

ORDERING OF SENTENCES

Directions (For the 15 items which follow) : In the following items, each passage consists of six sentences. The first sentence (S_1) and the final sentence (S_6) are given in the beginning. The middle four sentences in each have been removed and jumbled up. These are labelled P, Q, R and S. You are required to find out the proper sequence of the four sentences and mark accordingly on the Answer Sheet.

Example 'X' has been solved for you.

X. S_1 : There was a boy named Jack.

S_6 : At last she turned him out of the house.

P : So the mother asked him to find work.

Q : They were very poor.

R : He lived with his mother.

S : But Jack refused to work.

The proper sequence should be

(a) R Q P S (b) P Q R S

(c) Q P R S (d) R P S Q

Explanation : The correct sequence in this example is R Q P S which is marked by (a).

Therefore, (a) is the correct answer.

1. S_1 : Having visited the Taj Mahal many tourists think that Agra has little else to offer.

S_6 : There are few other buildings to match the delicacy of this tomb.

P : One of these is surely the tomb of Itimad-ud-daulah.

Q : The design of the whole tomb was given by his daughter Nur Jahan.

R : After seeing the Taj one could profitably visit half a dozen other Mughal buildings.

S : This tomb has the delicacy of a baroque jewel case.

The proper sequence should be

(a) R S Q P (b) Q S R P

(c) S P R Q (d) R P S Q

2. S_1 : For years the old chair stood in one of the empty antics.

S_6 : I saw my parents madly in love again.

P : So when I saw it for the last time, it stood there.

Q : When my mother died, I wanted to sell it but could not.

R : It was there for many years after my father died.

S : I peeped in the past.

The proper sequence should be

(a) P Q R S (b) S R Q P

(c) R P Q S (d) R Q P S

3. S_1 : Illness may start with almost any sign, but some of them are much commoner than others.

S_6 : As soon as this happens he must become alert about the signs.

P : It is important to note these signs.

Q : Often the first sign of something wrong is that the patient just does not feel fit.

R : They may help a doctor to decide what is wrong.

S : He usually relies on these signs for the diagnosis of the illness.

The proper sequence should be

(a) P R S Q (b) R S Q P

(c) P Q S R (d) Q R S P

4. S_1 : Newton was perhaps the greatest scientist that ever lived.

S_6 : Newton went home and worked quietly by himself for about 18 months.

P : But when he was only 22, a terrible plague epidemic swept over England.

Q : He was the son of a Lincolnshire farmer, and was born in 1642.

R : Therefore the universities were closed.

S : He went to Cambridge to study mathematics when he was 19.

The proper sequence should be

(a) S P R Q (b) Q P S R

(c) S Q P R (d) Q S P R

5. S_1 : Poverty is a God's curse.

S_6 : Is not poverty a God's boon !

P : These persons get themselves enrolled as poor persons and get all the benefits of poverty.

Q : It is not necessary for a person to be actually poor for getting enrolled because it can be easily managed.

R : It may be true for a few but to many it is just its opposite.

S : Such persons consider it to be a source of enjoying life without earning enjoyment.

The proper sequence should be

(a) R Q P S (b) Q R S P

(c) R S P Q (d) S R Q P

6. S_1 : Belur is 35 km from Hassan.

S_6 : They depict young women musicians and dancers in various poses.

P : Seen from afar, the star-shaped temple, characteristically Hoysala, is not very impressive.

Q : It stands in a courtyard surrounded by a rectangular wall.

R : But closer it is dazzling and marvellous; and the entire exterior is decorated with sculptures, the loveliest being the panels right and left of the main door.

S : Chennakesava Temple is dedicated to Vishnu.

The proper sequence should be

(a) Q R S P (b) S R P Q

(c) S P Q R (d) S Q P R

7. S_1 : When his business failed, he began to look for a job in an office.
 S_6 : Unable to bear misfortunes any further, he started toying with the idea of ending his life of burdens and strains.
P : To overcome depression he took to drinking and became addicted to it.
Q : He soon realised that nothing was more difficult than to find a job.
R : Without job he failed to meet the daily requirements of his family which made him highly depressed.
S : Quarrel ensued invariably between husband and wife when he returned home in a state of drunkenness.
The proper sequence should be
(a) P Q R S (b) S R Q P
(c) Q S R P (d) Q R P S
8. S_1 : Unlike many modern thinkers, Tagore had no blueprint for the world's salvation.
 S_6 : As a poet he will always delight, as a singer he will always enchant, as a teacher he will always enlighten.
P : His thought will therefore never be out of date.
Q : He merely emphasised certain basic truths which may ignore only at their peril.
R : He believed in no particular 'ism'.
S : He was what Gandhiji rightly termed the Great Sentinel.
The proper sequence should be
(a) S R P Q (b) P R Q S
(c) R S P Q (d) R Q P S
9. S_1 : Louis Pasteur had a very busy and interesting life.
 S_6 : He was always very proud of being able to help his country in this way.
P : Among the people whom Pasteur was able to help were brewers, breeders of silk worms, and cow keepers, all of whom were trying to carry on important industries.
Q : He worked hard in his laboratory with test tubes and all kinds of experiments.
R : He was working to help people who were suffering in some special way from disease.
S : He not only made some exciting discoveries about germs but he was able to use his discoveries in very practical ways.
The proper sequence should be
(a) S Q R P (b) P Q R S
(c) Q R S P (d) R S Q P
10. S_1 : Tom Walker and his wife were always at loggerheads.
 S_6 : Tom silently thanked God for this relief.
P : She never tired of reproaching him on this score.
Q : Tom was incurably lazy and talkative.
R : One day Mrs. Walker caught a deadly cold, and shortly afterwards, died.
S : This was a constant source of irritation to his wife.
The proper sequence should be
(a) P R Q S (b) Q S P R
(c) S Q R P (d) P S Q R
11. S_1 : So we went on in the quiet, and the twilight deepened into night.
 S_6 : Then as the darkness grew deeper, she put her arms round my neck, and closing her eyes tightly pressed her face against my shoulder.
P : The ground grew dim and the trees black.
Q : The clear blue of the distance faded, and one star after another came out.
R : Neena's fears and her fatigue grew upon her.
S : I took her in my arms and talked to her and caressed her.
The proper sequence should be
(a) P R Q S
(b) Q P R S
(c) Q P S R
(d) R S P Q
12. S_1 : Kennedy kicked moodily at the leg of the chair which he was holding.
 S_6 : It was a depressing beginning.
P : Now his chief desire seemed to be to score off the human race in general, his best friend included.
Q : If he had asked Fenn to help him in a tight place, then he knew he could have relied on him.
R : Last term he and Fenn had been as close friends as you could wish to see.
S : The feeling that his whole world had fallen about his ears was increasing with every hour he spend at Kay's.
The proper sequence should be
(a) P R S Q (b) R S P Q
(c) S R Q P (d) R Q P S
13. S_1 : I sat at the table and ate.
 S_6 : I was just the normal Ramaswamy, husband of Madeleine.
P : My breathing became suddenly difficult.
Q : I concentrated on my food and I was convinced I had to eat.
R : I stopped, however, any exhibition of the extraordinary.
S : But lungs have temperament.
The proper sequence should be
(a) P R S Q
(b) Q S P R
(c) Q S R P
(d) S P R Q
14. S_1 : Todd borrowed this dollar last year on the 8th of April.
 S_6 : And I said, 'certainly'.
P : He needed a dollar to pay his taxi and I lent it to him.
Q : He merely said, 'Let me have a dollar, will you !'
R : It happened quite simply and naturally.
S : I hardly realised it till it was all over.
The proper sequence should be
(a) P R S Q (b) R S P Q
(c) Q R P S (d) P Q R S
15. S_1 : People have always been fascinated by dreams.
 S_6 : But a small number, perhaps less than 5% have them regularly.
P : In fact, only recently have there been serious studies to find out how many of us actually have nightmares.
Q : Now that is changing.
R : But the study of nightmares has been curiously neglected.
S : While results so far are inconclusive, it seems fair to say that at least half the population has occasional nightmares.
The proper sequence should be
(a) S R P Q (b) R Q P S
(c) P Q R S (d) S Q R P

SPOTTING ERRORS

Directions (For the 16 items which follow) :

(i) In this Section a number of sentences are given. The sentences are underlined in three separate parts and each one is labelled (a), (b) and (c). Read each sentence to find out whether there is an error in any underlined part. No sentence has more than one error. When you find an error in any one of the underlined parts (a), (b) or (c), indicate your response on the separate Answer Sheet at appropriate space. You may feel that there is no error in a sentence. In that case letter (d) will signify a 'No error' response.

(ii) You are to indicate only one response for each item in your Answer Sheet (If you indicate more than one response, your answer will be considered wrong.) Errors may be in grammar, word usage or idioms. There may be a word missing or there may be a word which should be removed.

(iii) You are not required to correct the error. You are required only to indicate your response on the Answer Sheet.

Examples 'P' and 'Q' have been solved for you.

P. The young child singed a very sweet song.
 (a) (b) (c)
No error.
 (d)

Q. We worked very hard throughout the season.
 (a) (b) (c)
No error.
 (d)

Explanation : In item P, the word 'singed' is wrong. The letter under this part is (b); so (b) is the correct answer. Similarly, for item Q, (d) is the correct answer, as the sentence does not contain any error.

16. I went to his house but couldn't see him
 (a) (b)
because he went out before I arrived. No error.
 (c) (d)

17. When I shall see him, I will tell him that
 (a) (b)
what he has done is worng. No error.
 (c) (d)

18. Literature remains the interest of a minority
 (a)
and the majority has chosen to ignore those aspects
of language
 (b)
which, at school they were told to value highly.
 (c)

No error.
 (d)

19. I look forward to meet you in future. No error.
 (a) (b) (c) (d)

20. If I was the king, I would change the face
 (a) (b)
of my country. No error.
 (c) (d)

21. He admits that he is not following the instructions.
 (a) (b) (c)

No error.
 (d)

22. Life on board ship was not as I expected

(a) (b)
it to be. No error.
 (c) (d)

23. He did not pass the examination in spite of

(a) (b)
his best efforts. No error.
 (c) (d)

24. I tried to read your letter, but it was so badly written

(a) (b)
that I had to leave the attempt. No error.
 (c) (d)

25. I prefer my job to yours. No error.
 (a) (b) (c) (d)

26. If there a guarantee then we are prepared

(a) (b)
to place a bulk order for your product. No error.
 (c) (d)

27. I meet him once a blue moon

(a) (b)
so I do not know much about his activities. No error.
 (c) (d)

28. My daughter-in-laws who are in Kolkata

(a) (b)
have come to visit us. No error.
 (c) (d)

29. He asked me what my name is and where I came from.

(a) (b) (c)
No error.
 (d)

30. There has always been some form of education

(a) (b)
but there has not always been schools. No error.
 (c) (d)

31. At the annual function of the school

(a) (b)
the principal advised to the students to be ideal citizens.
 (c)

No error.
 (d)

ANTONYMS

Directions : (For the 21 items which follow) :

Each of the following twenty-one items consists of a word or a group of words in capital letters followed by four words or groups of words. Select the word or group of words that is farthest in meaning to the word in capital letters.

32. REPLENISH

(a) Deplete
 (c) Enlarge

(b) Increase
 (d) Unprotect

- 33. RELENTLESS**
 (a) Ruthless (b) Restless
 (c) Be merciful (d) Be harsh
- 34. RESILIENCE**
 (a) Silence (b) Buoyancy
 (c) Rigidity (d) Emptiness
- 35. QUERULOUS**
 (a) Confident (b) Cheerful
 (c) Firm (d) Quarrelsome
- 36. ACQUITTED**
 (a) Neglected (b) Discharged
 (c) Arrested (d) Convicted
- 37. AT THE ELEVENTH HOUR**
 (a) At night (b) At noon
 (c) Late (d) Early
- 38. GRUDGING**
 (a) Wholehearted (b) Reluctant
 (c) Convincing (d) Secretive
- 39. DIVULGE**
 (a) Reveal (b) Hide
 (c) Tell (d) Inform
- 40. GARRULOUS**
 (a) Reticent (b) Soft-spoken
 (c) Peaceful (d) Kind
- 41. REJUVENATED**
 (a) Reaffirmed (b) Reincarnated
 (c) Exhausted (d) Devastated
- 42. THWARTED**
 (a) Foiled (b) Opposed
 (c) Supported (d) Tightened
- 43. BIG-WIGS**
 (a) Mangers-on (b) Small fry
 (c) Riff-raff (d) Novices
- 44. PRONE TO**
 (a) Prior to (b) Preceding
 (c) Immune to (d) Vulnerable to
- 45. OBSEQUIOUS**
 (a) Offensive (b) Dignified
 (c) Irritating (d) Subservient
- 46. FIGHT SHY OF**
 (a) Welcome (b) Avoid
 (c) Quarrel with (d) Feel shy of
- 47. BY FITS AND STARTS**
 (a) Regularly (b) When in a fit
 (c) From time to time (d) Without steady application
- 48. PAUCITY**
 (a) Plenty (b) Pressure
 (c) Pause (d) Retention
- 49. DIFFIDENCE**
 (a) Confusion (b) Confidence
 (c) Contentment (d) Dissatisfaction
- 50. DELETERIOUS**
 (a) Dilatory (b) Harmless
 (c) Being delicate (d) Salubrious

- 51. EXASPERATED**
 (a) Encouraged (b) Impressed
 (c) Diverted (d) Delighted
- 52. ON THE SLY**
 (a) Openly (b) Secretly
 (c) Casually (d) Actively

MEANING FOR IDIOMS/PHRASES

Directions (For the 5 items which follow) : You are given four alternative meanings to each of the following idioms/phrases. Choose the most appropriate one.

- 53. BLOW BY BLOW**
 (a) Eruptions in quick succession from a great volcano
 (b) Continuously raining with thunders
 (c) Describe an event as it occurred in every detail
 (d) A rapid decline of business leading to its closure
- 54. BY HOOK OR BY CROOK**
 (a) In a completely insane manner
 (b) In whatever way one can
 (c) Being very evil and destructive
 (d) To be very tenacious
- 55. CHOCK-A-BLOCK**
 (a) Filled to capacity
 (b) Not being able to fulfil one's desires
 (c) Blocking somebody's path to progress
 (d) Suffocation caused due to living in a congested area
- 56. A FEATHER IN ONE'S CAP**
 (a) Accumulating more money or property
 (b) Taking more burden on oneself
 (c) Being felicitated for one's artistic merits
 (d) Something achieved that constitutes a victory
- 57. FOR GOOD**
 (a) For a good cause (b) Temporarily
 (c) Permanently (d) Seriously

SYNONYMS

Directions (For the 23 items which follow) : Each of the following twenty-three items consists of a word in capital letters followed by four words or group of words. Select the word or group of words that is most similar in meaning to the word in capital letters.

- 58. GENIAL**
 (a) Generous (b) Wonderful
 (c) Liberal (d) Friendly and cheerful
- 59. REVAMP**
 (a) Retreat (b) Reconstruct
 (c) Retrial (d) Retrace
- 60. RESCIND**
 (a) Reunite (b) Repeal
 (c) Reserve (d) Reproach
- 61. RESPLENDENT**
 (a) Wonderful (b) Dazzling
 (c) Beautiful (d) Respectful
- 62. CORPULENT**
 (a) Fleeshy (b) Thin
 (c) Stout (d) Bony
- 63. ACRIMONY**
 (a) Disagreement (b) Despondency
 (c) Bitterness (d) Difference

64. CANTANKEROUS
(a) Bad tempered
(c) Very sick
65. FELICITY
(a) Peace
(c) Faithfulness
66. UNRUFFLED
(a) Simple
(c) Sluggish
67. FELINE
(a) Feminine
(c) Ferocious
68. TENUOUS
(a) Being tenacious
(c) Gross
69. EXQUISITE
(a) Highly refined
(c) Extemporaneous
70. WRESTED
(a) Took by force
(c) Lost narrowly
71. EXPOSTULATED
(a) Requested
(b) Quarrelled ferociously
(c) Remonstrated
(d) Appealed with good reason
72. PLACATE
(a) Implore
(c) Pacify
73. PERPETUAL
(a) Contagious
(c) Perplexing
74. DAUNTLESS
(a) Praiseworthy
(b) Effortless and smooth
(c) Fearless and determined
(d) Unceasing
75. SEETHING
(a) Dissatisfied
(c) Noisy
76. STINGY
(a) Violent
(c) Cautious
77. EXULTATION
(a) Extinction
(c) Jubilation
78. DOUGHTY
(a) Dastardly
(c) Flabby
79. OBIVIATE
(a) Delaying the solution of a problem
(b) To remove a difficulty
(c) Make obstruction
(d) Supercede
80. SACRILEGE
(a) Offering sacrifice
(c) Blasphemy
- (b) Full of contempt
(d) Very envious
- (b) Comfort
(d) Great happiness
- (b) Indifferent
(d) Calm
- (b) Cat-like
(d) Ugly and clumsy
- (b) Not substantial
(d) Popular
- (b) Too costly
(d) Exotic
- (b) Took away easily
(d) Won easily
- (b) Flatter
(d) Compensate
- (b) Continuous
(d) Perennial
- (b) Be agitated
(d) Soothing
- (b) Miserly
(d) Quarrelsome
- (b) Anxiety
(d) Expectation
- (b) Deceptive
(d) Valiant
- (b) Privilege
(d) Being sacred

COMPREHENSION

Directions (For the 20 items which follow) : In this Section you have six short passages. After each passage, you will find several questions based on the passage. First, read a passage, and then answer the questions based on it. You are required to select your answers based on the contents of the passage and opinion of the author only.

Examples 'I' and 'J' are solved for you.

PASSAGE

In our approach to life, be it pragmatic or otherwise, a basic fact that confronts us squarely and unmistakably is the desire for peace, security and happiness. Different forms of life at different levels of existence make up the teeming denizens of this earth of ours. And, no matter whether they belong to the higher groups such as human beings or to the lower groups such as animals, all beings primarily seek peace, comfort and security. Life is as dear to a mute creature as it is to a man. Even the lowliest insect strives for protection against dangers that threaten its life. Just as each one of us wants to live and not to die, so do all other creatures.

- I. The author's main point is that
(a) different forms of life are found on earth
(b) different levels of existence are possible in nature
(c) peace and security are the chief goals of all living beings
(d) even the weakest creatures struggles to preserve its life
- J. Which one of the following assumptions or steps is essential in developing the author's position ?
(a) All forms of life have a single overriding goal
(b) The will to survive of a creature is identified with a desire for peace
(c) All beings are divided into higher and lower groups
(d) A parallel is drawn between happiness and life and pain and death

Explanations :

- I. The idea which represents the author's main point is "peace and security are the chief goals of all living beings", which is response (c). So (c) is the correct answer.
- J. The best assumption underlying the passage is "The will to survive of a creature is identified with a desire for peace", which is response (b). So (b) is the correct answer.

PASSAGE I

Ah! whatever could be said was said. All held him guilty. Even his own mother who claimed to understand him the best. All had betrayed him in his hour of need. Yet, there he was, still with a sparkling hope and knew that the truth must prevail. In the cold, dark and damp cell he never for a moment lost faith in God and goodness and was waiting anxiously for an angel to come, plead non guilty for him and free him of his miseries.

81. Three of the following statements indicate that he had a sparkling hope. Which statement does not ?
(a) He had never lost faith in God
(b) He was sure there was goodness
(c) He could have evidence in his favour
(d) He knew that the truth must prevail

82. Whatever others said about him, he
- betrayed no one
 - thought over the problem
 - never lost faith in goodness
 - raised his voice against injustice

83. In the dark dungeon he always waited for
- his mother
 - the jailer
 - the verdict freeing him of his miseries
 - the angel to come and plead for him

84. The truth must prevail means
- he was true
 - angel will reveal truth
 - truth always wins in the end
 - we must plead for the truth

PASSAGE II

Once while travelling by the local bus, I got a seat beside a very strange man. He seemed interested in every passenger aboard. He would stare at a person, scribble some odd mathematical notations on his long notebook and then move on to the next. Being quite interested in what he was doing I asked him what all those notations meant and then came the startling reply. He saw a man's face not as a single unit but as thousands of squares put together. He was in fact a statistical expert and a budding artist learning the art of graphics.

85. The man was scribbling down
- the figures of co-passengers
 - the details of thousands of squares put together
 - some mathematical formulae and calculations
 - some mathematical signs
86. The man caught author's attention because
- he was sitting next to him
 - he was staring at every person in the bus
 - he would stare at every person and then scribble down some mathematical notation
 - he was a budding artist learning the art of graphics
87. The author found that man's reply quite startling because
- a statistical expert cannot be a budding scientist
 - a budding artist cannot be a statistical expert
 - graphics is still a rare art form and he was learning it while travelling in a bus
 - the fact that "a man's face can be analysed as thousands of squares" was a strange concept
88. From the passage we gather that
- the author is very inquisitive
 - the author tries to poke his nose in other people's business
 - the author is interested in mathematical notations
 - the author wants to talk to fellow passengers in the bus

PASSAGE III

With the inevitable growth of specialisation I see the universities facing two great dangers. First, it is very easy to get so involved in the technical details of education that the object of education is lost. And secondly, in an effort to condition a university to the needs of its students and to the needs of the State it may lose its power to make or

mould those students into responsible men, capable of thinking for themselves and capable of expressing the results of their thoughts to others.

89. The author calls growth of specialisation 'inevitable'. Which one of the following statements is likely to be the most correct reason for this inevitability?
- Universities give grants only to do specialised work in different disciplines
 - The professors and researchers in universities are competent only for specialised work
 - Specialisation helps economic growth of the nation
 - In an age of science and technology specialisation becomes necessary
90. Which one of the following statements most correctly suggests the central theme of the passage?
- The aim of education is specialisation
 - The aim of education is to mould the youth to work for the State
 - The aim of education is to make the youth capable of independent thought and expression
 - The aim of education is to enable the youth to earn a comfortable living
91. Which one of the following statements most correctly suggests the warning implied in the passage?
- University education should not be concerned with technical details
 - Universities should not subordinate themselves to the interests of the State
 - Universities should be concerned only with the needs of students
 - Universities should not go in for any specialisation

PASSAGE IV

One December night, a family had gathered around their fireside and piled it high with wood gathered from mountain streams and ruins of great trees that had come falling down the mountain sides. The fire roared and brightened the room with its light. The faces of the father and mother had a quiet gladness; the children laughed; the oldest daughter was the picture of happiness at seventeen; and the aged grandmother who sat sewing in the warmest place was the picture of happiness grown old.

92. The firewood had been
- | | |
|---------------|------------|
| (a) brought | (b) stolen |
| (c) collected | (d) found |
93. The parents looked
- | | |
|------------|--------------|
| (a) serene | (b) cheerful |
| (c) gloomy | (d) dull |
94. The oldest daughter looked
- | | |
|-----------------|--------------|
| (a) stupid | (b) glad |
| (c) intelligent | (d) mournful |

PASSAGE V

The unpleasant feeling passed and she glanced guardedly up at him. He was walking unmarked in moonlight, innocent of her reaction to him. She felt then - this thought had come to her before - that there might be more to him than she had imagined. She felt ashamed she had never thanked him for the help he had given her father.

95. She glanced at him when
 (a) he walked alone and unnoticed in moonlight
 (b) she was sure that she was not being noticed
 (c) her reactions did not have any effect on him
 (d) the unpleasant feeling passed
96. Her unpleasant feeling passed when
 (a) he did not take any notice of her
 (b) the moonlight was beautiful
 (c) she realised her sense of shame
 (d) she looked carefully at him
97. She was ashamed because
 (a) she was spying on him
 (b) there was more to him than she had imagined
 (c) a recurring thought came back to her
 (d) she had never thanked him for his help to her father

PASSAGE VI

As I slung my pack onto my shoulders a big mosquito thudded against my cheek. There had been a few through the day, but it was early in the season - the ice had gone out just two weeks before - and I had scarcely noticed them. But now as I would down the ridge, the last breeze faded, and they were on me. Rising in clouds from the soggy tundra, they pelted against my face. I reached in my pocket for the repellent and came up empty.

98. The traveller could not feel the breeze because
 (a) the mosquito had bitten him
 (b) he was at the foot of the ridge
 (c) there was no ice on the mountain
 (d) there was no breeze on the tundra mountain
99. The traveller carried with him
 (a) mosquito repellent
 (b) a pack of food
 (c) a sling
 (d) a back-pack
100. When he was in the arctic, the time of the year was
 (a) middle of winter
 (b) early autumn
 (c) early spring
 (d) middle of summer

ORDERING OF WORDS IN A SENTENCE

Directions (For the 20 items which follow) : In the following items, some parts of the sentence have been jumbled up. You are required to re-arrange these parts which are labelled P, Q, R and S to produce the correct sentence. Choose the proper sequence and mark in your Answer Sheet accordingly.

Example 'Z' has been solved for you.

- Z. It is well-known that
 the effect is very bad on children of cinema
 (P) (Q) (R) (S)

The correct sequence should be

- (a) P S R Q (b) S P Q R
 (c) S R P Q (d) Q S R P

Explanation : The proper way of writing the sentence is "It is well-known that the effect of the cinema on children is very bad." This is indicated by the sequence P S R Q and so (a) is the correct answer.

101. He found the house
 and knocked at without any difficulty the door twice
 (P) (Q) (R) (S)

The correct sequence should be

- (a) P Q R S (b) P R S Q
 (c) Q P S R (d) Q P R S

102. A good garden,
 should display round about a huge building or palace
 (P) (Q)

laid out on a magnificent scale

(R)

fresh beauties every month

(S)

The correct sequence should be

- (a) P Q R S (b) P S Q R
 (c) R Q P S (d) R P Q S

103. When a spider has a meal, its next meal, until it has
 (P) (Q)
 to last for many months it eats enough
 (R) (S)

The correct sequence should be

- (a) Q P S R (b) S R Q P
 (c) S Q P R (d) Q P R S

104. Mother tongue is for the development
 (P)
 as natural of man's mind as mother's milk
 (Q) (R) (S)

The correct sequence should be

- (a) S R P Q (b) P Q S R
 (c) S R Q P (d) Q S P R

105. The year that has just ended
 (P) (Q)
 has proved to be disastrous for my uncle's family
 (R) (S)

The correct sequence should be

- (a) P R S Q (b) P Q R S
 (c) P S R Q (d) S P R Q

106. When I look back on my life
 I find it hard to believe which has been eventful
 (P) (Q)
 despite what cynics say that it is an illusion
 (R) (S)

The correct sequence should be

- (a) P S Q R (b) P Q S R
 (c) Q R S P (d) Q P S R

107. Guards often use to search for cavities
 (P)
 metal probing rods which they push
 (Q) (R)
 through the ground
 (S)

The correct sequence should be

- (a) S Q R P (b) Q R S P
 (c) S R Q P (d) Q S P R

108. I realised more than ever
 (P)
 and how we lived and worked
 (Q)

how cut off we were from our people

(R)

and agitated in little world apart from them

(S)

The correct sequence should be

- (a) Q S P R (b) S Q R P
(c) P R Q S (d) R S Q P

109. Medical practice in recent years

(P)

has changed so radically

(Q)

you only get specialists in a variety of fields

(R)

that you can no longer find a good general practitioner

(S)

The correct sequence should be

- (a) P S Q R (b) Q P S R
(c) S P R Q (d) P Q R S

110. If everything will be a great success

(P)

the closing function we are sure goes on well

(Q)

(R)

(S)

The correct sequence should be

- (a) P Q R S (b) S R Q P
(c) P R Q S (d) S Q P R

111. With an idea to reach the deprived child

(P)

by the United Nations

(Q)

the year 1979 has been declared as

(R)

the International Year of the Child

(S)

The correct sequence should be

- (a) R S P Q (b) R S Q P
(c) P R S Q (d) P Q R S

112. The gardener with a little brown moustache

(P)

a short fellow and sharp little brown eyes

(Q)

(R)

tiptoed into the room

(S)

The correct sequence should be

- (a) P Q R S (b) Q P R S
(c) Q P S R (d) Q S R P

113. If you have something interesting express it clearly to write about simply and

(P)

(Q)

(R)

with the human touch

(S)

The correct sequence should be

- (a) P Q S R
(b) S P R Q
(c) R S Q P
(d) Q P R S

114. One cloudless morning towards the valley

(P)

the pilots flew off together of the farmer's house

(Q)

(R)

in close formation

(S)

The correct sequence should be

- (a) Q S P R (b) S Q P R
(c) P Q S R (d) R Q P S

115. When he had ridden to the end of his mad little journey

(P)

in front of his rocking horse he climbed down and stood

(Q)

(R)

staring fixedly into its lowered face

(S)

The correct sequence should be

- (a) Q R P S (b) S Q P R
(c) P R Q S (d) P S R Q

116. The meeting if Mr Rai would have been over on time

(P)

(Q)

with his long financial report did not hold us up

(R)

(S)

The correct sequence should be

- (a) Q R P S (b) S P R Q
(c) Q P S R (d) P R S Q

117. The long gruelling hours had finally paid off

(P)

on drawing after drawing, working tirelessly

(Q)

(R)

painting after painting

(S)

The correct sequence should be

- (a) P R Q S (b) R Q S P
(c) Q S R P (d) R P Q S

118. For us before this Monday to complete this work

(P)

(Q)

and it should not be delayed is very important

(R)

(S)

The correct sequence should be

- (a) P Q R S (b) Q P S R
(c) R S P Q (d) Q S P R

119. When the the party realised that elections were over

(P)

(Q)

in the assembly it had lost its majority

(R)

(S)

The correct sequence should be

- (a) P S Q R (b) Q P S R
(c) Q R P S (d) P Q R S

120. If you must arm yourself so before starting a war

(P)

(Q)

that the enemy may think twice you want peace

(R)

(S)

The correct sequence should be

- (a) S P R Q (b) P R Q S
(c) R Q S P (d) P R S Q

General Knowledge

- Which one of the following is used as a mordant in dyeing and tanning industry?
(a) Magnesium oxide
(b) Magnesium carbonate
(c) Magnesium chloride
(d) Magnesium sulphate
- By which one of the following, an old written material which cannot be read easily, can be read?
(a) γ -rays
(b) X-rays
(c) IR-rays
(d) Radiofrequency waves
- Which one of the following characteristics is common among parrot, platypus and kangaroo?
(a) Oviparity
(b) Toothless jaws
(c) Homothermy
(d) Functional postanal tail
- Which one of the following petroleum refinery products has the lowest boiling point?
(a) Kerosene
(b) Diesel
(c) Gasoline
(d) Lubricating oil
- In which one of the following places was Asia's first Export Processing Zone (EPZ) set up?
(a) Santa Cruz
(b) Kandla
(c) Cochin
(d) Surat
- Which one of the following feature films is official nominee for Oscar, 2008 from India?
(a) Rock on
(b) Walu
(c) Drona
(d) Tare Jamin Par
- What is the correct chronological order of conferring Bharat Ratna to the following?
1. M.S. Subbalakshmi
2. Professor Amartya Sen
3. Dr. A. P. J. Abdul Kalam
4. Sushri Lata Dinanath Mangeshkar
Select the correct answer using the codes given below:
(a) 1-2-3-4
(b) 3-1-2-4
(c) 2-1-4-3
(d) 4-3-1-2
- Which one of the following zones of the atmosphere is rich in ozone gas?
(a) Mesosphere
(b) Troposphere
(c) Stratosphere
(d) Ionosphere
- Which one of the following is an example of vestigial organ in man?
(a) Jaw apparatus
(b) Ear muscles
(c) Canine teeth
(d) Humerus
- Which one of the following is a freeliving bacterium that helps in nitrogen fixation in soil?
(a) *Azotobacter*
(b) *Anabaena*
(c) *Azolla*
(d) *Nostoc*
- Which one of the following is associated with the formation of brown air in traffic congested cities?
(a) Sulphur dioxide
(b) Nitrogen oxide
(c) Carbon dioxide
(d) Carbon monoxide
- Which one of the following is the permissible level of noise in a silent zone at daytime?
(a) 50 dB
(b) 60 dB
(c) 65 dB
(d) 75 dB
- Which one of the following is the first National Park established in India?
(a) Bandipur
(b) Corbett
(c) Velavadar
(d) Periyar
- Bryophytes are photosynthetic but do not have vascular tissue and true roots. This feature enables them to resemble with which of the following?
(a) Fungi
(b) Algae
(c) Pteridophytes
(d) Angiosperms
- The genetically engineered 'Golden Rice' is rich in which of the following?
(a) Vitamin A and nicotinic acid
(b) β -carotene and folic acid
(c) β -carotene and iron
(d) Vitamin A and niacin
- Consider the following statements:
 - National Parks are a special category of protected areas of land and sea coasts where people are an integral part of the system.
 - Sanctuaries are concerned with conservation of particular species.
 - Biosphere Reserves are connected with the habitat of a particular wild animal.Which of the statements given above is/are correct?
(a) 1, 2 and 3
(b) 2 only
(c) 1 and 2
(d) 1 and 3
- Which one of the following is categorised as millet?
(a) Wheat
(b) Rice
(c) Sorghum
(d) Maize
- The plant dye *Henna* imparts orange-red colour to skin and hairs due to its reaction with which of the following?
(a) Proteins and amino acids
(b) Lipids
(c) Carbohydrates
(d) Nucleic acids
- Which one of the following plants is preferred for mixed cropping in order to enhance the bioavailability of nitrogen?
(a) Wheat
(b) Gram
(c) Maize
(d) Barley
- The 'Red Data Book' containing information on all wild plants and animals in danger of extinction has been published by which one of the following?
(a) International Union for Conservation of Nature and Natural Resources (IUCN)
(b) World Wildlife Fund (WWF)
(c) World Conservation Union (WCU)
(d) United Nations Environment Programme (UNEP)
- Wavelengths of which of the following colours of the visible spectrum of light are maximally absorbed by green plants?
(a) Green and Yellow
(b) Red and Blue
(c) Green and Red
(d) Blue and Yellow
- Consider the following regions of India:
 - Western Ghats
 - Arvali Hills
 - Eastern Himalayas

Which of the above is/are biodiversity hot spot/hot spots ?
 (a) 1 only
 (b) 1 and 3
 (c) 2 and 3
 (d) 1, 2 and 3

23. Match List-I with List-II and select the correct answer using the codes given below the Lists :

	List-I (Medicinal Product)		List-II (Source)
A.	Quinine	1.	Poppy plant
B.	Morphine	2.	Bacterium
C.	Penicillin	3.	Cinchona bark
D.	Tetracycline	4.	Fungus

Codes :

	A	B	C	D
(a)	3	4	1	2
(b)	2	3	1	4
(c)	3	1	4	2
(d)	2	1	3	4

24. 'A Forgotten Empire', written by the renowned historian Robert Sewell is about which one of the following Empires ?

- (a) Kushan Empire
 (b) Mauryan Empire
 (c) Vijayanagar Empire
 (d) Mughal Empire

25. Which one of the following is considered as the drug of last resort for human beings ?

- (a) Penicillin
 (b) Tetracycline
 (c) Chloramphenicol
 (d) Streptomycin

Directions : The following five (5) items consist of two statements, one labelled as 'Assertion (A)' and the other as 'Reason (R)'. You are to examine these two statements carefully and select the correct answers to these items using the codes given below.

Codes :

- (a) Both A and R are individually true and R is the correct explanation of A
 (b) Both A and R are individually true, but R is the correct explanation of A
 (c) A is true, but R is false
 (d) A is false, but R is true

26. Assertion (A) : Venus is the brightest object in the sky after the sun.

Reason (R) : Venus is the second planet from the sun in our solar system.

27. Assertion (A) : Despite low evaporation and stable stratification of the atmosphere, salinity is high in polar regions.

Reason (R) : Sea water freezes leaving the remaining water saline than before.

28. Assertion (A) : Physiological density is preferable to arithmetic density as an index of population density.

Reason (R) : Physiological density is based on arable land while arithmetic density is based on total area.

29. Assertion (A) : Water in an open pond remains cool even on a hot summer day.

Reason (R) : Water on heating evaporates and heat energy gets converted into latent heat.

30. Assertion (A) : Soaps do not form lather with water containing salts of calcium and magnesium.

Reason (R) : Calcium and magnesium salts of long-chain fatty acids are insoluble in water.

31. The head of a district (Ahara), the principal coordinator of the revenue and the officer in charge of general and military functions in his jurisdiction during Mauryan Empire was known as

- (a) Krori
 (b) Rajuka
 (c) Foujdar
 (d) Chirastadar

32. Which one among the following States has the highest gender disparity ?

- (a) Orissa
 (b) Uttar Pradesh
 (c) Haryana
 (d) Maharashtra

33. Who among the following recommends to the Parliament for the abolition of the Legislative Council in a State ?

- (a) The President of India
 (b) The Governor of the concerned State
 (c) The Legislative Council of the concerned State
 (d) The Legislative Assembly of the concerned State

34. Nail polish remover contains

- (a) acetone
 (b) benzene
 (c) petroleum ether
 (d) acetic acid

35. Who among the following had moved the objectives resolution which formed the basis of the Preamble of the Constitution of India in the Constituent Assembly on December 13, 1946 ?

- (a) Dr. B.R. Ambedkar
 (b) Dr. Rajendra Prasad
 (c) Sardar Vallabhbhai Patel
 (d) Pt. Jawaharlal Nehru

36. Which one of the following is the largest Committee of the Parliament ?

- (a) The Public Accounts Committee
 (b) The Estimates Committee
 (c) The Committee on Public Undertakings
 (d) The Committee on Petitions

37. Who among the following was not a member of the Constituent Assembly ?

- (a) Sardar Vallabhbhai Patel
 (b) Acharya J.B. Kriplani
 (c) Lok Nayak Jayprakash Narayan
 (d) K. M. Munshi

38. In which of the following years the Fundamental Duties have been added to the existent Fundamental Rights in the Constitution of India ?

- (a) 1965
 (b) 1976
 (c) 1979
 (d) 1982

39. Consider the following statements with respect to the Attorney General of India :

1. He is appointed by the President.
2. He must have the same qualifications as are required by a Judge of High Court.
3. In the performance of his duties he shall have the right of audience in all courts of India.

Which of the statements given above is/are correct ?

- (a) 1 only
 (b) 1 and 3
 (c) 2 and 3
 (d) 1, 2 and 3

40. Match List-I with List-II and select the correct answer using the codes given below the Lists :

	List-I (Part of the Constitution of India)		List-II (Source)
A.	Amendment of the Constitution	1.	Constitution of Germany
B.	Directive Principles	2.	Constitution of Canada
C.	Emergency Power of the President	3.	Constitution of South Africa
D.	The Union-State Relations	4.	Irish Constitution

Codes :

	A	B	C	D
(a)	1	2	4	3
(b)	3	4	1	2
(c)	1	4	2	3
(d)	3	1	4	2

41. Who among the following was elected as the President of All-India Khilafat Conference met at Delhi in 1919 ?

(a) Motilal Nehru (b) Mahatma Gandhi
(c) M.A. Jinnah (d) Shaukat Ali

42. According to Article 164(1) of the Constitution of India, in three States there shall be a Minister in charge of tribal welfare who may in addition be in charge of the welfare of the Scheduled Castes and Backward Classes. Which one of the following States is not covered by the Article ?

(a) Jharkhand (b) Punjab
(c) Madhya Pradesh (d) Orissa

43. In which of the following years was the All-India Trade Union Congress formed in Bombay ?

(a) 1918 (b) 1919
(c) 1920 (d) 1921

44. Which one of the following is the correct chronological order of the tenures of the following Presidents of Indian National Congress ?

(a) Jagjivan Ram (b) K. Kamaraj
(c) P.D. Tandon (d) U. N. Dhebar

Select the correct answer using the codes given below :

(a) 1-2-4-3 (b) 2-3-4-1
(c) 3-4-2-1 (d) 3-4-1-2

45. Who among the following was the first Speaker of the Lok Sabha ?

(a) M. A. Ayyangar (b) G.V. Mavalankar
(c) Sardar Hukam Singh (d) N. Sanjiva Reddy

46. In which of the following years was General Agreement on Tariffs and Trade (GATT) absorbed into the World Trade Organisation (WTO) ?

(a) 1991 (b) 1995
(c) 2000 (d) 2005

47. Consider the following statements
X-rays

- can pass through aluminum.
- can be deflected by magnetic field.
- move with a velocity less than the velocity of ultraviolet rays in vacuum.

Which of the statements given above is/are correct ?

(a) 1, 2 and 3 (b) 1 only
(c) 2 and 3 (d) 1 and 2

48. If a small raindrop falls through air
- its velocity goes on increasing
 - its velocity goes on decreasing
 - its velocity goes on increasing for some time and then becomes constant
 - it falls with constant speed for some time and then its velocity increases

49. Television signal cannot be received generally beyond a particular distance due to

- curvature of the earth
- weakness of antenna
- weakness of signal
- absorption of signal in air

50. Because of which one of the following factors, clouds do not precipitate in deserts ?

- Low pressure (b) Low humidity
- High wind velocity (d) High temperature

51. Which one of the following is an object with such a strong gravitational field that even light cannot escape from its surface ?

- Neutron star (b) White dwarf
- Black hole (d) Supernova star

52. Which one of the following is a medium range surface to air missile ?

- Trishul (b) Nag
- Prithvi (d) Akash

53. Match List-I with List-II and select the correct answer using the codes given below the Lists :

	List-I (Vitamin)		List-II (Chemical Compound)
A.	Vitamin A	1.	Thiamin
B.	Vitamin B ₁	2.	Retinol
C.	Vitamin C	3.	Ascorbic acid
D.	Vitamin E	4.	Tocopherol

Codes :

	A	B	C	D
(a)	4	1	3	2
(b)	2	3	1	4
(c)	4	3	1	2
(d)	2	1	3	4

54. Which one of the following is the tide produced as a consequence of moon and sun pulling the earth in the same direction ?

- Spring tide (b) Neap tide
- High tide (d) Low tide

55. Aqua regia used by alchemists to separate silver and gold is a mixture of

- hydrochloric acid (concentrated) and nitric acid (concentrated)
- hydrochloric acid (concentrated) and sulphuric acid (concentrated)
- nitric acid (concentrated) and sulphuric acid (concentrated)
- hydrochloric acid (dilute) and sulphuric acid (dilute)

56. Commercial vulcanisation of rubber involves

- sulphur (b) carbon
- carbon phosphorus (d) selenium

57. In which one of the following is higher percentage of carbon found ?

- Lignite coal (b) Peat coal
- Bituminous coal (d) Anthracite coal

58. Which one of the following when dissolved in H₂O gives hissing sound ?

- (a) Limestone
(b) Slacked lime
(c) Soda lime
(d) Quicklime

59. The rusting of iron nail

- (a) decreases its weight
(b) increases its weight
(c) Does not affect weight but iron is oxidised
(d) does not affect weight but iron is reduced

60. Which one of the following is heavy water used in nuclear reactor ?

- (a) Water having molecular weight 18 amu
(b) Water having molecular weight 20 amu
(c) Water at 4°C but having molecular weight 19 amu
(d) Water below the ice in a frozen sea

61. Which one of the following pairs is not correctly matched ?

- | Country | Currency |
|--------------|----------|
| (a) Brazil | Reais |
| (b) China | Yuan |
| (c) Mexico | Pesos |
| (d) Thailand | Ringgit |

62. Match List-I with List-II and select the correct answer using the codes given below the Lists :

	List-I (City)		List-II (Stadium)
(a)	Bengaluru	1.	Sawai Mansingh
(b)	Chennai	2.	Sardar Patel
(c)	Motera	3.	Chinnaswami
(d)	Jaipur	4.	Chidambaram

Codes :

- | | A | B | C | D |
|-----|---|---|---|---|
| (a) | 1 | 2 | 3 | 4 |
| (b) | 3 | 4 | 2 | 1 |
| (c) | 1 | 3 | 2 | 4 |
| (d) | 3 | 2 | 4 | 1 |

63. Who among the following had won the Wimbledon Women's Singles Title, 2008 ?

- (a) Ana Ivanovic
(b) Maria Sharapova
(c) Serena Williams
(d) Venus Williams

64. Who among the following is the first man (after Bjorn Borg in 1990) to win the French Open and Wimbledon Singles Title back to back ?

- (a) Rafael Nadal
(b) Roger Federer
(c) John McEnroe
(d) Daniel Nestor

65. Which one of the following books had been named as winner of the Best of the Booker Award in 2008 ?

- (a) The Enchantress of Florence
(b) Disgrace
(c) Midnight's Children
(d) The Siege of Krishnapur

66. Which one of the following countries has recently carried out military operations in Georgia ?

- (a) USA
(b) Poland
(c) Russia
(d) Kyrgyzstan

67. Which one of the following Committees/Commissions was formed to study and suggest pricing pattern for oil and natural gas sectors in India ?

- (a) B. K Chaturvedi Committee
(b) Sachar Committee
(c) B.N. Srikrishna Commission
(d) M. Veerapa Moily Commission

68. Which one of the following countries has adopted a new Constitution in the year 2008 aiming to pursue a modern, multi-party, democratic system and giving more power to the judiciary and legislature ?

- (a) Japan
(b) Bhutan
(c) Maldives
(d) Singapore

69. Which one of the following countries has recently tested a two-stage satellite launch rocket named the Safir-e-Omid or the Ambassador of Peace ?

- (a) Israel
(b) Iran
(c) Pakistan
(d) Turkey

70. Consider the following statements about Comprehensive Test Ban Treaty (CTBT) :

1. The treaty comes into force only if and when all nuclear capable countries sign it.

2. Iraq and India have not signed the treaty.

Which of the statements given above is/are correct ?

- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

71. In appreciation of his environmental research and campaigns, space agency NASA has recently named a minor planet after whom among the following ?

- (a) Sainudeen Pattazhy
(b) Anil Agarwal
(c) Sunita Narayan
(d) R. K. Pachauri

72. Who among the following has issued the coin rupee for the first time ?

- (a) Muhammad-bin-Tughluq
(b) Alauddin Khilji
(c) Sher Shah
(d) Akbar

73. Which one of the following was the original name of Tansen, the famous musician in the court of Akbar ?

- (a) Mahananda Pande
(b) Lal Kalwant
(c) Baz Bahadur
(d) Ramtanu Pande

74. Who among the following was not a member of the Cabinet Mission ?

- (a) Sir Stafford Cripps
(b) A. V. Alexander
(c) Radcliffe
(d) Pethwick Lawrence

75. What is the correct sequence of the following events ?

- Rowlatt Act
- Gandhi-Irwin Pact
- Morley-Minto Reforms
- Illbert Bill

Select the correct answer using the codes given below :

- (a) 1-2-4-3
(b) 4-3-1-2
(c) 4-1-3-2
(d) 3-4-1-2

76. Under which one of the following systems of assessment, the British Government collected revenue directly from the farmers ?

- (a) Zamindari
(b) Ryotwari
(c) Annawari
(d) Desaiwari

77. Who among the following has started the Public Works Department in India in AD 1848 ?

- (a) Lord William Bentinck
(b) Lord Dalhousie
(c) Lord Wellesley
(d) Lord Cornwallis

78. Who among the following was thrice elected President of the Indian National Congress ?
 (a) Dadabhai Naoroji
 (b) Surendranath Banerjee
 (c) Gopal Krishna Gokhale
 (d) Shankaran Nair
79. Match List-I with List-II and select the correct answer using the codes given below the Lists

	List-I (Person)		List-II (Associated in Formation of)
A.	G.K. Gokhale	1.	Servants of India Society
B.	M.M. Malaviya	2.	Benaras Hindu University
C.	C. Rajgopalachari	3.	Free India Society
D.	V.D. Savarkar	4.	Swatantra Party

Codes :

	A	B	C	D
(a)	1	2	4	3
(b)	3	4	2	1
(c)	1	4	2	3
(d)	3	2	4	1

80. Who among the following Urdu poets was invited to the Second and Third Round Table Conference ?
 (a) Faiz Ahmad Faiz (b) Josh Malihabadi
 (c) Muhammad Iqbal (d) Firaq Gorakhpuri
81. What is the correct sequence of the following events ?
 1. Bardoli Satyagraha
 2. Rajkot Satyagraha
 3. Champaran Satyagrah
 4. Nagpur Satyagraha
 Select the correct answer using the code given below.
 (a) 1-2-4-3 (b) 4-3-1-2
 (c) 3-1-4-2 (d) 3-4-1-2
82. In which of the following years was the first Railway line between Bombay and Thane laid ?
 (a) 1853 (b) 1854
 (c) 1856 (d) 1858
83. Who among the following was not a party to the league that was defeated by the British in the Battle of Buxar ?
 (a) Shuja-ud-daulah (b) Shah Alam
 (c) Mir Jafar (d) Mir Kasim
84. In Buddhism, what does *Patimokkha* stand for ?
 (a) A description of Mahayana Buddhism
 (b) A description of Hinayana Buddhism
 (c) The rules of the Sangha
 (d) The questions of king Menander
85. Who among the the following was the founder of the Muslim League ?
 (a) Muhammad Ali Jinnah (b) Shaukat Ali
 (c) Nawab Salimullah (d) Aga Khan
86. Whose philosophy is called the Advaita ?
 (a) Ramanujacharya (b) Shankaracharya
 (c) Nagarjuna (d) Vasumitra
87. Consider the following Vice-Presidents of India :
 1. V. V. Giri
 2. M. Hidayatullah
 3. B.D. Jatti
 4. G.S. Pathak

Which one of the following is the correct chronology of their tenures ?

- (a) 1-4-3-2 (b) 2-1-3-4
 (c) 3-2-1-4 (d) 4-1-3-2

88. In which one of the following Ministries the census organisation has been functioning on a permanent footing since 1961 ?
 (a) Health and Family Welfare
 (b) Home Affairs
 (c) Social Justice and Empowerment
 (d) Human Resource Development
89. Which of the following is not a recommendation of the Ashok Mehta Committee on Panchayati Raj ?
 (a) Open participation of political parties in Panchayati Raj affairs
 (b) Creation of a three-tier system
 (c) Reservation of seats for Scheduled Castes and Scheduled Tribes
 (d) Compulsory powers of taxation to Panchayati Raj institution
90. With reference to the Constitution of India, which one of the following pairs is not correctly matched

Subject	List
(a) Stock Exchanges	The State List
(b) Forest	The Concurrent List
(c) Insurance	The Union List
(d) Marriage and Divorce	The Concurrent List

91. In which one of the following is lands of India is an active volcano found ?
 (a) Car Nicobar Island
 (b) Nancowry Island
 (c) Barren Island
 (d) Maya Bunder Island
92. Match List-I with List-II and select the correct answer using the codes given below the Lists :

	List-I (Pass)		List-II (State)
A.	Zoji La Pass	1.	Sikkim
B.	Bara Lacha Pass	2.	Uttarakhand
C.	Jelep La Pass	3.	Himachal Pradesh
D.	Niti Pass	4.	Jammu and Kashmir

Codes :

	A	B	C	D
(a)	4	1	3	2
(b)	2	3	1	4
(c)	4	3	1	2
(d)	2	1	3	4

93. Which one of the following longitudes determines the Indian Standard Time ?
 (a) 85.5°E (b) 86.5°E
 (c) 84.5°E (d) 82.5°E
94. Which one of the following is the oldest mountain range in India ?
 (a) Himalayas (b) Aravali
 (c) Satpura (d) Nilgiri

95. Match List-I with List-II and select the correct answer using the codes given below the Lists :

List-I (River)		List-II (Tributary)	
A.	Brahmaputra	1.	Musi
B.	Krishna	2.	Tawa
C.	Narmada	3.	Bhavani
D.	Cauvery	4.	Dikhow

Codes :

	A	B	C	D
(a)	4	2	1	3
(b)	4	1	2	3
(c)	3	2	1	4
(d)	3	1	2	4

96. Which one of the following lakes in India has the highest water salinity ?

- (a) Dal
(b) Chilika
(c) Wular
(d) Sambhar

97. Which one of the following pairs is not correctly matched ?

River	City
(a) Gomati	Lucknow
(b) Saryu	Ayodhya
(c) Alaknanda	Badrinath
(d) Narmada	Satna

98. Which one of the following cities will never get the vertical rays of the sun ?

- (a) Srinagar
(b) Mumbai
(c) Kolkata
(d) Thiruvananthapuram

99. Which of the following diseases is not caused by viruses ?

- (a) Cholera
(b) Chickenpox
(c) Hepatitis
(d) Measles

100. Which one of the following sequences of the oil refineries of India as they occur from south to north is correct ?

- (a) Kochi-Mangalore-Mumbai-Koyali
(b) Koyali-Mumbai-Mangalore-Kochi
(c) Kochi-Mumbai-Mangalore-Koyali
(d) Mangalore-Kochi-Mumbai-Koyali

101. Match List-I with List-II and select the correct answer using the codes given below the Lists:

List-I (River)		List-II (Power Station)	
A.	Rihand	1.	Hirakud
B.	Gandak	2.	Balmikinagar
C.	Chambal	3.	Pipri
D.	Mahanadi	4.	Kota

Codes :

	A	B	C	D
(a)	3	4	2	1
(b)	1	2	4	3
(c)	3	2	4	1
(d)	1	4	2	3

102. Which one of the following States of India is the largest producer of lignite coal ?

- (a) Maharashtra
(b) Gujarat
(c) Madhya Pradesh
(d) Tamil Nadu

103. Which one of the following pairs is not correctly matched ?

List-I (National Park)	List-II (State)
(a) Kanha National Park	Madhya Pradesh
(b) Sultanpur National Park	Haryana
(c) Ranthambore National Park	Gujarat
(d) Bandipur National Park	Karnataka

104. Which one of the following oil fields of India is the oldest and still producing oil ?

- (a) Bombay High
(b) Digboi
(c) Ankleshwar
(d) Naharkatiya

105.



The shaded area in the map given above is the major producer of which one of the following ?

- (a) Cotton
(b) Groundnut
(c) Wheat
(d) Mustard

106. Which one of the following States is the largest producer of black pepper in India ?

- (a) Tamil Nadu
(b) Kerala
(c) Karnataka
(d) Andhra Pradesh

107. The Buddha delivered his first sermon, known as 'Turning of the wheel of law' at

- (a) Sanchi
(b) Sarnath
(c) Sravasti
(d) Bodh Gaya

108. Which one of the following is the longest National Highway in India ?

- (a) NH-2
(b) NH-7
(c) NH-8
(d) NH-31

109. In human beings, the opening of the stomach into the small intestine is called

- (a) caecum
(b) ileum
(c) oesophagus
(d) pylorus

110. In which one of the following places is the Forest Survey of India (FSI), a national organisation engaged in forest cover mapping, forest inventory and training in the field of remote sensing and GIS, located ?

- (a) Dehradun
(b) Itanagar
(c) Ahmedabad
(d) Aizawl

111. The Veerapa Moily Commission in its report on Administrative Reforms among other aspects has suggested doing away with which one of the following pairs of Articles of the Constitution of India ?

- (a) Articles 305 and 306
- (b) Articles 307 and 308
- (c) Articles 308 and 309
- (d) Articles 310 and 311

112. Who among the following has created world record in the men's 100 metre sprint event at 2008 Olympic Games ?

- (a) Usain Bolt
- (b) Churandy Martina
- (c) Asafa Powell
- (d) Walter Dix

113. What does Fuwa, the Official Mascot of the 2008 Olympic Games, contain ?

- (a) Four popular animals of China and the Olympic Flame
- (b) Five popular animals of China and the map of China
- (c) Five popular animals of China
- (d) Four popular animals of China and the world map

114. Match List-I with List-II and select the correct answer using the codes given below the Lists :

	List-I (Year)		List-II (UN's International Year)
A.	2000	1.	International Year of Ecotourism
B.	2004	2.	International Year of Microcredit
C.	2005	3.	International Year of Planet Earth
D.	2008	4.	International Year of Struggle against Slavery and its Abolition

Codes :

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 3 | 4 | 2 | 1 |
| (b) | 1 | 4 | 2 | 3 |
| (c) | 3 | 2 | 4 | 1 |
| (d) | 1 | 2 | 4 | 3 |

115. Which one of the following pairs is not correct matched ?

- | Person | Bank |
|-------------------|-------|
| (a) O. P. Bhatt | SBI |
| (b) K.V. Kamath | ICICI |
| (c) Aditya Puri | HDFC |
| (d) Vikram Pandit | IDBI |

116. Which one of the following pairs is not correctly matched ?

- | Nobel Laureate of 2008 | Discipline |
|----------------------------------|------------|
| (a) Martti Ahtisaari | Peace |
| (b) Yoichiro Nambu | Physics |
| (c) Jean-Marie Gustave Le Clezio | Literature |
| (d) Osamu Shimomura | Physiology |

117. Match List-I with List-II and select the correct answer using the codes given below the Lists :

	List-I (Player)		List-II (Sport)
A.	Gagan Narang	1.	Archery
B.	Akhil Kumar	2.	Swimming
C.	Mangal Singh Champia	3.	Boxing
D.	Virdhawal Khade	4.	Rifle Shooting

Codes :

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 4 | 1 | 3 | 2 |
| (b) | 2 | 3 | 1 | 4 |
| (c) | 4 | 3 | 1 | 2 |
| (d) | 2 | 1 | 3 | 4 |

118. Consider the following statements about IAEA :

1. It was set up as the world's Atoms for Peace organisation in 1957.
2. The IAEA Secretariat is headquartered at the Vienna International Centre in Vienna, Austria.
3. In terms of its statute, the IAEA reports annually to the UN General Assembly.

Which of the statements given above is/are correct ?

- (a) 1, 2 and 3
- (b) 1 only
- (c) 2 and 3
- (d) 3 only

119. Who among the following has been awarded the 'Officer of the Legion of Honour,' the highest civilian distinction of the Government of France ?

- (a) N.R. Narayana Murthy
- (b) Ratan Tata
- (c) K. M. Birla
- (d) Mukesh Ambani

120. Madhya Pradesh shares its border with how many States ?

- (a) 3
- (b) 4
- (c) 5
- (d) 6

1. When a natural number n is divided by 4, the remainder is 3. What is the remainder when $2n$ is divided by 4?
 - (a) 1
 - (b) 2
 - (c) 3
 - (d) 6
2. What is the last digit in the expansion of $(2457)^{754}$?
 - (a) 3
 - (b) 7
 - (c) 8
 - (d) 9
3. If $\log_r 6 = m$ and $\log_r 3 = n$, then what is $\log_r (r/2)$ equal to?
 - (a) $m - n + 1$
 - (b) $m + n - 1$
 - (c) $1 - m - n$
 - (d) $1 - m + n$
4. Consider the following statements
A number $a_1 a_2 a_3 a_4 a_5$ is divisible by 9 if
 1. $a_1 + a_2 + a_3 + a_4 + a_5$ is divisible by 9.
 2. $a_1 - a_2 + a_3 - a_4 + a_5$ is divisible by 9.
 Which of the above statements is/are correct?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
5. What is $x(y - z)(y + z) + y(z - x)(z + x) + z(x - y)(x + y)$ equal to?
 - (a) $(x + y)(y + z)(z + x)$
 - (b) $(x - y)(x - z)(z - y)$
 - (c) $(x + y)(z - y)(x - z)$
 - (d) $(y - x)(z - y)(x - z)$
6. If the remainder of the polynomial $a_0 + a_1x + a_2x^2 + \dots + a_nx^n$ when divided by $(x - 1)$ is 1, then which one of the following is correct?
 - (a) $a_0 + a_2 + \dots = a_1 + a_3 + \dots$
 - (b) $a_0 + a_2 + \dots = 1 + a_1 + a_3 + \dots$
 - (c) $1 + a_0 + a_2 + \dots = -(a_1 + a_3 + \dots)$
 - (d) $1 - a_0 - a_2 - \dots = a_1 + a_3 + \dots$
7. When $(x^3 - 2x^2 + px - q)$ is divided by $(x^2 - 2x - 3)$, the remainder is $(x - 6)$. What are the values of p, q respectively?
 - (a) $-2, -6$
 - (b) $2, -6$
 - (c) $-2, 6$
 - (d) $2, 6$
8. What are the values of c when the HCF of $x^3 + cx^2 - x + 2c$ and $x^2 + cx - 2$ over the rationals is a linear polynomial?
 - (a) ± 1
 - (b) ± 2
 - (c) ± 3
 - (d) ± 4
9. If $(x + 2)$ is the HCF of $x^2 + ax + b$ and $x^2 + cx + d$ ($a \neq c$ and $b \neq d$), then which one of the following is correct?
 - (a) $a + c = b + d$
 - (b) $2a + b = 2c + d$
 - (c) $b + 2c = 2a + d$
 - (d) $b - 2c = 2a - d$
10. What is the LCM of $(x^2 - y^2 - z^2 - 2yz)$, $(x^2 - y^2 + z^2 + 2xz)$ and $(x^2 + y^2 - z^2 - 2xy)$?
 - (a) $(x + y + z)(x + y - z)(x - y + z)$
 - (b) $(x + y + z)(x - y - z)(x - y + z)$
 - (c) $(x + y + z)(x + y - z)(x - y - z)$
 - (d) $(x + y - z)(x - y - z)(x - y + z)$
11. If $3^x + 27(3^{-x}) = 12$, then what is the value of x ?
 - (a) 1 only
 - (b) 2 only
 - (c) 1 or 2
 - (d) 0 or 1
12. If $x = 1 + \sqrt{2}$, then what is the value of $x^4 - 4x^3 + 4x^2$?
 - (a) -1
 - (b) 0
 - (c) 1
 - (d) 2
13. What is the magnitude of difference of the roots of $x^2 - ax + b = 0$?
 - (a) $\sqrt{a^2 - 4b}$
 - (b) $\sqrt{b^2 - 4a}$
 - (c) $2\sqrt{a^2 - 4b}$
 - (d) $\sqrt{b^2 - 4ab}$
14. What is the solution of the equations $x - y = 0.9$ and $11(x + y)^{-1} = 2$?
 - (a) $x = 3.2$ and $y = 2.3$
 - (b) $x = 1$ and $y = 0.1$
 - (c) $x = 2$ and $y = 1.1$
 - (d) $x = 1.2$ and $y = 0.3$
15. Pooja started her job with certain monthly salary and gets a fixed increment every year. If her salary was Rs 4200 after 3 yr and Rs 6800 after 8 yr of service, then what are her initial salary and the annual increment respectively?
 - (a) Rs 2640, Rs 320
 - (b) Rs 2460, Rs 320
 - (c) Rs 2460, Rs 520
 - (d) Rs 2640, Rs 520
16. A person bought 5 tickets from a station P to a station Q and 10 tickets from the station P to a station R . He paid Rs 350. If the sum of a ticket from P to Q and a ticket from P to R is Rs 42, then what is the fare from P to Q ?
 - (a) Rs 12
 - (b) Rs 14
 - (c) Rs 16
 - (d) Rs 18
17. The product of two alternate odd integers exceeds three times the smaller by 12. What is the larger number?
 - (a) 3
 - (b) 5
 - (c) 7
 - (d) 9
18. If $a^x = c^q = b$ and $c^y = a^z = d$, then which one of the following is correct?
 - (a) $x/y = q/z$
 - (b) $x + y = q + z$
 - (c) $xy = qz$
 - (d) $x^y = q^z$
19. A ball is dropped from a height 64 m above the ground and every time it hits the ground it rises to a height equal to half of the previous. What is the height attained after it hits the ground for the 16th time?
 - (a) 2^{-12} m
 - (b) 2^{-11} m
 - (c) 2^{-10} m
 - (d) 2^{-9} m
20. What is the value of $2 \log(5/8) + \log(128/125) + \log(5/2)$?
 - (a) 0
 - (b) 1
 - (c) 2
 - (d) 5
21. If $x \cos 60^\circ + y \cos 0^\circ = 3$ and $4x \sin 30^\circ - y \cot 45^\circ = 2$, then what is the value of x ?
 - (a) -1
 - (b) 0
 - (c) 1
 - (d) 2
22. If the unit of weight is $15/4$ kg. What number will $3/2$ quintal represent?
 - (a) 25
 - (b) 6
 - (c) $1/9$
 - (d) None of these
23. A dishonest dealer professes to sell his goods at cost price, but uses a false weight and thus gains 20%. For a kilogram he uses a weight of
 - (a) 700 g
 - (b) 750 g
 - (c) 800 g
 - (d) 850 g
24. If we divide a positive integer by another positive integer, what is the resulting number?
 - (a) 1 only
 - (b) 2 only
 - (c) 1 or 2
 - (d) 0 or 1

- (a) It is always a natural number
 (b) It is always an integer
 (c) It is a rational number
 (d) It is an irrational number
25. Nine numbers are written in ascending order. The middle number is the average of the nine numbers. The average of the first five larger numbers is 68 and that of five smaller numbers is 44. What is the sum of all nine numbers?
 (a) 450 (b) 501
 (c) 504 (d) 540
26. What is the value of $\left(\frac{1}{\sqrt{9}-\sqrt{8}} - \frac{1}{\sqrt{8}-\sqrt{7}} + \frac{1}{\sqrt{7}-\sqrt{6}} - \frac{1}{\sqrt{6}-\sqrt{5}} + \frac{1}{\sqrt{5}-\sqrt{4}}\right)$?
 (a) 0 (b) $\frac{1}{3}$
 (c) 1 (d) 5
27. Two persons P and Q start at the same time from city A for city B, 60 km away. P travels 4 km/h slower than Q. Q reaches city B and at once turns back meeting P, 12 km from city B. What is the speed of P?
 (a) 8 km/h (b) 12 km/h
 (c) 16 km/h (d) 20 km/h
28. A boy walks from his house to school at 2.5 km/h and arrives 12 min late. The next day he walks at 4 km/h and reaches the school 15 min earlier. What is the distance from his house to school?
 (a) 2 km (b) 2.5 km
 (c) 3 km (d) 3.5 km
29. A and B can do a piece of work in 8 days, B and C can do the same work in 12 days. If A, B and C can complete the same work in 6 days, in how many days can A and C complete the same work?
 (a) 8 days (b) 10 days
 (c) 12 days (d) 16 days
30. The compound interest on a sum for 2 yr is Rs 832 and the simple interest on the same sum at the same rate for the same period is Rs 800. What is the rate of interest?
 (a) 6% (b) 8%
 (c) 10% (d) 12%
31. A person invested part of Rs 45000 at 4% and the rest at 6%. If his annual income from both are equal, then what is the average rate of interest?
 (a) 4.6% (b) 4.8%
 (c) 5.0% (d) 5.2%
32. What the seller marked the printed price of a watch purchased at Rs 380, so that after giving 5% discount, there is 25% profit?
 (a) Rs 400 (b) Rs 450
 (c) Rs 500 (d) Rs 600
33. A person A sells a table costing Rs 2000 to a person B and earns a profit of 6%. The person B sells it to another person C at a loss of 5%. At what price did B sell the table?
 (a) Rs 2054 (b) Rs 2050
 (c) Rs 2024 (d) Rs 2014
34. If $a:b = 1\frac{1}{2} : 2\frac{1}{4}$ and $b:c = 2 : 3\frac{1}{2}$, then what is $a:b:c$ equal to?
 (a) $12:8:21$ (b) $8:21:12$
 (c) $8:12:21$ (d) $21:8:12$
35. A bag contains Rs 114 in the form of 1 rupee, 50 paise and 10 paise coins in the ratio 3:4:10. What is the number of 50 paise coins?
 (a) 76 (b) 72
 (c) 56 (d) 48
36. Two taps can fill a tub in 5 min and 7 min respectively. A pipe can empty it in 3 min. If all the three are kept open simultaneously, when will the tub be full?
 (a) 60 min (b) 85 min
 (c) 90 min (d) 105 min
37. If $(x/y) = (z/w)$, then what is $(xy + zw)^2$ equal to?
 (a) $(x^2 + z^2)(y^2 + w^2)$ (b) $x^2y^2 + z^2w^2$
 (c) $x^2w^2 + y^2z^2$ (d) $(x^2 + w^2)(y^2 + z^2)$
38. If $\frac{1}{x+1} + \frac{2}{y+2} + \frac{1009}{z+1009} = 1$, then what is the value of $\frac{x}{x+1} + \frac{y}{y+2} + \frac{z}{z+1009}$?
 (a) 0 (b) 2
 (c) 3 (d) 4
39. Suppose y is equal to the sum of two quantities of which one varies directly as x and the other inversely as x. If $y = 6$ when $x = 4$, and $y = 10/3$ when $x = 3$, then what is the relation between x and y?
 (a) $y = x + (4/x)$ (b) $y = -2x + (4/x)$
 (c) $y = 2x + (8/x)$ (d) $y = 2x - (8/x)$
40. A train of length 150 m takes 10 s to cross another train 100 m long coming from the opposite direction. If the speed of first train is 30 km/h. What is the speed of second train?
 (a) 72 km/h (b) 60 km/h
 (c) 54 km/h (d) 48 km/h
41. There are some coins and rings of either gold or silver in a box. 60% of the objects are coins, 40% of the rings are of gold and 30% of the coins are of silver. What is the percentage of gold articles?
 (a) 16 (b) 27
 (c) 58 (d) 70
42. What is the total number of three digit numbers with unit digit 7 and divisible by 11?
 (a) 6 (b) 7
 (c) 8 (d) 9
43. What is the sum of positive integers less than 100 which leave a remainder 1 when divided by 3 and leave a remainder 2 when divided by 4?
 (a) 416 (b) 620
 (c) 1250 (d) 1314
44. What is the greatest number which divides 392, 486 and 627 so as to leave the same remainder in each case?
 (a) 47 (b) 43
 (c) 37 (d) 34
45. A man walking at the rate 3 km/h crosses a square field diagonally in 1 min. What is the area of the field?
 (a) 1000 m^2 (b) 1250 m^2
 (c) 2500 m^2 (d) 5000 m^2
46. The difference between the area of a square and that of an equilateral triangle on the same base is $1/4 \text{ cm}^2$. What is the length of side of triangle?
 (a) $(4 - \sqrt{3})^{1/2} \text{ cm}$ (b) $(4 + \sqrt{3})^{1/2} \text{ cm}$
 (c) $(4 - \sqrt{3})^{-1/2} \text{ cm}$ (d) $(4 + \sqrt{3})^{-1/2} \text{ cm}$

47. A horse is tied to a pole fixed at one corner of a $50\text{m} \times 50\text{m}$ square field of grass by means of a 20m long rope. What is the area of that part of the field which the horse can graze?
 (a) 1256m^2 (b) 942m^2
 (c) 628m^2 (d) 314m^2

48. Two sides of a parallelogram are 10cm and 15cm . If the altitude corresponding to the side of length 15cm is 5cm , then what is the altitude to the side of length 10cm ?
 (a) 5cm (b) 7.5cm
 (c) 10cm (d) 15cm

49. From a rectangular metal sheet of sides 25cm and 20cm , a circular sheet as large as possible is cut-off. What is the area of the remaining sheet?
 (a) 186cm^2 (b) 144cm^2
 (c) 93cm^2 (d) 72cm^2

50. Three cubes each of side 5cm are joined end to end. What is the surface area of the resulting cuboid?
 (a) 300cm^2 (b) 350cm^2
 (c) 375cm^2 (d) 400cm^2

51. The diameter of the moon is approximately one-fourth of that of the earth. What is the (approximate) ratio of the volume of the moon to that of earth?
 (a) $1/16$ (b) $1/32$
 (c) $1/48$ (d) $1/64$

52. What is the area of a right angled isosceles triangle whose hypotenuse is $6\sqrt{2}\text{cm}$?
 (a) 12cm^2 (b) 18cm^2
 (c) 24cm^2 (d) 36cm^2

53. If A is the area of a triangle in cm^2 , whose sides are 9cm , 10cm and 11cm , then which one of the following is correct?
 (a) $A < 40\text{cm}^2$
 (b) $40\text{cm}^2 < A < 45\text{cm}^2$
 (c) $45\text{cm}^2 < A < 50\text{cm}^2$
 (d) $A > 50\text{cm}^2$

54. A roller of diameter 70cm and length 2m is rolling on the ground. What is the area covered by the roller in 50 revolutions?
 (a) 180m^2 (b) 200m^2
 (c) 220m^2 (d) 240m^2

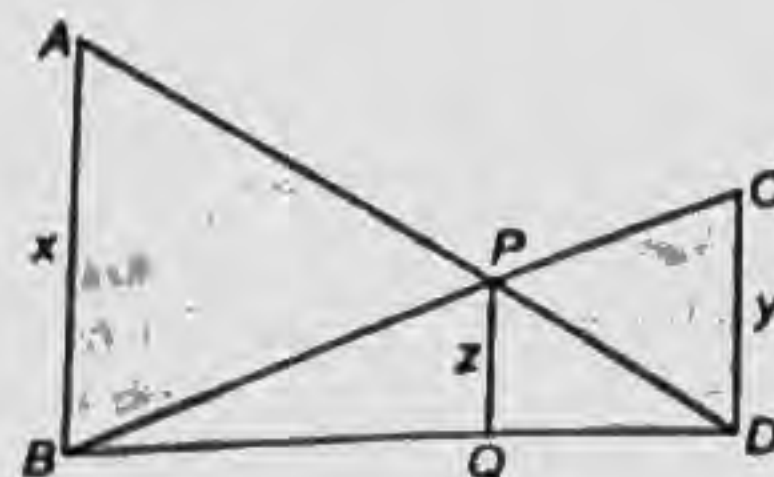
55. A cylindrical rod of length h is melted and cast into a cone of base radius twice that of the cylinder. What is the height of the cone?
 (a) $3h/4$ (b) $4h/3$
 (c) $2h$ (d) $h/2$

56. A cylindrical vessel of base radius 14cm is filled with water to some height. If a rectangular solid of dimensions $22\text{cm} \times 7\text{cm} \times 5\text{cm}$ is immersed in it, what is the rise in water level?
 (a) 0.5cm (b) 1.0cm
 (c) 1.25cm (d) 1.5cm

57. A lead pencil is in the shape of a cylinder. The pencil is 21cm long with radius 0.4cm and its lead is of radius 0.1cm . What is the volume of wood in the pencil?
 (a) 9cm^3 (b) 9.4cm^3
 (c) 9.9cm^3 (d) 10.1cm^3

58. What is the angle (in radian) included between the hands of a clock, when the time is 10 min past 5?
 (a) $17\pi/36$ (b) $19\pi/36$
 (c) $5\pi/9$ (d) $7\pi/12$

59.



In the figure given above

$\angle ABD = \angle PQD = \angle CDQ = \frac{\pi}{2}$. If $AB = x$, $PQ = z$ and $CD = y$,

then which one of the following is correct?

- (a) $\frac{1}{x} + \frac{1}{y} = \frac{1}{z}$ (b) $\frac{1}{x} + \frac{1}{z} = \frac{1}{y}$
 (c) $\frac{1}{z} + \frac{1}{y} = \frac{1}{x}$ (d) $\frac{1}{x} + \frac{1}{y} = \frac{2}{z}$

60. ΔPQR is right angled at Q , $PR = 5\text{cm}$ and $QR = 4\text{cm}$. If the lengths of sides of another triangle ABC are 3cm , 4cm and 5cm , then which one of the following is correct?

- (a) Area of ΔPQR is double that of ΔABC
 (b) Area of ΔABC is double that of ΔPQR
 (c) $\angle B = \frac{\angle Q}{2}$

(d) Both triangles are congruent

61. Which one of the following figures has only one line of symmetry?

- (a) Rhombus
 (b) Rectangle
 (c) Isosceles trapezium
 (d) Parallelogram

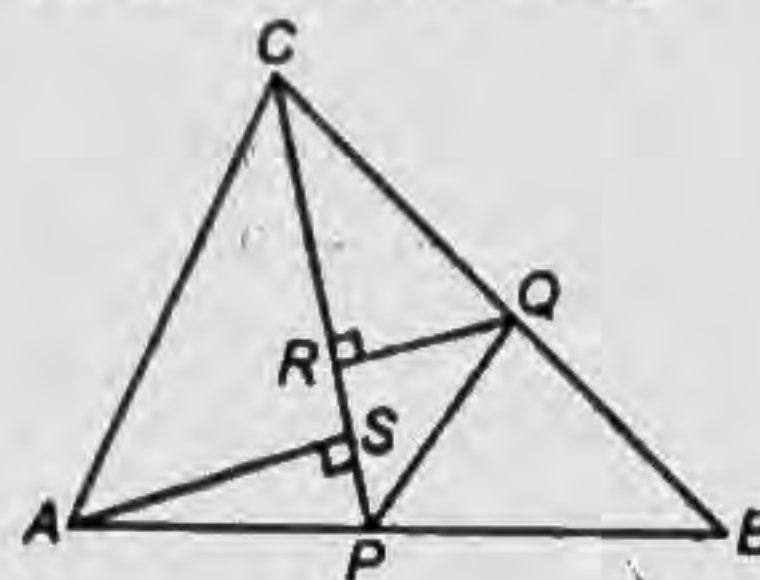
62. A ladder 25m long is leaning against a wall which is perpendicular to the level ground. The bottom of the ladder is 7m from the base of the wall. If the top of the ladder slips down 4m , how much will the bottom of the ladder slip?

- (a) 7m (b) 8m
 (c) 10m (d) 15m

63. If C_1 and C_2 and r_1 and r_2 are respectively the centroids and radii of incircles of two congruent triangles, then which one of the following is correct?

- (a) C_1 and C_2 are the same point and $r_1 = r_2$
 (b) C_1 and C_2 are not necessarily the same point and $r_1 = r_2$
 (c) C_1 and C_2 are the same point and r_1 is not necessarily equal to r_2
 (d) C_1 and C_2 are not necessarily the same point and r_1 is not necessarily equal to r_2

64.

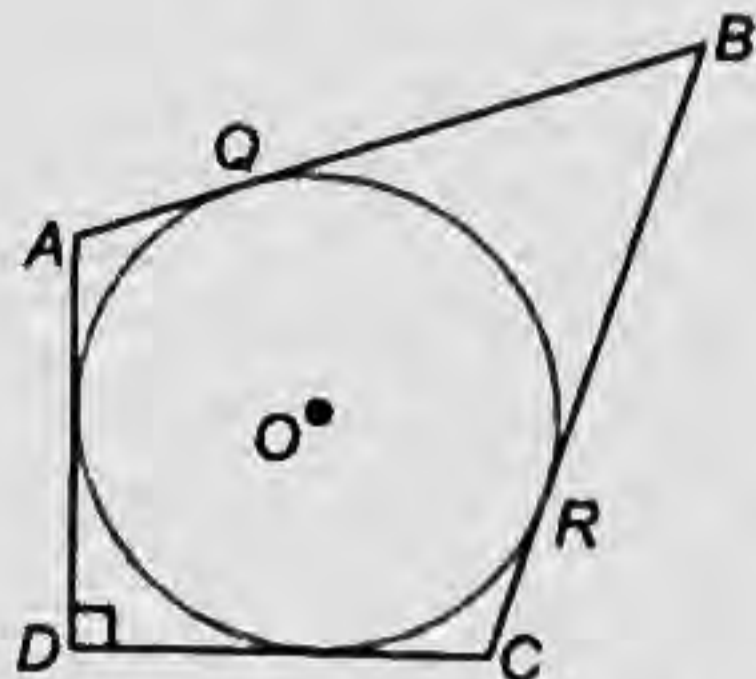


In the figure given above, P is a point on AB and PQ is parallel to AC . What is the number of pairs of distinct similar triangles in the figure?

- (a) 1 (b) 2
 (c) 3 (d) 4

65. If the medians of two equilateral triangles are in the ratio 3 : 2, then what is the ratio of their sides ?
 (a) 1 : 1 (b) 2 : 3
 (c) 3 : 2 (d) $\sqrt{3} : \sqrt{2}$
66. The centroid and the orthocenter are coincident for which one of the following triangles ?
 (a) Scalene triangle (b) Isosceles triangle
 (c) Equilateral triangle (d) Right angled triangle

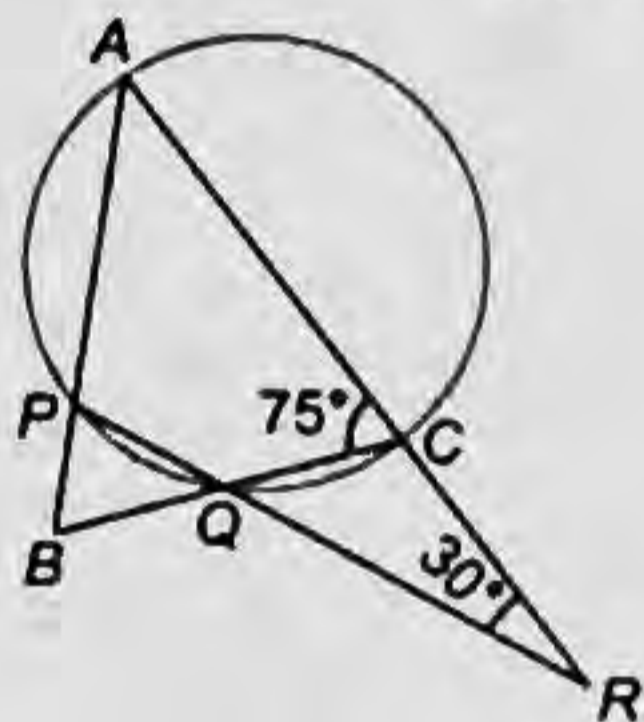
67.



In the figure given above, a circle is inscribed in a quadrilateral $ABCD$. Given that $BC = 38$ cm, $QB = 27$ cm, $DC = 25$ cm and AD is perpendicular to DC . What is the radius of the circle ?

- (a) 11 cm (b) 14 cm
 (c) 15 cm (d) 16 cm

68.



In the figure given above, what is $\angle CBA$?

- (a) 30° (b) 45°
 (c) 50° (d) 60°

69. A, B, C, D are four distinct points on a circle whose centre is at O .

If $\angle OBD - \angle CDB = \angle CBD - \angle ODB$, then what is $\angle A$ equal to ?

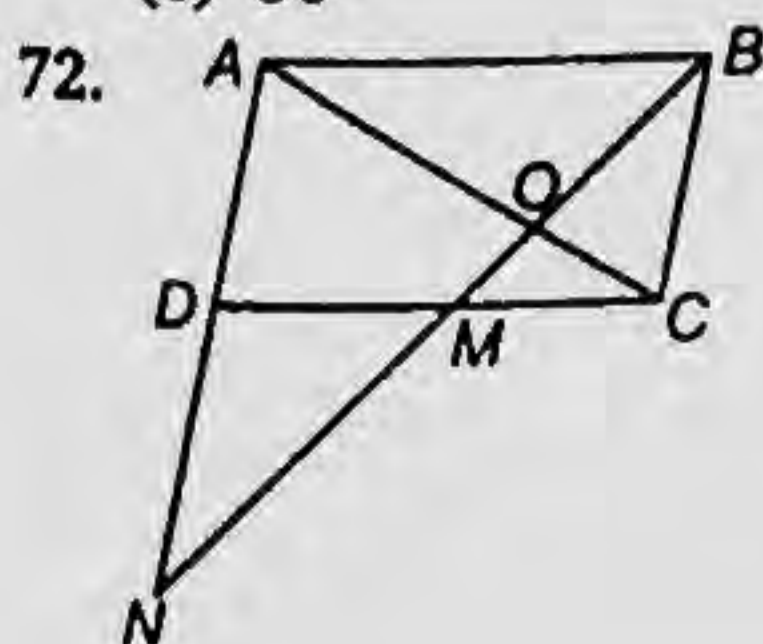
- (a) 45° (b) 60°
 (c) 120° (d) 135°

70. PQ is a common chord of two circles. APB is a secant line joining points A and B on the two circles. Two tangents AC and BC are drawn. If $\angle ACB = 45^\circ$, then what is $\angle AQB$ equal to ?

- (a) 75° (b) 90°
 (c) 120° (d) 135°

71. $ABCD$ is a concyclic quadrilateral. The tangents at A and C intersect each other at P . If $\angle ABC = 100^\circ$, then what is $\angle APC$ equal to ?

- (a) 10° (b) 20°
 (c) 30° (d) 40°

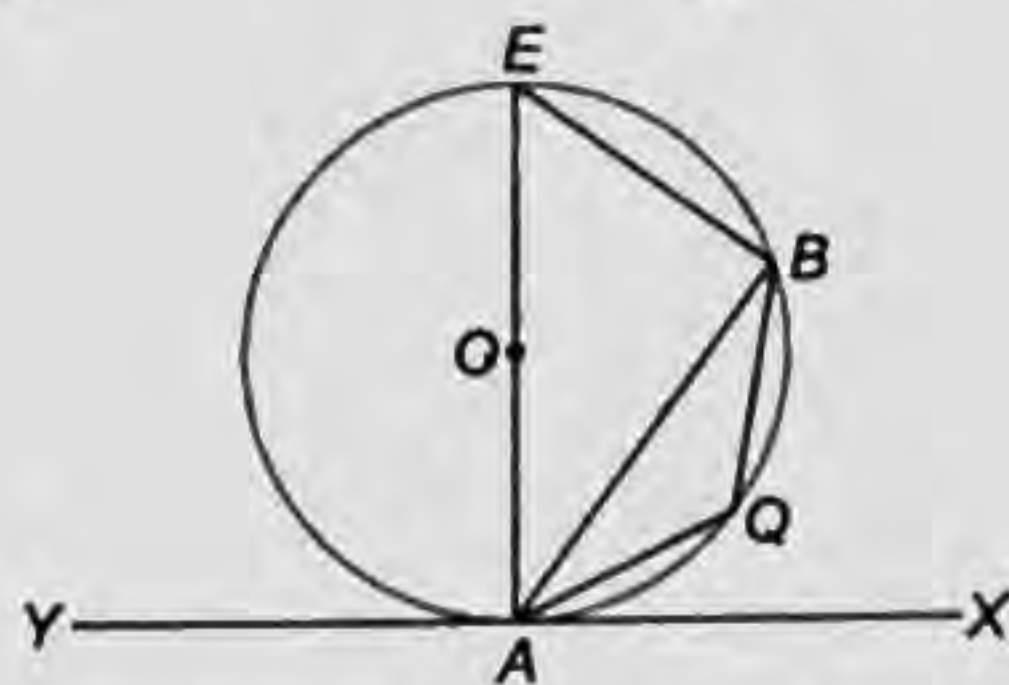


72.

In the figure given above, M is the mid point of the side CD of the parallelogram $ABCD$. What is $ON : OB$?

- (a) 3 : 2 (b) 2 : 1
 (c) 3 : 1 (d) 5 : 2

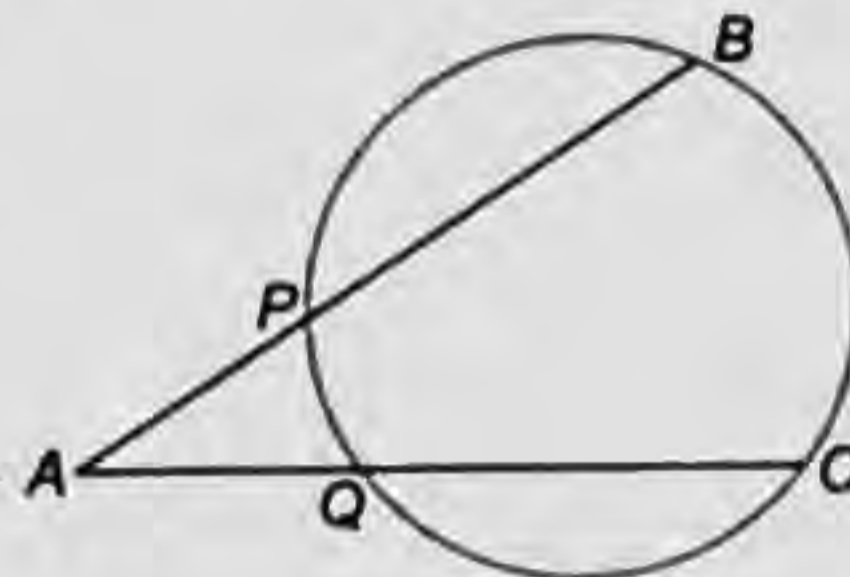
73.



In the figure given above, YAX is a tangent to the circle with centre O . If $\angle BAX = 70^\circ$ and $\angle BAQ = 40^\circ$, then what is $\angle ABQ$ equal to ?

- (a) 20° (b) 30°
 (c) 35° (d) 40°

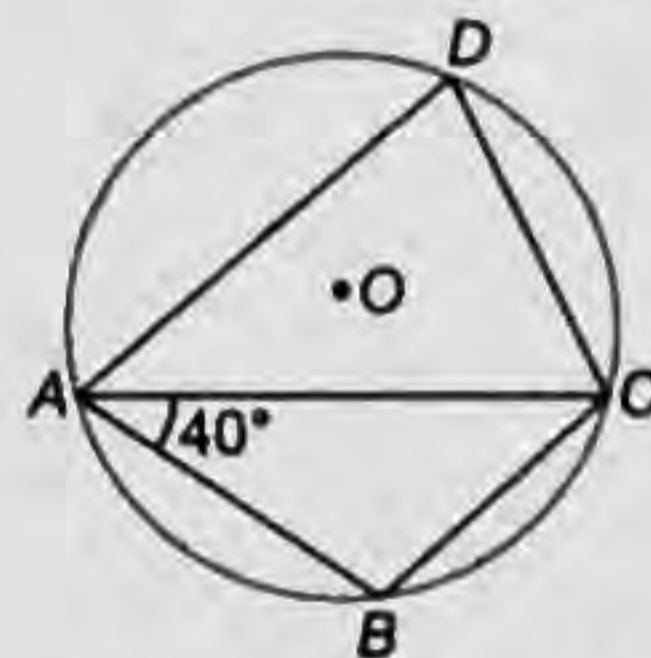
74.



In the figure given above, $AP = 3$ cm, $PB = 5$ cm, $AQ = 2$ cm and $QC = x$. What is the value of x ?

- (a) 6 cm (b) 8 cm
 (c) 10 cm (d) 12 cm

75.



In the figure given above, O is the centre of a circle circumscribing a quadrilateral $ABCD$. If $AB = BC$ and $\angle BAC = 40^\circ$, then what is $\angle ADC$ equal to ?

- (a) 50° (b) 60°
 (c) 70° (d) 80°

76. Let \vec{AB} and \vec{AC} be two rays intersecting at A . Let D, E be the points lying on \vec{AB}, \vec{AC} respectively and P be the point such that P divides the line DE such that $PD : PE = AD : AE$. What is the locus of the point P ?

- (a) The angle bisector of angle A
 (b) The angle trisector of angle A
 (c) The perpendicular bisector of angle A
 (d) None of the above

77. What is $\log (\tan 1^\circ) + \log (\tan 2^\circ) + \log (\tan 3^\circ) + \dots + \log (\tan 89^\circ)$ equal to ?

- (a) 0 (b) 1
 (c) 2 (d) -1

78. Consider the following equations

1. $\operatorname{cosec}^2 x + \sec^2 x = \operatorname{cosec}^2 x \sec^2 x$
 2. $\sec^2 x + \tan^2 x = \sec^2 x \tan^2 x$

$$3. \operatorname{cosec}^2 x + \tan^2 x = \cot^2 x + \sec^2 x$$

Which of the above statements are correct ?

- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

79. If $\cos x + \cos^2 x = 1$, then what is the value of $\sin^2 x + \sin^4 x$?

- (a) 0 (b) 1
(c) 2 (d) 4

80. If $\sin x \cos x = 1/2$, then what is the value of $\sin x - \cos x$?

- (a) 2 (b) 1
(c) 0 (d) -1

81. If $\tan^2 y \operatorname{cosec}^2 x - 1 = \tan^2 y$, then which one of the following is correct ?

- (a) $x - y = 0$ (b) $x = 2y$
(c) $y = 2x$ (d) $x - y = 1^\circ$

82. If $\frac{\cos x}{1 + \operatorname{cosec} x} + \frac{\cos x}{\operatorname{cosec} x - 1} = 2$, which one of the following

is one of the values of x ?

- (a) $\pi/2$ (b) $\pi/3$
(c) $\pi/4$ (d) $\pi/6$

83. If $x + y = 90^\circ$ and $\sin x : \sin y = \sqrt{3} : 1$, then what is $x : y$ equal to ?

- (a) 1 : 1 (b) 1 : 2
(c) 2 : 1 (d) 3 : 2

84. If $\frac{\cos x}{\cos y} = n$, $\frac{\sin x}{\sin y} = m$, then what is

$(m^2 - n^2) \sin^2 y$ equal to ?

- (a) $1 - n^2$ (b) $1 + n^2$
(c) m^2 (d) n^2

85. If $0 \leq x \leq \pi/2$, then which one of the following is always correct ?

- (a) $\sin^2 x < 1/2$ and $\cos^2 x > 1/2$
(b) $\sin^2 x > 1/2$ and $\cos^2 x < 1/2$
(c) $\sin^2 x < 1/2$ and $\cos^2 x < 1/2$
(d) At least one of $\sin^2 x$, $\cos^2 x$ is less than 1

86. If $p = \tan^2 x + \cot^2 x$, then which one of the following is correct ?

- (a) $p \leq 2$ (b) $p \geq 2$
(c) $p < 2$ (d) $p > 2$

87. What is the value of

$$\frac{5 \sin 75^\circ \sin 77^\circ + 2 \cos 13^\circ \cos 15^\circ}{\cos 15^\circ \sin 77^\circ} - \frac{7 \sin 81^\circ}{\cos 9^\circ} ?$$

- (a) -1 (b) 0
(c) 1 (d) 2

88. A radio transmitter antenna of height 100 m stands at the top of a tall building. At a point on the ground, the angle of elevation of bottom of the antenna is 45° and that of top of antenna is 60° . What is the height of the building ?

- (a) 100 m (b) 50 m
(c) $50(\sqrt{3} + 1)$ m (d) $50(\sqrt{3} - 1)$ m

89. The angle of elevation of the top of an unfinished pillar at a point 150 m from its base is 30° . If the angle of elevation at the same point is to be 45° , then the pillar has to be raised to a height of how many metres ?

- (a) 59.4 m (b) 61.4 m
(c) 62.4 m (d) 63.4 m

90. Which one of the following represents statistical data ?

- (a) The names of all owners of shops located in a shopping complex
(b) A list giving the names of all states of India
(c) A list of all European countries and their respective capital cities
(d) The volume of a rainfall in certain geographical area, recorded every month for 24 consecutive months

91. If $\sin x + \sin y = a$ and $\cos x + \cos y = b$, what is $\sin x \cdot \sin y + \cos x \cdot \cos y$ equal to ?

- (a) $a + b - ab$ (b) $a + b + ab$
(c) $a^2 + b^2 - 2$ (d) $\left(\frac{a^2 + b^2 - 2}{2}\right)$

92. The arithmetic mean of a set of 10 numbers is 20. If each number is first multiplied by 2 and then increased by 5, then what is the mean of new numbers ?

- (a) 20 (b) 25
(c) 40 (d) 45

93. Consider the following types of data

- Marks of students who appeared for a test of 100 marks.
- Collar sizes of 200 shirts sold in a week.
- Monthly incomes of 250 employees of a factory.

For which of the above data, mode is a suitable measure of central tendency ?

- (a) 1 and 2 only (b) 2 only
(c) 1 and 3 only (d) 1, 2 and 3

94. The mean of 25 observations is 36. The mean of first 13 observations is 32 and that of last 13 observations is 39. What is the value of 13th observation ?

- (a) 20 (b) 23
(c) 32 (d) 40

95. Data on percentage distribution of area of land in acres owned by households in two districts of a particular state are as follows

Land holding	District-A	District-B
0.01-0.99	5.62	13.53
1.0-2.49	18.35	21.84
2.5-7.49	47.12	39.32
7.5-12.49	19.34	12.15
12.5-19.99	7.21	7.43
20.0-29.99	2.36	5.73

What is the appropriate diagram to represent the above data ?

- (a) Pie diagram (b) Histogram
(c) Bar chart (d) None of these

96. If α is the angle of first quadrant such that $\operatorname{cosec}^4 \alpha = 17 + \cot^4 \alpha$, then what is the value of $\sin \alpha$?

- (a) $1/3$ (b) $1/4$
(c) $1/9$ (d) $1/16$

97. If $x + \left(\frac{1}{x}\right) = 2 \cos \alpha$, then what is the value of $x^2 + \left(\frac{1}{x^2}\right)$?

- (a) $4 \cos^2 \alpha$ (b) $4 \cos^2 \alpha - 1$
(c) $2 \cos^2 \alpha - 2 \sin^2 \alpha$ (d) $\cos^2 \alpha - \sin^2 \alpha$

Directions (Q. No. 98-100) : Each of the next THREE (3) items consists of two statements, one labelled as the 'Assertion (A)' and the other as 'Reason (R)'. You are to examine these two statements carefully and select the answers to these items using the codes given below :

Codes :

- (a) Both A and R are individually true and R is the correct explanation of A
- (b) Both A and R are individually true but R is not the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

98. **Assertion (A) :** If two triangles have same perimeter, then they are congruent.

Reason (R) : If under a given correspondence, the three sides of one triangle are equal to the three sides of the other triangle, then the two triangles are congruent.

99. ABC is a triangle. Let D, E denote the mid points of BC, CA respectively. Let AD and BE intersect at G . Let O be a point on AD such $AO : OD = 2 : 7$.

Assertion (A) : $AO = (2GD)/3$

Reason (R) : $OD = (2AG)/3$

100. ABC is a triangle. AD, BE, CF are altitudes of ΔABC .

Assertion (A) : $(AB^2 + BC^2 + CA^2) > (AD^2 + BE^2 + CF^2)$

Reason (R) : $(AE^2 - AF^2) + (BF^2 - BD^2) + (CD^2 - CE^2) = 0$