



Name : _____

Reg No / Roll No : _____

Verbal Section

For questions 1–3, select among the given choices the word or phrase for each blank that best fits the meaning of the sentence as a whole.

- Old and tired rule India that is _____ with young people.
A) flowing B) teeming C) pouring D) bouncing
- Of the 20 international companies, which had been _____ permission to undertaken operations, 15 companies had already started the work.
A) asserted B) accorded C) assigned D) assured
- India is making _____ investments in overseas oil even as it is trying its to best to sell off its own deepwater blocks to private parties.
A) massive B) high C) solid D) excess

For questions 4–6, select among the given choices the correct phrase to replace the underlined phrase in the following sentence.

- She is good to the neighbors. But they put about her goodness to weakness.
A) put on B) put in C) put up D) put down
- Customers must avail of this opportunity.
A) must avail themselves of this opportunity B) should avail themselves of this opportunity
C) should avail of this opportunity D) must make availability of this opportunity
- The principal reminded the audience that the school always has and always will try to secure some ranks in the board examination.
A) has always and will always try to secure B) always has tried and always will try to secure
C) always has tried and always will try to secure D) has always tried to secure and will always

For questions 7–9, choose the lettered pair that expresses a relationship most similar to the relationship expressed in the capitalized pair.

- PRUDISH : PROPRIETY ::
A) fanatical : violence B) authoritative : evidence C) finicky : quality D) obstinate : accuracy
- FEAR : COWER ::
A) calmness : fret B) anger : rant C) disappointment : co mole D) embarrassment : speak
- FOIBLE : FAULT ::
A) perjury : testimony B) reputation : disrepute C) vagary : notion D) quibble : objection

For questions 10 & 11, select the option that gives the correct meaning of the given idiomatic expression or phrase.

- To meet one's Waterloo.
A) To die fighting B) To die an ignoble death
C) To meet one's final defeat D) To meet a strong adversary
- To flog a dead horse.
A) To do a vain thing B) To try to work from a weak horse
C) To act in a foolish way D) To revive interest in a subject which is out of date



Given below are sentences which when arranged logically form a coherent passage. For questions 12–14, choose the option which gives the correct sequence.

12. Choose the correct option.

- a. It attracts tourists from all over the world.
- b. India has a rich cultural heritage, which has no parallel in the world.
- c. The best example of the Indian-architecture is the Taj at Agra.
- d. They are charmed by the beauty of this poem in marble.

A) bcad B) badc C) abcd D) adbc

13. Choose the correct option.

- S1. Speech was the first means of conveying information.
- P. Thirdly printing helped in dissemination of knowledge in a permanent form.
- Q. Then writing as a means introduced a capacity for storing information.
- R. Computer is the only medium that can not only store but analyse information to make decision.
- S. However all these are passive media.
- S6. Therefore, computer is hailed as the fourth information revolution.

A) PQSR B) QPRS C) QPSR D) QRPS

14. S1. He tried the door.

- P. The room was neat and clean.
- Q. Then he stepped into the room.
- R. He waited for a minute or two.
- S. It opened easily and he peeped in.
- S6 He was careful not to touch anything.

A) PQRS B) QSPR C) RPQS D) SPRQ

For questions 15–17, select the option that can be substituted for the given sentence.

15. A person who lives alone and avoids other people.

A) Ascetic B) Recluse C) Unsocial D) Agnostic

16. A person interested in reading books and nothing else

A) Student B) Scholar C) Book Worm D) Book Keeper

Read the following passage and select the best answer to questions 17 - 20 among the given choices.

Music has the power to cause emotions to well up within us. These feelings are gripping - often irresistible - and seem to emerge from nowhere. These feelings color our moods, affect our perceptions and generate a behavioral pattern. The indisputable fact about music is its power to evoke emotions. Is there anyone, for whom music is completely emotion-neutral? Music has the ability to inevitably tap the still, mysterious deep well of our emotions.

However, music can produce various emotional responses in different individuals and even different responses in the same person at different times. Music may produce expressions of various emotions - peaceful, relaxing, exciting, festive, boring, unsettling, un-stimulating, invigorating... and so on.

Music is an extremely versatile medium of communication. Through music it is possible to explore all the features that are used in verbal communication. Moreover, it does so in an explicit and structured way, which makes it an interesting and useful window into human communication, in general.

The repetition of a line as in a lullaby, the regular beating of a drum - produces a feeling of physical ease and lulls the child to sleep. The rhythmic sound of the train, of waves breaking on the shore, the song of a cricket at night - why, even the electric fan is able to produce a soothing physical quiet. But good music does not stop there. It touches our emotions. True music really goes far deeper and touches our very soul and leaves its imprint on us. It may not be possible to explain or describe this reaction in ordinary language. It can only be felt. It is one of those mystic experiences, which baffle analytical explanation.

Music is known to endow the listener with aesthetic or intellectual pleasure. It can be simple, complex, subtle, overt - and these features may reside, in one of the different aspects of the music e.g. rhythm, melody. Some of the greatness of music, however, lies in its holistic nature-that all the elements form a unique wholeness which may not be understood by studying the parts, separately. However complex, music is readily appreciated by the mind without the need for formal knowledge. The lay listener may not be able to hear which instruments are playing, or which pitches are used. Yet, he or she may have no problem appreciating the music as a whole. An experienced listener, on the other hand, may be able to transcribe every note, but might still be at a loss to understand why the music is so pleasing to listen to even for the time!



As a performer, I believe that music can recreate emotions and get the listeners involved with my emotions. Any particular music has an inherent emotion. And, there is the emotion that one feels while rendering it. Besides, the listener is in an emotional state while listening to that music - which is also important because it could be possible that this will now be linked to the emotional state of the listener. So he or she can use the song to recreate this emotion. Very often we hear people say "This is my song" and feel that special emotion again.

Rhythm and melody are two facets of music that lend themselves to enjoyment in their individual capacities. The experience of beat and rhythm has a simple relation with joy, well-being and even excitement. Babies spontaneously start to rock and move when they hear music with a pronounced beat in a medium or fast tempo. By changing the rhythm, we can change the aesthetic appeal of a piece of music. Even a change of tempo can cause variations in the aesthetic appeal.

Similarly, melody, which is the soul of music, can create different types of feelings in listeners. Some melodies bring soulfulness, some sadness, some bring jubilation or tranquility.

Music is created from the heart and molded by emotion. As musicians, we are inherently creative - so people say - and we have the ability to derive intense pleasure from a particular piece of music, which we listen to or Produce. Here, I am referring to an aesthetic experience, which everybody must have felt. Tears of Joy, a tug at the heart, goose pimples ... True art always comes as an irresistible inner urge. We hear a song of Thyagaraja and are enthralled just as we gaze at a majestic temple or an ancient sculpture with wonder. All such works of art are the result of an inner urge. That is why it is something inherently beautiful.

And there can be no enjoyment more impersonal and sublimating than what it offers. It prepares the very soul for something higher.

17. According to the passage, music is a medium of communication as

- A) We can explore all the features used in verbal communication through music
- B) Certain melodies cause certain reactions
- C) It is created from an inner urge
- D) It can appease the mentally imbalanced people

18. What, according to the author, is the fact of music that cannot be disputed?

- A) It causes national barriers
- B) It creates a feeling of amiability
- C) People react in the same manner to music without regard to age
- D) It has the power to evoke emotions

19. Which of the following could be an apt title for the above passage?

- A) The spontaneous reaction to music
- B) The power of soothing.
- C) The inherent creativity in music
- D) The power of music

20. What is the mystic experience that the author refers to?

- A) Children rocking spontaneously to the sound of music
- B) Music bringing about physical repose as well as affecting the soul
- C) The experience of Tyagaraja in the temple
- D) The festive mood caused by the rhythmic beating of drums

ROUGH SHEET

Analytical Section

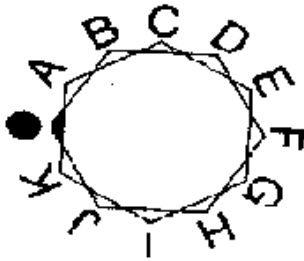
21. The thickness of the individual cards produced by a certain playing card Manufacturer is normally distributed with mean = 0.01 inches and variance = 0.000052. What is the probability that a deck of 52 cards is more than 0.65 inches? (In thickness)

- A) .001 B) .023 C) .006 D) .036

22. The diagram below represents a dial on a safe which has 12 points, one of them black. The black point, presently pointing toward a black dot, is to be turned to each letter in turn, but not in alphabetical order, to open the safe. The dial should be turned toward the letters as follows.

A before D but after B. B before C but after H. H before F, F before G, G before I and I before J. H after K, K before F, F after D, D before G, and G after E. E before D, C before E, E after B, C before G, and A after E.

What is the order of letters to which the black point should be turned in order to open the safe?



- A) K, H, B, E, C, A, F, D, G, I, J B) K, H, B, C, E, A, D, F, G, I, J
C) K, H, B, E, A, D, C, F, G, I, J D) K, H, B, C, E, D, A, G, F, I, J

23. Two beakers contain acid and water in the ratio 2: 3 and 3: 4.If the mixture in two beakers are poured into a common one, then find the resultant ratio of acid to water?

- A) 29:41 B) 15:27 C) 27:56 D) 21:29

24. In the below given number series, find the number which does not fit into the series.

24 45 133 263 787 1577 4711

- A) 4711 B) 1577 C) 787 D) 133

25. A man spends 1/3 of his income on food, of the rest 1/4 on house rent and 1/5 on cloth. He still has Rs.1760 left with him. Find his income.

- A) Rs.4200 B) Rs.4600 C) Rs.4800 D) Rs.5200

26. The average marks in an exam is found to be 50. After deducting the computer mistakes the marks of the 100 students had to be changed from 90 to 60 each and the average came down to 45 marks. Find the total number of candidates who took the exam?

- A) 800 B) 600 C) 400 D) 200

27. Five artists (Amitab, Beena, Chander, Dolly and Rajesh) have five different types of performance (Actor, Writer, Musician, Singer and Director) and are engaged in three different media (T.V., films and stage)

- Rajesh directs T.V. serials only.
- Amitab is neither musician nor writer and he works neither for T. V. nor for films.
- Dolly sings only for films.
- The male musician works for films only.
- The female writer neither writes for T.V. nor for films.

Which of the following pairs works for stage?

- A) Amitab & Dolly B) Amitab & Rajesh C) Beena & Amit D) Beena & Dolly

28. If 'A \$ B' means 'A is brother of B', 'A @ B' means 'A is wife of B', 'A # B means A is daughter of B' and 'A ★B means A is the father of B', then which of the following expressions indicates the relationship 'U is father-in-law of P'?

- A) P@WSQ★T#U B) P@Q\$W★T#U C) P@Q\$T#W★U D) P@Q\$T#U★W



ROUGH SHEET



29. Using the information given below, the letters from A to P inclusive are placed into the grid of 16 squares. L is above J which is to the right of H. O is above C and H and below I which is to the left of B. M is to the left of D and below G. N is below E, above D and to the right of A which is above G, below P and to the right of O and F. Which of the following is correct?

A)

O	F	A	N
C	L	G	K
H	J	M	D
I	B	P	E

B)

I	B	P	E
O	F	A	N
C	L	G	K
H	J	M	D

C)

K	F	N	O
C	L	A	P
H	J	G	E
I	B	M	D

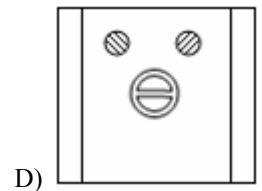
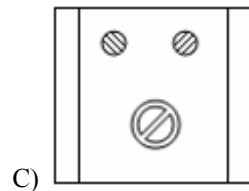
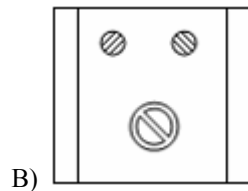
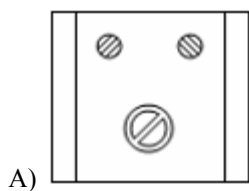
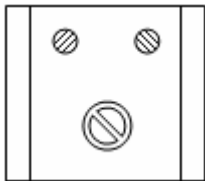
D)

F	L	N	O
C	K	A	P
H	J	G	E
I	B	M	D

30. In the Pinedale Orchestra, there are 14 violinists and 8 cellists. Of those orchestra members, 5 belong to the Fencing Club and half are in the Snake Lovers Association. Of the 14 orchestra members in the clubs, only 2 belong to both, neither of whom are cellists. If 6 violinists are in neither club and 3 cellists are in the snake group, how many violinists are fencers? And How many cellists belong to neither club?

- A) 4, 2 B) 2, 4 C) 2, 2 D) 4, 4

31. Which option is the mirror image of the following figure?



32. Select the option, which is the logical equivalent of the given statement.

It is not true that both Ramya and Soumya are intelligent.

- A) Ramya is intelligent or Soumya is intelligent B) Ramya is intelligent and Soumya is intelligent
C) Ramya is not intelligent and Soumya is intelligent D) Ramya is intelligent and Soumya is not intelligent

33. Vimala, Kamala, Anita, and Rita are playing bridge. The first two are partners. Anita is facing east. Which direction is Kamala facing?

- A) south B) north C) south or north D) south or west

34. If *BOARD* is coded *ERDUG*, then how is *FKDLU* coded?

- A) *HAIRC* B) *INGOX* C) *RAICH* D) *CAIRH*



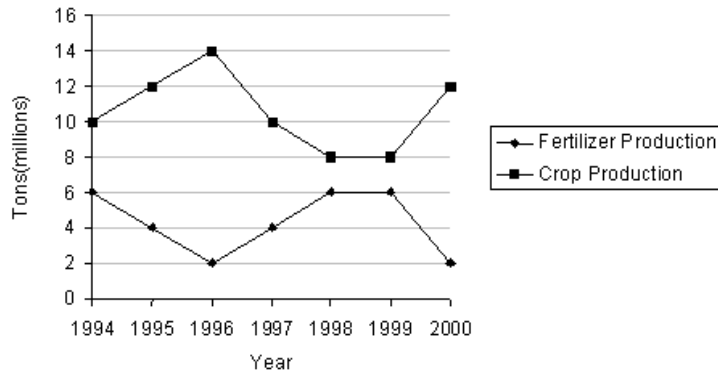
ROUGH SHEET



35. Identify the option that corresponds correctly to the given analogy:
SUMMIT : APEX = I : II

- (I) (P) BEAUTIFUL (Q) MOUNTAIN (R) PEAK (S) GRAPH
(II) (W) NADIR (X) MOON (Y) VALLEY (Z) ATTRACTIVE
- A) QW B) RW C) PY D) PZ

For Questions 36-38: Study the graph given below and answer the questions. (Consider approximate values for answers)



36. For how many years was the sum of fertilizer production and crop production 16 million tons?
A) 1 year B) 2 years C) 3 years D) 4 years
37. Studying the graph, what can be the prediction for crop production for 2001?
A) will remain constant B) will go up C) will go down D) cannot be predicted
38. In which year was the ratio of fertilizer to crop production the least?
A) 1994 B) 1995 C) 1998 D) 1996
39. Select the option that is true about the Statements and Conclusions given:
Statements:
Some carriers are janitors
Some engineers are carriers
Conclusions:
I. Some janitors are engineers
II. Some janitors are not engineers
A) only conclusion I follows B) only conclusion II follows
C) both conclusion I and II follow D) neither conclusion I nor conclusion II follows

40. Select the exact water image of the word given below:

FLOUNDER

- A) **Ɔ᠒᠐᠒᠒᠒᠒** B) **Ɔ᠒᠒᠒᠒᠒** C) **Ɔ᠒᠒᠒᠒᠒** D) **Ɔ᠒᠒᠒᠒᠒᠒**

Mathematics Section

41. $\lim_{x \rightarrow 0} \frac{2}{x} \log(1+x) =$

- A) e^2 B) e C) 2 D) $\frac{1}{2}$



ROUGH SHEET



ROUGH SHEET



52. The no of solutions of the equation $(125)^x + (45)^x = 2(27)^x$ is
A) 1 B) 2 C) 0 D) More than two
53. If $\tan^{-1} x + \tan^{-1} 3 = \tan^{-1} 8$ then x is
A) $\frac{1}{5}$ B) 5 C) 3 D) $\frac{1}{3}$
54. If $x = \sin \theta + i \cos \theta$ then $x^{10} - \frac{1}{x^{10}} =$
A) $2 \cos 10\theta$ B) $2 \sin 10\theta$ C) $2i \cos 10\theta$ D) $2i \sin 10\theta$
55. The roots of $x^3 + x^2 + x + 1 = 0$ are
A) 1, -1, 1 B) i, -i, -1 C) 2i, -2i, 1 D) 2i, -2i, -1
56. If $\log_x y = 100$ and $\log_2 x = 10$ then the value of y is
A) 2^{10} B) 2^{100} C) 2^{1000} D) 2^{10000}
57. The number of ways 5 different balls can be distributed into 3 boxes so that no box remains empty is
A) 140 B) 150 C) 160 D) 180
58. If the focus of the parabola $x^2 - ky + 3 = 0$ is (0, 2) then a value of k is
A) 14 B) 6 C) 3 D) 7
59. The number of points on x-axis which are at a distance C units ($C < 0.3$) from (2, 3) is
A) 1 B) 2 C) 0 D) 3
60. The equation of a diameter of a circle passing through the origin is $x + y = 1$ and the greatest distance of any point of the circle from the diameter is $\sqrt{5}$. Then an equation of the circle is
A) $x^2 + y^2 - 2x + 4y = 0$ B) $x^2 + y^2 - 4x + 2y = 0$ C) $x^2 + y^2 + 4x - 2y = 0$ D) $x^2 + y^2 + 2x + 4y = 0$

ROUGH SHEET