Engineer
  - B. Lawyer
  - C. Professor
  - D. Accountant

Answer: A

- 50. How many members of the group are males?
  - A. 2
  - B. 3
  - C. 4
  - D. Cannot be determined.

Answer: C

**Directions for Questions 51-55:**Read the following information carefully and answer the questions given below:

A B D F G H and K are seven members of a family . They belong to three generations . There are two married couples belonging to two different generation. D is son of H and is married to K. F is granddaughter of B. G's father is grandfather of A. B's husband is father-in -law of K. H has only one son.

- 51. How is F related to G?
  - A. Son
  - B. Nephew
  - C. Niece
  - D. data inadequate
  - E. None of these

Answer: A

52. How is H related to B?

- A. Father
- B. Father-in-law
- C. Uncle
- D. data inadequate
- E. None of these
- Answer: E
- 53. How is K related to G?
  - A. Sister-in-law
  - B. Sister
  - C. Niece
  - D. data inadequate
  - E. None of these
  - Answer: C
- 54. Which of the following is the , pair of married ladies?
  - A. HK
  - B. HD
  - C. KF
  - D. BF
  - E. None of these
  - Answer: D
- 55. How many female members are there among them?
  - A. Two
  - B. Three
  - C. Four
  - D. data inadequate
  - E. None of these
  - Answer: E