

ORDERING OF WORDS IN A SENTENCE

Directions (For the 17 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
(P) (Q)
on children of cinema
(R) (S)

Which one of the following is the correct sequence ?

- (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 cinema on children is very bad". This is indicated by the sequence P - S - R - Q and so (a) is the correct answer.

1. Compared to was an occasion of stately pageantry
(P)
the birth of the Republic
(Q)
accompanied by partition riots
(R)
the dawn of independence
(S)
Which one of the following is the correct sequence ?
(a) S - Q - R - P (b) P - R - Q - S
(c) S - R - Q - P (d) P - Q - R - S
2. It is giant strides in development so that we make
(P) (Q)
more and more rational like western countries
(R)
high time we become
(S)
Which one of the following is the correct sequence ?
(a) R - S - P - Q
(b) S - R - Q - P
(c) R - S - Q - P
(d) S - R - P - Q
3. From the days of the African and Asian States for their power blocks
(P)

there was a mad scramble by the U.S. and the Soviet Union
(Q)

Yalta Conference of February 4, 1945
(R)

to recruit the newly decolonised
(S)

Which one of the following is the correct sequence ?

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

4. Quite a few in the previous years
(P)
to large chunks of territory that India said was its
(Q)
over the McMahon Line, with China laying claims
(R)
border incursions and clashes had taken place
(S)

Which one of the following is the correct sequence ?

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

5. Cricketers
fail to zero in on a reason
(P)
well against a specific opposition
(Q)
for their playing exceptionally past or present
(R) (S)

Which one of the following is the correct sequence ?

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

6. The deluge in merely managing chaos and little or
(P)
Mumbai showed that
(Q)
no thought has gone into upgrading the city
(R)
successive state governments have been
(S)

Which one of the following is the correct sequence ?

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

7. What religion for money or marry (P)
meaning does social freedom (Q)
their girl child off the highest bidder (R)
hold when people are tempted to change (S)
Which one of the following is the correct sequence ?
(a) R - S - P - Q (b) Q - P - S - R
(c) R - P - S - Q (d) Q - S - P - R
8. The recent relations between the two countries (P)
Indo-US agreements, especially the nuclear pact (Q)
meant to transform (R)
have been the subject of much controversy (S)
Which one of the following is the correct sequence ?
(a) R - Q - S - P
(b) Q - R - P - S
(c) R - Q - P - S
(d) Q - R - S - P
9. Even young in feel (P) Delhi continues to remain (Q)
though it is among the oldest capitals in the world (R)
and modern in thought (S)
Which one of the following is the correct sequence ?
(a) P - Q - R - S (b) R - S - P - Q
(c) P - S - R - Q (d) R - Q - P - S
10. Reduction in economic growth of (P) be the result of (Q)
the concerned state alone (R) poverty may or may not (S)
Which one of the following is the correct sequence ?
(a) S - P - Q - R (b) R - Q - P - S
(c) S - Q - P - R (d) R - P - Q - S
11. The rebellion standing up for their rights (P) may be slow and sporadic (Q)
youngsters become the unlikely heroes (R)
but it is happening as (S)
Which one of the following is the correct sequence ?
(a) Q - S - R - P (b) P - R - S - Q
(c) P - S - R - Q (d) Q - R - S - P
12. Drug abuse dies down soon after (P) that follows every expose (Q)
but the hue and cry (R)
is an increasing vice among party-hopping elites (S)

- Which one of the following is the correct sequence ?
(a) Q - P - S - R (b) S - R - Q - P
(c) Q - R - S - P (d) S - P - Q - R
13. Apparently levels change in response to stresses (P)
fish possess memory (Q)
where their heart rate goes up in response to (R)
things and their hormone (S)
Which one of the following is the correct sequence ?
(a) S - Q - P - R (b) Q - S - R - P
(c) S - Q - R - P (d) Q - S - P - R
14. Today cinema do not demand that (P)
the logic that the themes of contemporary (Q)
the lack of grandeur in the music with (R)
music directors often explain (S)
Which one of the following is the correct sequence ?
(a) S - Q - R - P (b) P - Q - R - S
(c) S - R - Q - P (d) P - R - Q - S
15. Some beautiful women commands (P)
places attract courageous men from far away lands (Q)
in much the same manner as a (R) immediate obeisance (S)
Which one of the following is the correct sequence ?
(a) Q - R - P - S (b) R - Q - S - P
(c) Q - R - S - P (d) R - Q - P - S
16. For the what it was when they were just a cluster of districts (P)
inhabitants of these fledgling (Q)
the quality of life remains pretty much (R)
but resource-rich States of India (S)
Which one of the following is the correct sequence ?
(a) Q - S - P - R (b) S - Q - R - P
(c) Q - S - R - P (d) S - Q - P - R
17. The United States, to sell Uranium, nuclear turbines, fighter planes (P)
to India is now offering (Q)
which denied even helicopter nuts and screws (R)
and even Patriot missiles (S)
Which one of the following is the correct sequence ?
(a) R - Q - S - P (b) Q - R - P - S
(c) Q - R - S - P (d) R - Q - P - S

Directions (For the 10 items which follows) :

You are given four alternative meanings to each idiom/phrase. Choose the most appropriate one.

18. A BREAD-AND-BUTTER LETTER
(a) An appointment letter
(b) A contract termination letter
(c) A letter to thank a host
(d) A request to get donation for a noble cause
19. CLOAK-AND-DAGGER
(a) Involving intrigue (b) To become very weak
(c) Family feud (d) Fond of hunting
20. A FAIR CRACK OF THE WHIP
(a) To go out for morning walk
(b) To get a fair chance
(c) To get unexpected success
(d) To be routed
21. THE WORSE FOR WEAR
(a) Worn out (b) Improbable
(c) Far off (d) Frightening
22. IN THE CLEAR
(a) Without any money
(b) Without any knowledge of traditions
(c) Very friendly
(d) No longer in danger
23. TAKE UP THE CUDGELS
(a) To support somebody (b) To start a new business
(c) To go on a holiday (d) To relax
24. AS THE CROW FLIES
(a) To wander in jungles
(b) In a straight line
(c) To protect environment
(d) To travel to a foreign land
25. TO CHAMP AT THE BIT
(a) To be careless in making preparations
(b) To show off
(c) To be restlessly impatient
(d) To win in a tournament
26. WITH A FLEA IN ONE'S EAR
(a) To know secrets (b) To have severe headache
(c) To be rebuked (d) To flatter someone
27. PIE IN THE SKY
(a) Beautiful surroundings
(b) Event unlikely to happen
(c) Rainy season
(d) Foreign traditions

SPOTTING ERRORS

Directions (For the 15 items which follows) :

(i) In the 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 the 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. No error.
(a) (b) (c) (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.

28. The street lights come in at dusk and go off at dawn.
(a) (b) (c)
No error.
(d)
29. Two of the mountain climbers were suffering
(a) (b)
with frost-bite. No error.
(c) (d)
30. Although there was still
(a)
a faint heartbeat, the patient was
(b)
for all intents and purposes dead. No error.
(c) (d)
31. When the rules for police procedure were laid up
(a) (b)
a lot of grey areas remained. No error.
(c) (d)
32. Anurag is eclipsed by his wife
(a)
who is much cleverer and more amusing than he is.
(b) (c)
No error.
(d)
33. The company took a gamble by
(a)
cutting the price of its products and it paid up.
(b) (c)
No error.
(d)
34. She claimed to have seen manifestations of dead people
(a) (b)
in the haunted house. No error.
(c) (d)
35. It's difficult to make friends with her, she's constantly
(a) (b)
in the offensive. No error.
(c) (d)

36. I needed that money so desperately, it was
 (a) like manna from heaven when it arrived. (b) No error.
 (c) (d)
37. I can't see much likelihood between him and his father.
 (a) (b) (c)
 (d) No error.
38. The world today is totally different than we have seen
 (a) (b)
 in the last century. (c) (d) No error.
39. Of all the teachers I have ever met
 (a)
 Dr. Subramaniam is the most remarkable teacher.
 (b) (c)
 (d) No error.
40. The moral of the entire novel is how money doesn't
 (a) (b)
 make you happy. (c) (d) No error.
41. That store hadn't hardly any of those goods. (a) (b) (c) (d) No error.
42. Meals will be served outside on the terrace
 (a) (b)
 weather allowing. (c) (d) No error.

ORDERING OF SENTENCES

Directions (For the 15 items which follows) :

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 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.
 Which one of the following is the correct sequence ?
 (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.

3. S_1 : The effect of books is two fold.
 S_6 : But once printing had been discovered, it did not matter how soon you died or how many copies of what you had written were eaten by mice.
 P : Unless you can write it down, your poem or idea will probably die when you do.
 Q : They preserve knowledge in time and spread it in space.

- R : Suppose, for example, that you think of an important idea or a beautiful poem.
 S : Even if you do write it down, it perishes soon as the mice eat the paper.
 Which one of the following is the correct sequence ?
 (a) Q - P - R - S (b) S - R - P - Q
 (c) Q - R - P - S (d) S - P - R - Q

44. S_1 : The accident occurred in just a moment.
 S_6 : The cyclist was thrown a few feet away.
 P : The cyclist was blinded by a bullockcart moving slowly in the opposite direction.
 Q : The cyclist from the main road did not notice it.
 R : The result was a head-on-collision.
 S : A speeding car came from a side road.
 Which one of the following is the correct sequence ?
 (a) P - Q - S - R (b) S - R - P - Q
 (c) P - R - S - Q (d) S - Q - P - R
45. S_1 : Man is a fighting animal as much as a thinking one.
 S_6 : Their pacificism is only a cloak for their weakness.
 P : There is no denying the fact that somewhere in the blood of everyone of us there is a war-dance.
 Q : It is usually the weak and the cowardly who fight shy of war.
 R : It excites the inborn pugnacity in everyone.
 S : The sight of men fighting moves us strangely.
 Which one of the following is the correct sequence ?
 (a) Q - R - S - P (b) P - S - R - Q
 (c) Q - S - R - P (d) P - R - S - Q

46. S_1 : It was dark and it was raining heavily.
 S_6 : Except for the sound of the rain, all was quiet.
 P : With a sigh of relief, the tiger crawled under the thatched roof and lay down by the door.
 Q : He was wet and cold and his home was far away.
 R : An old tiger ran through the rain looking for shelter.
 S : While hurrying to his shelter he saw an old hut.
 Which one of the following is the correct sequence ?
 (a) R - P - S - Q (b) S - Q - R - P
 (c) R - Q - S - P (d) S - P - R - Q

47. S_1 : Tim Severin is a writer.
 S_6 : Tim eventually found himself facing Atlantic Gale in a small boat.
 P : Researching seafaring legends intrigues Tim.
 Q : Tim is as likely to be found before the mast as before a typewriter.
 R : Tim is very keen on the ancient story of the travels of Brendan.
 S : Tim cannot stop short of a total reconstruction of historic voyages.
 Which one of the following is the correct sequence ?
 (a) Q - S - P - R (b) R - P - S - Q
 (c) Q - P - S - R (d) R - S - P - Q

48. S_1 : When he was only three years old, Mozart could pick out melodies on a clavichord.
 S_6 : It was evident that he was a prodigy and a musical genius.
 P : While he was a very young child, he had started to compose music.
 Q : He published the first composition when he was twelve.
 R : By seven he had learned to play the violin and organ without instruction.

S : By the time he was a young man, he had played at concerts in most of Europe's great cities.

Which one of the following is the correct sequence ?

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

49. S₁ : Kanna had to kick open the door, as his arms were full of shopping.

S₆ : May be, because he did not want to be hit on the head a third time. Tommy hid under the chair.

P : The dog now jumped up and ran across the room, barking loudly.

Q : The door hit Tommy on the head and on top of that, Kanna also tripped over him dropping the shopping, like a shower on Tommy.

R : Unfortunately Tommy was now in front of the bedroom door which hit him again.

S : This woke Kanna's mother up and she rushed out of the room like a whirlwind.

Which one of the following is the correct sequence ?

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

50. S₁ : Diagnosis is an important component of health care.

S₆ : Doctors at rural health centres are left to rely on their own clinical skill and the stethoscope to determine the nature and extent of an illness.

P : They came the stethoscope, the microscope, laboratory tests with chemicals, screenings and X-rays.

Q : The first barometer to be used in determining a health condition was the pulse, and, along with it, the tongue, throat and eyes.

R : Diagnostic facilities are the single most important qualitative element missing in our rural health services.

S : Now diagnostic technology includes ultrasonic gadgets and nuclear equipments which have found their way into some of our urban hospitals.

Which one of the following is the correct sequence ?

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

51. S₁ : Time is our tyrant.

S₆ : To us, for example, the moment 8.17 A.M. means something-something very important, if it happens to be the starting time of our daily train.

P : We are chronically aware of the moving minute hand, even of the moving second hand.

Q : There are trains to be caught, cards to be punched, tasks to be done in specified periods, records to be broken by fraction of a second.

R : Our consciousness of the smallest units of time is now acute.

S : We have to be.

Which one of the following is the correct sequence ?

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

52. S₁ : Sceptics say that writing cannot be taught; it is too personal a process, depending too much on the aptitude of the writer.

S₆ : In writing, words can be moved or altered, sentences and paragraphs broken up or joined together, passages added or taken away, until the writer feels satisfied that he has expressed himself as adequately as he can.

P : They could certainly maintain that offering to teach it is a rash act for anyone to undertake.

Q : For the writer the great virtue of the written word is that it is improvable.

R : What can be taught, however, is preparation : a certain mastery of your material and orderly planning of how to set it out.

S : Another thing that can be taught is revision.

Which one of the following is the correct sequence ?

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

53. S₁ : The energy in coal is chemical energy.

S₆ : The engine transmits mechanical energy to the machine.

P : These compounds were formed in trees many millions of years ago and the energy used to build them was the light of the Sun.

Q : This heat can be used to change water into steam, giving the steam the energy to expand, which drives the steam engine.

R : When the coal is burned, the energy trapped by the trees millions of years ago is released and becomes heat.

S : This is the energy that binds the atoms of the chemical compounds in coal together.

Which one of the following is the correct sequence ?

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

54. S₁ : After the rain has fallen on the mountains, most of it sinks into the ground where it collects in pools underground.

S₆ : After a river has flowed through a human habitation it collects debris and other waste material.

P : Hence we have the beginnings of a mountain stream.

Q : The water which collects in pools underground may burst out into springs and flow down the slope.

R : Some of the water joins the streams and eventually flows into bigger rivers which then carry it to the seas or oceans.

S : Usually the water at the top of mountains is clean and pure as it has not been polluted by men who usually pollute the rivers flowing through the plains.

Which one of the following is the correct sequence ?

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

55. S₁ : Human beings are not the natural prey of tigers.

S₆ : Then it is compelled to take to a diet of human flesh.

P : A tiger becomes man-eater through stress of circumstances.

Q : The wounded tiger is incapacitated.

R : The stress of circumstances is mostly wounds.

S : It cannot hunt its natural prey.

Which one of the following is the correct sequence ?

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

56. S₁ : Nature can produce acidity in rains.

S₆ : It can damage vegetation and wild life, corrode steel structures, bridges, buildings, statues and etch car finishes and harm human health too.

P : Acid rain has made thousands of lakes fishless in Scandinavia, Canada and the United States.

- Q : Lightening bolt can form oxides of nitrogen which in turn form nitric acid.
 R : Recently it has been known that biological processes in the oceans are responsible for the production of sulphuric acid.
 S : However, it is believed that the amount of acid produced in atmosphere by nature is insignificant when compared to the amount produced from man-made sources.
 Which one of the following is the correct sequence ?
 (a) P - S - R - Q (b) Q - R - S - P
 (c) P - R - S - Q (d) Q - S - R - P

57. S₁ : There is no organization or agency controlling activity on the Internet.
 S₂ : However, a number of laws apply to communications and activities on the Internet, and Internet-wide rules of etiquette and rules for acceptable behaviour exist.
 P : This allows for the formation of discussions, exchange of ideas, and the spread of information in a free and open member.
 Q : Control is in the hands of individuals and local organizations, schools, or businesses.
 R : Some people describe the Internet as a form of anarchy, mainly because there isn't any central control.
 S : The users come from a variety of countries and cultures, and this diversity contributes to the Internet's utility and vigour.
 Which one of the following is the correct sequence ?
 (a) S - R - Q - P (b) Q - P - S - R
 (c) S - P - Q - R (d) Q - R - S - P

ANTONYMS

Directions (For the 17 items which follows) :

Each of the following 17 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 furthest in meaning to the word in capital letters.

58. PROCRASTINATE
 (a) To be prompt (b) To adjudicate
 (c) To teach (d) To help others
59. PROCLIVITY
 (a) Speed (b) Weakness
 (c) Disgust (d) Disinclination
60. OUTLANDISH
 (a) Modern (b) Moderate
 (c) Disrespectful (d) Coward
61. SUPPLICATE
 (a) Short of supply (b) To be arrogant
 (c) To be tolerant (d) To fall on lean days
62. TERSE
 (a) Detailed (b) Nasty
 (c) Advanced (d) Impure
63. CELERITY
 (a) Lack of wisdom (b) Silence
 (c) Victory (d) Sluggishness
64. LUCID
 (a) Lacking resources (b) Lacking vitality
 (c) Lacking clarity (d) Lacking comfort

65. ASSIDUOUSLY
 (a) Casually (b) Tirelessly
 (c) Without fear (d) Hopeless
66. INTREPID
 (a) Honest (b) Sick
 (c) Timid (d) Ugly
67. CHOLERIC
 (a) Affluent (b) Brave
 (c) Pleasant (d) Tired
68. SPASMODIC
 (a) Ill-humoured (b) Ancient
 (c) Regular (d) Tireless
69. TRANSGRESS
 (a) To remain within acceptable limits
 (b) To observe from a distance
 (c) To learn a new language
 (d) To go to a foreign country
70. PIFFLING
 (a) Annoying (b) Vast amount
 (c) Unnatural (d) Lying at a great height
71. CHAFE
 (a) To remain patient
 (b) To get medically examined
 (c) To succeed in an examination
 (d) To get reprimand
72. EXCRUCIATING
 (a) Mild (b) Noisy
 (c) Sophisticated (d) Modern
73. PUERILE
 (a) Inquisitive (b) Matured
 (c) Impure (d) Original
74. GRUMPY
 (a) High-headed (b) Influential
 (c) Cheerful (d) Affluent

COMPREHENSION

Directions (For the 29 items which follows) :

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' have been 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 creature 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

Explanation :

- 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

Many present-day board now recognise the need for careful succession planning. The Chief Executive Officer's succession plans are commonly part of his annual performance review, and most boards now devote several meetings a year to the subject. One crucial decision that boards face is whether to select one of their own or an outsider. Unsurprisingly, firms in trouble are much more likely to look for fresh blood. When the business is running smoothly, directors are more than happy to pick an experienced insider, who will continue along the present path. Whereas promising senior executives will often abandon a struggling company, successful firms tend to have a large pool of talented managers to choose from. Occasionally, even a successful company appoints an outsider who can introduce some particular expertise. Many utility companies seek outside Chief Executive Officers to shepherd them through the complexities of deregulation. Many boards do consider outsiders even when the existing Chief Executive Officer is planning a normal retirement.

75. The passage conveys that an ailing firm cannot be revived by the appointment of a Chief Executive Officer who is an :
 (a) Outside expert
 (b) Experienced insider
 (c) Expert in deregulation
 (d) Experienced shepherd
76. Successful companies prefer to promote an inside executive as Chief Executive Officer for reasons of :
 (a) Stability of operations
 (b) Higher profits
 (c) Market compulsions
 (d) Diversification
77. Successful companies sometimes appoint Chief Executive Officers from outside because :
 (a) Their existing executives are complacent
 (b) Distance lends enchantment
 (c) They wish to input their expertise
 (d) They wish to be better placed than their competitors

78. What is the main issue in this passage ?
 (a) Leadership traits of Chief Executive Officers
 (b) Compensation package of Chief Executive Officers
 (c) Discipline to be inculcated by Chief Executive Officers
 (d) Planning the succession of Chief Executive Officers
79. Consider the following statements :
 1. The Companies are too complacent and do not address the problem of succession of their Chief Executive Officers.
 2. Even successful companies do not have enough talent in their ranks to pick incumbent to pick incumbent to the post of Chief Executive Officer.
 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

PASSAGE-II

Something strange haunts the cultural landscape of America. Movie makers and television producers have become the most powerful, though perhaps not the most careful historians. It seems fair to say more people are getting their history or what they think is history, from the movies these days than from the standard history books. The phenomenon is probably unavoidable, yet, if the history as presented by the movies turns out to be a muddy blur of fantasy and fact, the consequences cannot be good. In the 16th Century, Francis Bacon said that history makes men wise. It follows that bad history, trivialized history, history distorted and sensationalised, can make them foolish. There is indeed something disconcerting about the tendency of today's movies-as-history to construct multicoloured and sound-tracked edifices of entertainment on the slender foundations of what appear to be actual events.

80. Consider the following statements :
 1. Movie makers can manipulate the actual events of history.
 2. The quality of standard history books has deteriorated.
 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
81. As historians, movie makers are :
 (a) both powerful and careful
 (b) Powerful but not sticklers for accuracy
 (c) Neither powerful nor careful
 (d) Forced to stick to facts
82. Bacon's statement that 'history makes men wise' is interpreted by the author as follows :
 (a) History aided by technological support makes men wise
 (b) History as a plain and actual record of events makes men wise
 (c) A sentimentalised account of events is good history as it gives pleasure
 (d) Good history cannot dispense with the help offered by movies
83. Which one of the following statements best reflects the attitude of the author in the passage ?
 (a) The author is all admiration for the movie makers and television producers of America
 (b) The author regrets that movie makers and television producers of America do not have good stories
 (c) The author does not find fault with trivialized or distorted history

(d) The author does not really approve of the rather disturbing trend of today to rely on movie makers and television producers to describe history

84. Consider the following statements :
1. Movies are responsible for the children in America to neglect their academic schedules.
 2. Children in America are losing respect for their parents because of the influence of the technological advances depicted in the movies and television programmes.
- 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

PASSAGE-III

Scientists show that there is a curious relationship between a lion's life span and the pattern of spots on each side of its face. Each spot is associated with the root of a whisker, and the pattern of spots is as characteristic of an individual lion as a finger print of a person. But the placement varies between the two sides of the face. Males with a greater degree of symmetry tend to die younger than their more evenly-envisaged colleagues. Thus can a male's life be read in his face : it is his autobiography.

85. According to the passage, the spots are :
- (a) Associated with hair growing round the mouth of a lion
 - (b) Associated with the lions rubbing against the roots of trees
 - (c) Formed owing to cross breeding between different species of lions
 - (d) The after-effects of a disease
86. The phrase "evenly-envisaged colleagues" means :
- (a) Scientists who are level headed
 - (b) Lions with symmetrical spot-patterns on each side of the face
 - (c) Scientists who are members of a society that hold the same opinion
 - (d) those lions whose life spans are shorter than those of other lions
87. Which one of the following statements is not correct ?
- (a) The variation between the patterns is a pointer to the lion's longevity
 - (b) There is hardly any variation between the patterns on the two sides of a lion's face
 - (c) The pattern of spots is characteristic of each individual lion
 - (d) The relationship between the pattern of spots and the life span of a lion is something strange
88. What is the conclusion of scientists regarding the placement of spots on either side of a lion's face ?
- (a) Males with a greater degree of irregularity in spot patterns have shorter life spans
 - (b) Males with a greater degree of lack of ordered spot patterns have longer life spans
 - (c) Males with very few spots on their bodies die younger
 - (d) Males with evenly placed spots on both sides of the face die sooner
89. Why is the lion's face his autobiography ?
- (a) The lion's face shows all aspects of his life like an autobiography
 - (b) The lion is the author of his own life story
 - (c) The lion's spots appear late in life like an autobiography

(d) The lion's life span can be judged from the lion's face

PASSAGE—IV

As I write, highly civilized human beings are flying overhead, trying to kill me. They do not feel any enmity against me as an individual, nor I against them. They are "only doing their duty," as the saying goes. Most of them are kind-hearted law-abiding men who would never dream of committing murder in private life. But if one of them succeeds in blowing me to pieces, he will still be able to sleep without any degree of compunction. He is serving his country, which has the power to absolve him from evil.

90. The people who are flying overhead are called highly civilized because they :
- (a) Are kind hearted
 - (b) Are doing their duty
 - (c) Are trained bombers
 - (d) Draw hefty salaries
91. The person who succeeds in killing the author will :
- (a) Never sleep undisturbed
 - (b) Be without any remorse
 - (c) Suffer a lot
 - (d) Consider himself a sinner
92. The reason why they are trying to kill the author is that :
- (a) They have murderous instincts
 - (b) They have a grudge against the author
 - (c) They have an assigned job
 - (d) The author is not as law-abiding as they are
93. In this passage the author assumes that doing one's duty to one's country :
- (a) Heightens one's sensibility
 - (b) Exonerates a person of his act of killing
 - (c) Makes one kind-hearted
 - (d) Makes one desist from doing anything unscrupulous
94. What is the author's attitude to the ways of civilized societies ?
- (a) Sarcastic
 - (b) Indifferent
 - (c) Hostile
 - (d) Casual

PASSAGE—V

All attempts to detect oxygen in the atmosphere of Mars have been unsuccessful, and it can be concluded that the amount of oxygen is not more than one-thousandth part of the amount in the Earth's atmosphere. Indirect evidence of oxygen is provided by the ruddy colour of Mars, which is unique among the heavenly bodies. This red colour is suggestive of rocks that have been completely oxidized and it may be contrasted with the grey or brownish colour of the rocks on the Moon, which have remained unoxidised because of the absence of oxygen. It appears probable that Mars may be a planet where the weathering of rocks followed by their oxidation, has resulted in the almost complete depletion of oxygen from the atmosphere.

95. The amount of oxygen available in the atmosphere of Mars is :
- (a) Probably very small
 - (b) None at all
 - (c) A thousand times more than that in the earth's atmosphere
 - (d) About as much as there is in the Moon's atmosphere

96. The reason suggested by the writer for the difference in colour between the rocks on Mars and those on the Moon is that :
- Mars is very cold compared to other planets
 - There is no oxygen at all in the atmosphere of the Moon
 - The rocks on Mars have become old
 - The rocks on Mars are unoxidized
97. According to the passage :
- The amount of oxygen in Mars has remained constant
 - Once there was more oxygen in the atmosphere of Mars than there is now
 - At one time Mars was swept by fire, which turned the rocks into a reddish colour
 - Severe storms caused the weathering of rocks
98. The presence of colouration in Mars is quite suggestive of the presence of :
- Brownish rocks in the atmosphere
 - Grey and brown rocks on the moon
 - Oxygen in the atmosphere in the past
 - No oxygen at all in the atmosphere

PASSAGE—VI

I passed all the other course that I took at my university, but I could never pass Botany. This was because all Botany students had to spend several hours a week in a laboratory looking through a microscope at plant cells, and I could never see through a microscope. I never once saw a cell through a microscope. This used to enrage my instructor. He would wander around the laboratory pleased with the progress all the students were making in drawing the involved and, so I am told, interesting structure of flower cells, until he came to me. I would just be standing there. "I cannot see anything, I would say." He would begin patiently enough, explaining how anybody can see through a microscope, but he would always end up in fury, claiming that I too could see through a microscope but just pretended that I couldn't. "It takes away from the beauty of flowers anyway." I used to tell him. "We are not concerned with beauty in this course", he would say. "We are concerned solely with what I may call the mechanics of flowers." "Well", I'd say, "I can't see anything", "Try it just once again", he'd say, and I would put my eye to the microscope and see nothing at all, except now and again a nebulous milky substance—a phenomenon of maladjustment. "You were supposed to see a vivid, restless clockwork of sharply defined plant cells." "I see what looks like a lot of milk", I would tell him. This, he claimed, was the result of my not having adjusted the microscope properly, so he would readjust it for me, or rather, for himself. And I would look again and see milk.

99. The author thinks that he could not pass the botany examination because :
- He did not take any interest in the subject
 - He was partially blind
 - He did not like microscope
 - His teacher was not devoted to job
100. The difference in attitude between the instructor and the author was that while the :
- Instructor was patient with the microscope; the author was impatient with it

- Instructor was concerned with the mechanics of flowers; the author was concerned more with the beauty of flowers
 - Instructor could adjust the microscope properly, the author did not learn to adjust the microscope
 - Instructor was interested in flowers, the author was disinterested in the beauty of flowers
101. The instructor was enraged with the author's persistent failure to see cells because he thought that the author :
- Pretended not to see them
 - Was only interested in the mechanics of flowers
 - Could only see a nebulous milky substance
 - Lacked common sense
102. The author thought that the instructor :
- Attached too much significance to the laboratory work
 - Failed to appreciate brilliant students
 - Was himself pretending to be a scholarly person
 - Used to get upset with him
103. Plant-cells under the microscope looked like milk to the author because the instructor :
- Actually adjusted the microscope for himself
 - Adjusted the microscope for the whole class
 - Was solely concerned with the mechanics of flowers
 - Was solely concerned with the mechanics of the microscope

SYNONYMS

Directions (For the 17 items which follow) :

Each of the following 17 items consists of a word or group of words in capital letters, followed by four or group of words. Select the word or group of words that is most similar in meaning to the word or group of words in capital letters.

104. COUNTERVAILING
- Argumentative
 - Compensating
 - Crying
 - Complaining
105. TO DEBILITATE
- To outlaw
 - To support
 - To weaken
 - To honour
106. FERRET
- Steal
 - Search
 - Forget
 - Fight
107. PECUNIARY
- Pertaining to money
 - Pertaining to Politics
 - Pertaining to Geography
 - Pertaining to History
108. REPRISAL
- Loneliness
 - Retaliation
 - Remuneration
 - Pleasure
109. PROPRIETY
- Rightness
 - Brand name
 - Cultivate land
 - Market share
110. CAVIL.
- To play
 - To complain
 - To prepare
 - To cut a joke
111. EVINCE
- To learn
 - To exhibit
 - To resist
 - To become infirm

112. INCENSE
(a) To become angry (b) To support someone
(c) To become relevant (d) To introduce a new topic
113. ATTENUATE
(a) To weaken (b) To celebrate
(c) To store (d) To swim
114. ASCETIC
(a) Fashionable (b) Austere
(c) Articulate (d) Athletic
115. ARABLE
(a) Tolerable (b) Suitable for ploughing
(c) Likeable (d) Ardent
116. SECEDE
(a) To stop (b) To arrest
(c) To flow (d) To withdraw

117. PROFFER
(a) To apologize (b) To appoint
(c) To disappear (d) To offer
118. PREVARICATE
(a) To evade (b) To work hard
(c) To steal (d) To demonstrate
119. SPECULATE
(a) To embezzle (b) To guess
(c) To study deeply (d) To store
120. PECKISH
(a) Angry (b) Impudent
(c) Hungry (d) Smart

1. The tracking of people by trained dogs is based on the recognition of which of the following compounds in the sweat from feet ?
(a) Carboxylic acids (b) Uric acid
(c) Sugar (d) Salt
 2. German silver is an alloy of :
(a) Gold and silver
(b) Copper and silver
(c) Copper, zinc and silver
(d) Copper zinc and nickel
 3. 'Freon' used as refrigerants is chemically known as :
(a) Chlorinated hydrocarbon
(b) Fluorinated hydrocarbon
(c) Chlorofluoro hydrocarbon
(d) Fluorinated aromatic compound
 4. In which categories did Marie Curie win her two different Nobel prizes ?
(a) Physics and Chemistry
(b) Chemistry and Medicine
(c) Physics and Medicine
(d) Chemistry and Peace
 5. Age of an old wooden idol is determined by using which one of the following ?
(a) Density (b) Carbon dating
(c) Softness (d) Water content
 6. Nail varnish remover generally contains which one of the following ?
(a) Vinegar (b) Benzene
(c) Methyl alcohol (d) Acetone
 7. The flavour of apples is mainly due to which one of the following ?
(a) Formalin (b) Benzene
(c) Ethanal (d) Benzaldehyde
 8. In electric supply lines in India, which parameter is kept constant ?
(a) Voltage (b) Current
(c) Frequency (d) Power
 9. Consider the following :
Enzymes and protein can be correlated with each other in the following ways :
1. All proteins are enzyme.
2. All enzymes are protein.
3. All enzymes are not protein.
4. All proteins are not enzyme.
Which of the above are correct ?
(a) 1 and 3 only (b) 2 and 4 only
(c) 1, 2 and 3 (d) 2, 3 and 4
 10. Which one of the following has highest frequency ?
(a) Cosmic rays (b) X-rays
(c) Radiowaves (d) Microwaves
 11. Which one of the following is the largest satellite in solar system ?
(a) Titan (b) Ganymede
(c) Europa (d) Triton
 12. Which one of the following is a protein fibre ?
(a) Nylon (b) Polyester
(c) Silk (d) Cotton
 13. Which one of the following disease is caused due to presence of excess arsenic in water ?
(a) Alzheimer's disease (b) Parkinson's disease
(c) Skin cancer (d) Indigestion
 14. Which one of the following is known as the Great Circle?
(a) Tropic of Cancer (b) Tropic of Capricorn
(c) Equator (d) Arctic Circle
 15. What is Gulf-stream ?
(a) A cold current in the Atlantic Ocean
(b) A cold current in the Pacific Ocean
(c) A warm current in the Atlantic Ocean
(d) A warm current in the Pacific Ocean
 16. Which of the following soils is most common in the Northern Plain ?
(a) Laterite (b) Regur
(c) Alluvial (d) Red soil
 17. The Tropic of Cancer passes through which one of the following States ?
(a) Jharkhand (b) Himachal Pradesh
(c) Jammu and Kashmir (d) Bihar
 18. Which one of the following countries is the leading producer of uranium ?
(a) Russia (b) France
(c) Canada (d) Australia
 19. What was the pre-Korean War boundary between North Korea and South Korea ?
(a) 17th parallel (b) 38th parallel
(c) 49th parallel (d) Radcliffe Line
 20. What approximate percentage of world's population lives in Asia ?
(a) 30% (b) 35%
(c) 45% (d) More than 50%
 21. Which one of the following statements is correct ?
Boiling point of water :
(a) is always 100°C
(b) depends on atmospheric pressure
(c) depends on the material of the container in which it is boiled
(d) depends upon the source of heat
 22. What of the following electromagnetic waves has the longest wavelength ?
(a) Infrared rays (b) Gamma rays
(c) Light rays (d) Ultraviolet rays
 23. Well-known company Suzlon is engaged in which one of the following ?
(a) Oil exploration (b) Telecommunication
(c) Wind energy (d) Petrochemicals
 24. Which one of the following is not computer language ?
(a) Cobol (b) Visual Basic
(c) HTML (d) Netscape
- Directions :** The following 4 (Four) items consist 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
25. **Assertion (A)** : The number of the Members of the Union Public Service Commission is prescribed in the Constitution of India.
Reason (R) : The Union Public Service Commission was constituted under the provisions in the Constitution of India.
26. **Assertion (A)** : Per capita income of India does not give a complete picture of the economic growth of the country.
Reason (R) : Per capita income of a country is not independent of the size of its population.
27. **Assertion (A)** : An elevator is going up at constant velocity. If a person in the lift drops a coin in the elevator, then the coin will fall with uniform velocity.
Reason (R) : The elevator is not moving with any acceleration or retardation.
28. **Assertion (A)** : In winter, although many lakes and rivers are frozen, the marine fish still survives.
Reason (R) : The density of water is maximum at 4°C. Hence, water below the frozen outer surface is maintained at 4°C.
29. Container Corporation of India Limited (CONCOR), a Public Sector Undertaking is under the administrative control of which of the following Ministries ?
 (a) Heavy Industry
 (b) Small Scale
 (c) Railway
 (d) Shipping, road transport and highways
30. Which one of the following is the deepest point in the ocean floor ?
 (a) Challenger Deep (b) Milwaukee Deep
 (c) Java Trench (d) Philippine Trench
31. The Asteroid Belt is found between which of the following?
 (a) Mars and Jupiter (b) Earth and Mars
 (c) Jupiter and Saturn (d) Saturn and Uranus
32. What is the convergence of north east and south east trade winds near equator known as ?
 (a) Doldrums
 (b) Jet stream
 (c) Inter-tropical convergence zone
 (d) Upper air monsoon
33. The Sarkaria Commission Report deal with which one of the following ?
 (a) Corruption in India
 (b) Centre-state relations
 (c) Local governance
 (d) Inter-river dispute
34. Consider the following :
 1. Swarnjayanti Gram Swarozgar Yojana
 2. Pradhan Mantri Gram Sadak Yojana
 3. Sampoorna Grameen Rozgar Yojana
 4. Indira Awas Yojana
 Which one of the following is the correct chronological order of the above Yojanas ?
 (a) 2-3-4-1 (b) 4-1-2-3
 (c) 1-2-3-4 (d) 4-3-1-2
35. Who was the President of India at the time of proclamation of emergency in the year 1976 ?
 (a) V.V. Giri
 (b) Giani Zail Singh
 (c) Fakhruddin Ali Ahmad
 (d) Shankar Dayal Sharma
36. Which one of the following statements is not correct ?
 (a) The Vice President of India holds office for a period of five years
 (b) The Vice President of India can be removed by a simple majority of votes passed in the Rajya Sabha only
 (c) The Vice President of India continues to be in office even after the expiry of his term till his successor takes over
 (d) The Supreme Court of India has to look into all disputes with regard to the election of the Vice-President of India
37. Consider the following statements :
 1. A Money Bill cannot be introduced in the Council of States.
 2. The Council of States cannot reject a Money Bill nor amend it.
 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
38. Which of the following is not a Parliamentary Committee?
 (a) Demands for Grants Committee
 (b) Committee on Public Accounts
 (c) Committee on Public Undertakings
 (d) Committee on Estimates
39. Who propounded the Saptanga Theory ?
 (a) Manu (b) Charaka
 (c) Kautilya (d) Tulsidas
40. Consider the following statements about National Security Guard (NSG) :
 1. NSG was set up in the year 1984.
 2. Hostage rescue missions and counterhijack operations are its primary tasks.
 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
41. The office of Lokpal and Lokayukta in India is based on which one of the following ?
 (a) Parliamentary Commissioner of UK
 (b) Ombudsman in Scandinavia
 (c) Procurator General of Russia
 (d) Council of State in France
42. The development of which of the following administrative concepts could be attributed to German Sociologist Max Weber ?
 (a) Democracy (b) Bureaucracy
 (c) Pluralism (d) Corporatism
43. Where is the Wanderers Test Cricket ground located ?
 (a) Colombo (b) Melbourne
 (c) Auckland (d) Johannesburg
44. Under which Article of the Constitution of India can the President of India be impeached ?
 (a) Article 61 (b) Article 75
 (c) Article 76 (d) Article 356

45. PERT is a technique used for which one of the following?
 (a) Electric Power transmission
 (b) Project management
 (c) Railway safety
 (d) Internet
46. Who among the following was not a noble under Alauddin Khilji?
 (a) Ain-ul-Mulk Multani (b) Zafar Khan
 (c) Nusrat Khan (d) Munim Khan
47. Who among the following leaders dominated the Lucknow Pact in December, 1916?
 (a) Jawahar Lal Nehru (b) Bal Gangadhar Tilak
 (c) Moti Lal Nehru (d) Madan Mohan Malviya
48. Which region of India was ruled by Sultan Zain-ul-Abidin?
 (a) Assam (b) Delhi
 (c) Kashmir (d) Orissa
49. Which one among the following religions was patronized by Rashtrakutas?
 (a) Jainism (b) Buddhism
 (c) Shaivism (d) Vaishnavism
50. The Santhal rebellion of 1855-56 resulted in the creation of a separate geographical entity known as Santhal Parganas for the tribals. Who were the leaders associated with the rebellion?
 (a) Sidhu and Chakara (b) Chakara and Bogra
 (c) Sidhu and Kanhu (d) Dora and Chakara
51. Who wrote the famous drama Neel Darpan, which depicted the agony of the indigo cultivators and brutality of the planters?
 (a) Harish Chandra Mukherjee
 (b) Dinabandhu Mitra
 (c) Sisir Kumar Ghose
 (d) Ram Gopal Ghose
52. Which Rock Edict of Asoka provides a description of the horrors of Kalinga War?
 (a) 13th Rock Edict (b) Kalinga Edict at Dhauli
 (c) The Edict at Jaugada (d) 10th rock Edict
53. Which one of the following pairs is not correctly matched?
 (a) HCL Shiv Nidar
 (b) Ranbaxi Bhai Mohan Singh
 Laboratories Ltd
 (c) DLF Group Karsanbhai Khodidas Patel
 (d) Hero Group B. M. Munjal
54. Which one of the following Vedic god/goddess depicts an association with the Sun?
 (a) Ashvin (b) Pusan
 (c) Indira (d) Aranyani
55. Who among the following British officials was sent to Lahore to negotiate the Treaty of Amritsar with Ranjit Singh?
 (a) Major Broodfoot (b) Charles T. Metcalfe
 (c) John Lawrence (d) Lord Mc Cartney
56. Who among the following was not a member of the Royal Commission on the Public Services in India, 1912?
 (a) Gopal Krishna Gokhale
 (b) Valentine Chirol
 (c) Abdur Rahim
 (d) Bal Gangadhar Tilak
57. Who was the Founder of the Asiatic Society?
 (a) William Carey (b) William Jones
 (c) David Hare (d) Marshman
58. The decimal numeral system, including the concept of zero was invented in India during which one of the following dynasty?
 (a) Saka (b) Gupta
 (c) Pala (d) Chola
59. What was the scheme to reduce interest burden of the State Government in India through gradual conversion of high cost debt into a low cost debt known as?
 (a) Debt-swap scheme
 (b) Debt-write-off scheme
 (c) Grants-in-aid scheme
 (d) Debt consolidation scheme
60. In which of the following years India switched over to decimal currencies?
 (a) 1955 (b) 1957
 (c) 1960 (d) 1956
61. Which of the following women of Indian origin has been adjudged as the 'Miss Great Britain 2006' to represent UK in the Miss Universe content?
 (a) Kiran Desai (b) Preeti Desai
 (c) Hema Sarkar (d) Khalida Akhtar
62. In the year 2006, Muhammad Yusuf, a Pakistani batsman has broken the record of highest aggregate runs in test cricket in a calendar year which up till now stood in whose name?
 (a) Don Bradman (b) Sachin Tendulkar
 (c) Barry Richards (d) Vivian Richards
63. Which of the following Indians are recipients of the highest French Civilian Award of the 'Knight of Legion'?
 1. Lata Mangeshkar 2. Kishore Kumar
 3. Satyajit Ray 4. Amitabh Bachchan
 Select the correct answer using the code given below:
 (a) 1 and 4 only (b) 2 and 3 only
 (c) 1, 3 and 4 (d) 1, 2, 3 and 4
64. Who is the author of the book 'The Last Mughal—The Fall of a Dynasty, Delhi 1987'?
 (a) John Kirkland (b) William Dalrymple
 (c) Thomas Wilson (d) Simon Digby
65. Which one of the following is the correct sequence of Union Territories of India in the increasing order of their area?
 (a) Pondicherry - Lakshadweep - Chandigarh - Andaman and Nicobar Islands
 (b) Lakshadweep - Chandigarh - Andaman and Nicobar Islands - Pondicherry
 (c) Lakshadweep - Chandigarh - Pondicherry - Andaman and Nicobar Islands
66. Consider the following Greek Philosophers:
 1. Aristotle 2. Plato
 3. Pythagoras 4. Socrates
 Which one of the following is the correct chronological order of the Greek philosophers given above?
 (a) 1-2-3-4 (b) 3-4-2-1
 (c) 4-3-1-2 (d) 2-3-1-4
67. The historic peace agreement of November, 2006 in Nepal has been signed between which of the followings?
 (a) King and SPA (b) King and Maoist
 (c) SPA and Maoist (d) King, SPA and Maoist

68. Prof. Muhammad Yunus is renowned in which one of the following areas ?
 (a) International economics
 (b) Human rights
 (c) Freedom of press
 (d) Microcredit concept
69. Which one of the following has successfully been tested by India in November, 2006 ?
 (a) Rocket launching using solid fuel
 (b) Ballistic missile capable of carrying nuclear warhead
 (c) Ballistic missile covering 5000 km distance
 (d) Interceptor missile
70. Pluto has recently been demoted to "dwarf planet" because it does not meet one or more of the following criteria of a planet :
 1. A planet should orbit around the sun.
 2. A planet should have sufficient mass, so that it assumes a nearly round shape.
 3. A planet must have cleared its neighbourhood around its orbit.
 Select the correct answer using the codes given below :
 (a) 1, 2 and 3 (b) 2 and 3
 (c) 2 only (d) 3 only
71. Bamboo flowering is known to be associated with a subsequent famine. Which of the following is caused by bamboo flowering ?
 (a) Rainfall decreases
 (b) Pests and insects increase
 (c) Land becomes infertile
 (d) Population of rate increases
72. In which event did Manjeet Kaur excel in the Doha Asiad-2006 ?
 (a) 100 m race
 (b) 4x400 m women relay race
 (c) Shooting
 (d) Discus throw
73. Match List-I with List-II and select the correct answer using the codes given below the Lists :
- | List-I | | List-II | |
|--------------|------------------------------|------------------------------------|--|
| (Mineral) | | (Industries in Which Largely Used) | |
| A. Limestone | 1. Cement | | |
| B. Copper | 2. Electrical Goods | | |
| C. Bauxite | 3. Manufacture of aeroplanes | | |
| D. Maganese | 4. Steel | | |
- Codes :
- | A | B | C | D | A | B | C | D |
|-------|---|---|---|-------|---|---|---|
| (a) 3 | 4 | 1 | 2 | (b) 1 | 2 | 3 | 4 |
| (c) 3 | 2 | 1 | 4 | (d) 1 | 4 | 3 | 2 |
74. Which one of the following is not a cause for the present global warming and climate change ?
 (a) CFC emission (b) Carbon dioxide emission
 (c) Deforestation (d) Methane emission
75. Which one of the following is not a Defence Public Sector Undertaking ?
 (a) Bharat Electronics Ltd
 (b) National Hydroelectric Power Corporation Ltd
 (c) Bharat Earth Movers Ltd
 (d) Mazgaon Dock Ltd
76. Which of the following diseases are water-borne ?
 1. Typhoid 2. Hepatitis B
 3. Tuberculosis 4. Hepatitis A
 Select the correct answer using the code given below :
 (a) 1 and 2 (b) 1 and 3
 (c) 1 and 4 (d) 2 and 4
77. Who discovered the Polio vaccine ?
 (a) Louis Pasteur (b) Konard Zuse
 (c) Eli Whitney (d) Jonas Salk
78. Workers of paint industry are exposed to which one of the following hazards ?
 (a) Nickel pollution (b) Cadmium pollution
 (c) Strontium pollution (d) Lead pollution
79. Which one of the following is responsible for blue baby syndrome ?
 (a) Fluoride (b) Nitrate
 (c) Arsenic (d) Lead
80. Vaccination is available against all of the following diseases except :
 (a) Yellow Fever (b) Typhoid Fever
 (c) Malaria (d) Hepatitis B
81. The 2006 Nobel Prize in Medicine has been awarded jointly to whom among the following ?
 1. Andrew Z. Fire of Stanford University, School of Medicine.
 2. John C. Mather of NASA Centre, Maryland.
 3. Roger D. Koruberg of Stanford University, California.
 4. Craig C. Mello of University of Massachusetts Medical School, Worcester.
 Select the correct answer using the codes given below :
 (a) 1 and 4 (b) 2 and 3
 (c) 1, 2 and 3 (d) 2, 3 and 4
82. Athletes with higher proportion of red fibres in their muscles are better equipped for which one of the following ?
 (a) Swimming (b) Sprint
 (c) Short activities (d) Shot put
83. Match List I and with List II and select the correct answer using the codes given below the Lists :
- | List I | | List I | |
|------------------|-------------------|------------|--|
| (Tiger Reserves) | | (Location) | |
| A. Pench | 1. Assom | | |
| B. Manas | 2. Madhya Pradesh | | |
| C. Periyar | 3. Karnataka | | |
| D. Bandipur | 4. Kerala | | |
- Codes :
- | A | B | C | D | A | B | C | D |
|-------|---|---|---|-------|---|---|---|
| (a) 3 | 1 | 4 | 2 | (b) 2 | 4 | 1 | 3 |
| (c) 3 | 4 | 1 | 2 | (d) 2 | 1 | 4 | 3 |
84. The leaves used as wrappers for bidis are obtained from which one of the following ?
 (a) Shikakai (b) Rudraksha
 (c) Tendu (d) Lemon grass
85. Where is Asiatic wild ass found ?
 (a) Rann of Kachchh (b) Kaziranga
 (c) Ranthambore (d) Periyar

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

List I (Vitamin)		List I (Function)	
A. Vitamin A	1.	Assists in normal reproductive function	
B. Vitamin C	2.	Assists in absorption and metabolism of Calcium	
C. Vitamin D	3.	Essential for healthy skin and normal vision	
D. Vitamin B ₁₂	4.	Essential for formation of collagen	
	5.	Essential for Red Blood Cell formation	

Codes :

A	B	C	D	A	B	C	D
(a) 2	1	5	4	(b) 3	4	2	5
(c) 3	2	4	1	(d) 2	1	3	5

87. Which one of the following types of cells has the ability to develop into any type of cell ?

- (a) Endodermal cells (b) Ectodermal cells
(c) Stem cell (d) Muscle cell

88. The increasing abundance of greenhouse gases in the atmosphere has led to the following effects except :

- (a) Global warming
(b) Depletion of Ozone layer in the stratosphere
(c) Oxygen fertilization effect
(d) Carbon dioxide fertilization effect

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

List I (Greenhouse Gases)		List I (Major Source)	
A. Carbon dioxide	1.	Enteric fermentation in cattle	
B. Methane	2.	Burning of fossil	
C. Chlorofluoro carbons	3.	Mercury compounds in waste water	
D. Nitrous oxide	4.	Nylon production	
	5.	Air-conditioners and refrigeration units	

Codes :

A	B	C	D	A	B	C	D
(a) 2	1	5	4	(b) 3	4	2	1
(c) 3	2	4	1	(d) 1	2	3	5

90. Where is the Central Coffee Research Institute situated?

- (a) Balehonnur, Karnataka
(b) Coimbatore, Tamil Nadu
(c) Thiruvananthapuram, Kerala
(d) Hyderabad, Andhra Pradesh

91. The right to property was removed from the list of Fundamental Rights enlisted in the Constitution of India through which one of the following Amendments ?

- (a) 73rd (b) 23rd
(c) 44th (d) 76th

92. Consider the following statements :

1. United States-India Peaceful Atomic Energy Cooperation Act, 2006 was named in honour of the Chairman of the House Committee on International Relations.
2. About 25% of world's total thorium reserves are in India.

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

93. Athlete of which one of the following countries died in equestrian competition in the 15th Asian Games at Doha?

- (a) South Korea (b) Japan
(c) China (d) Malaysia

94. Who among the following heads Wipro Limited—one of the largest computer companies in India ?

- (a) Nandan Nilekani (b) Azim Premji
(c) Y. C. Deveshwar (d) Sunil Mittal

95. Consider the following statements :

1. Bhutan is going to hold its first ever parliamentary elections in the year 2010.
2. Bhutan has banned anyone without a university degree from contesting elections.

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

96. The rare astronomical event, transit of Mercury across Sun took place on 9th November, 2006, when the planet came between Sun and Earth. The next transit visible from India will be in which one of the following years?

- (a) 2010 (b) 2012
(c) 2014 (d) 2016

97. Consider the following statements :

1. Geshe Ngawang Tashi (Lama Tashi) was nominated for 48th Annual Grammy Awards for his album 'In the Heart of the Moon'.
2. Aashish Khan and Zakir Hussain were nominated for 49th Annual Grammy Awards for their album "Golden Strings of the Sarod", in the Traditional World Music category.

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

98. Consider the following statements :

1. ISRO is aiming to put an astronaut outside the earth's atmosphere by the year 2014.
2. In the year 1984, IAF pilot Rakesh Sharma went into space in a Soviet spacecraft.

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

99. The objective of the Eklavya Model Residential Schools is to provide quality education to which of the following?

- (a) Scheduled Caste students
(b) Tribal students
(c) Orphan girl students
(d) Unorganized women labour

100. Which one of the following States/UTs of the country has more than fifty percent tribal population of the total population ?
 (a) Andaman and Nicobar Islands
 (b) Dadra and Nagar Haveli
 (c) Himachal Pradesh
 (d) Pondicherry
101. Which one of the following was the Chairman of the Committee on Pricing and Taxation of Petroleum Products ?
 (a) Raja J. Chelliah (b) C. Rangarajan
 (c) Y. V. Reddy (d) Abid Hussain
102. Consider the following components of food grains production in India during the year 2005-06 :
 1. Wheat 2. Rice
 3. Coarse cereals 4. Pulses
 Which one of the following is the correct sequence of the aforesaid items in descending order in terms of their production ?
 (a) 1-2-3-4 (b) 2-1-3-4
 (c) 1-3-2-4 (d) 4-3-2-1
103. Which one of the following Indus culture sites gives evidence of a dockyard ?
 (a) Harappa (b) Lothal
 (c) Mohenjodaro (d) Rakhigarhi
104. What were the Khanqahs in the Medieval India ?
 (a) Sufi shrines
 (b) State Granaries
 (c) Provincial treasuries
 (d) Wayside resting places for traders
105. Who was Francisco De Almeida ?
 (a) Dutch Viceroy in India
 (b) Portuguese Viceroy in India
 (c) French Viceroy in India
 (d) English Viceroy in India
106. Who was the Defence Minister of India during the Indo-China War of 1962 ?
 (a) R. N. Thapar (b) Jagjivan Ram
 (c) V. K. Krishna Menon (d) Govind Ballabh Pant
107. Consider the following statements :
 1. John Kenneth Galbraith served as U S Ambassador to India.
 2. John Kenneth Galbraith was awarded the Padma Vibhushan for his contributions to strengthening ties between India and the United States.
 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
108. Consider the following statements :
 1. There are 21 High Courts at present in India.
 2. Kolkata, Mumbai, Chennai and Allahabad High Courts were established in the year 1862.
 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
109. Who among the following was awarded the Rajiv Gandhi Khel Ratna Award for the year 2005-2006 ?
 (a) Rajyavardhan Singh Rathore
 (b) Pankaj Advani
 (c) Anuj Bobby Goerge
 (d) K. M. Beenamol
110. Consider the following statements :
 1. The Grand Trunk Road (GT Road) traverses three South Asian countries-India, Pakistan and Bangladesh.
 2. The stretch of the GT Road between Kolkata and Delhi is known as NH-1.
 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
111. Joseph Barbera, who died recently, created which one of the following famous cartoon characters ?
 (a) Spiderman
 (b) Mickey Mouse
 (c) Tom and Jerry
 (d) Phantom
112. Consider the following statements :
 1. The consumer cooperative structure in India has three tiers.
 2. 24 December is celebrated in India as the National Consumer day.
 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
113. Which of the following is not correctly matched ?

(Institute)	(Location)
(a) Indian Institute of Foreign Trade	: Delhi
(b) Marine Products Export Development Authority	: Chennai
(c) Indian Institute of Packaging	: Mumbai
(d) Indian Diamond Institute	: Surat
114. Which of the following is not one of the official languages of the United Nations ?
 (a) Arabic (b) Spanish
 (c) Hindi (d) Russian
115. Which one of the following nations has set up an ambitious goal to achieve a completely oil-free economy by the year 2020 ?
 (a) Canada (b) USA
 (c) Sweden (d) Australia
116. Cortes Generales is the name of the Parliament of which one of the following countries ?
 (a) Norway (b) Spain
 (c) Sweden (d) Denmark
117. What is the approximate height of a geostationary satellite from the surface of the earth ?
 (a) 981 km (b) 15,000 km
 (c) 35,000 km (d) 55,000 km
118. What is the correct chronological order in which the following States of the Indian Union were created or granted full statehood ?
 1. Andhra Pradesh 2. Nagaland
 3. Maharashtra 4. Haryana
 Select the correct answer using the codes given below
 (a) 1-3-4-2 (b) 3-1-2-4
 (c) 1-3-2-4 (d) 3-1-4-2

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

List I		List I	
(Cities Connected)		(National Highway)	
A. Agra-Mumbai	1.	NH 21	
B. Varanasi-Kanniyakumari	2.	NH 7	
C. Chandigarh-Manali	3.	NH 3	
D. Delhi-Jaipur	4.	NH 8	

Codes :

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

120. How can the International Date Line be explained in simple terms ?

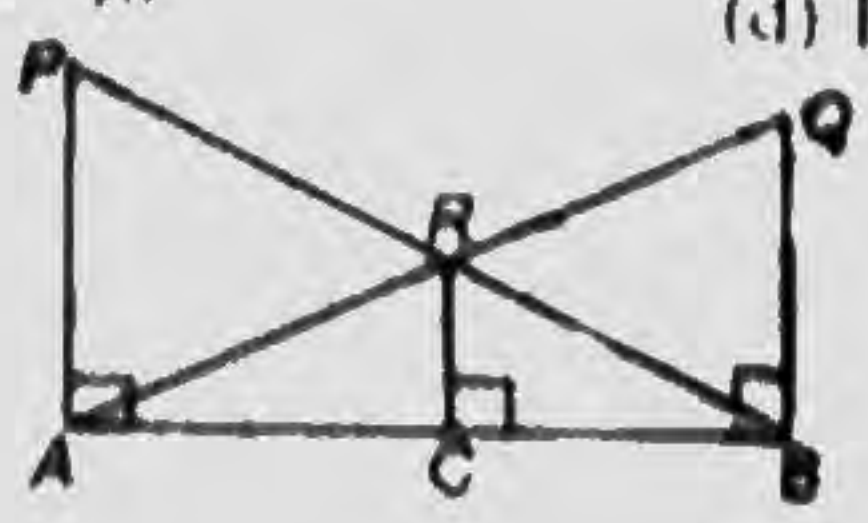
- (a) It is the equator
- (b) It is the 180° longitude
- (c) It is the 90° East longitude
- (d) It is the 0° longitude

1. Which one of the following numbers is a composite number?
 (a) 589 (b) 571
 (c) 569 (d) 563
2. For what value of k , will the expression $3x^3 - kx^2 + 4x + 16$ be divisible by $\left(x - \frac{k}{2}\right)$?
 (a) 4 (b) -4
 (c) 2 (d) 0
3. Which one of the following is the factor of $x^4 + xy^3 + xz^3 + x^3y + y^4 + yz^3$?
 (a) $x + y + z$ (b) $x^2 + y^2 + z^2$
 (c) $x^3 + y^3 + z^3$ (d) $x^2 + y^2$
4. If $x^2 - kx - 21 = 0$ and $x^2 - 3kx + 35 = 0$ have one common root, then what is the value of k ?
 (a) +4 only (b) -4 only
 (c) ± 4 (d) ± 1
5. What is the HCF of the polynomials $x^3 + 3x^2y + 2xy^2$ and $x^4 + 6x^3y + 8x^2y^2$?
 (a) $x(x + 2y)$ (b) $x(x + 3y)$
 (c) $x + 2y$ (d) None of these
6. What is the value of $(\log_{\frac{1}{2}} 2)(\log_{\frac{1}{3}} 3)(\log_{\frac{1}{4}} 4) \dots (\log_{\frac{1}{1000}} 1000)$?
 (a) 1 (b) -1
 (c) 1 or -1 (d) 0
7. If $pqr = 1$, what is the value of the expression $\frac{1}{1+p+q^{-1}} + \frac{1}{1+q+r^{-1}} + \frac{1}{1+r+p^{-1}}$?
 (a) 1 (b) -1
 (c) 0 (d) $\frac{1}{3}$
8. If $x + y + z = 2s$, then what is $(s-x)^3 + (s-y)^3 + 3(s-x)(s-y)z$ equal to?
 (a) z^3 (b) $-z^3$
 (c) x^3 (d) y^3
9. If $x^2 = y + z$, $y^2 = z + x$, $z^2 = x + y$, then what is the value of $\frac{1}{x+1} + \frac{1}{y+1} + \frac{1}{z+1}$?
 (a) 1 (b) 0
 (c) -1 (d) 2
10. Consider the following decimal numbers :
 1. 1.16666666...
 2. 1.181181118...
 3. 2.010010001...
 4. 1.454545...
 Which of the above numbers represent(s) rational number(s)?
 (a) 4 only
 (b) 2 and 3
 (c) 1 and 4
 (d) None of the above
11. Let p, q, r be such that $p + q = r$ and $pqr = 30$. What is the value of $p^3 + q^3 - r^3$?
 (a) 0
 (b) 90
 (c) -90
 (d) Cannot be determined as the data is insufficient
12. How many real values of x satisfy the equation $x^{2/3} + x^{1/3} - 2 = 0$?
 (a) Only 1 value (b) 2 values
 (c) 3 values (d) No value
13. What is the square root of $\left(\frac{x^5 - 1}{x - 1}\right) + (x^3 + 2x^2 + x)$?
 (a) $x^2 + x + 1$ (b) $x^2 - x + 1$
 (c) $x^2 - x - 1$ (d) $x^2 + x - 1$
14. If sum of the roots of the equation $ax^2 + bx + c = 0$ is equal to the sum of their squares, then which one of the following is correct?
 (a) $a^2 + b^2 = c^2$ (b) $a^2 + b^2 = a + b$
 (c) $2ac = ab + b^2$ (d) $2c + b = 0$
15. What is $\frac{x^8 + 4}{x^4 + 2x^2 + 2}$ equal to?
 (a) $x^4 + 2x^2 - 2$ (b) $x^4 - 2x^2 + 2$
 (c) $x^4 - 2x^2 - 2$ (d) Cannot be simplified
16. If $2^x - 2^{x-1} = 4$, then what is the value of $2^x + 2^{x-1}$?
 (a) 8 (b) 10
 (c) 12 (d) 16
17. If $x + (1/x) = p$, then what is $x^6 + (1/x^6)$ equal to?
 (a) $p^6 + 6p$ (b) $p^6 - 6p$
 (c) $p^6 + 6p^4 + 9p^2 + 2$ (d) $p^6 - 6p^4 + 9p^2 - 2$
18. If α, β are the roots of $x^2 - 5x + k = 0$, then what is the value of k such that $\alpha - \beta = 1$?
 (a) 1 (b) 3
 (c) 4 (d) 6
19. If $x + y + z = 0$, then what is $[(y - z - x)/2]^3 + [(z - x - y)/2]^3 + [(x - y - z)/2]^3$ equal to?
 (a) $24xyz$ (b) $-24xyz$
 (c) $3xyz$ (d) xyz
20. Which one of the following is the equation whose roots are respectively three times the roots of the equation $ax^2 + bx + c = 0$?
 (a) $ax^2 + 3bx + c = 0$ (b) $ax^2 + 3bx + 9c = 0$
 (c) $ax^2 - 3bx + 9c = 0$ (d) $ax^2 + bx + 3c = 0$
21. What is $((A \cup B)' \cap A) - (A - B)$ equal to?
 (a) ϕ (b) A
 (c) B (d) B'
22. If $A = \{(2^{2n} - 3n - 1) \mid n \in N\}$ and $B = \{(9(n - 1) \mid n \in N\}$, then which one of the following is correct?
 (a) $A \subset B$
 (b) $B \subset A$
 (c) $A = B$
 (d) Neither A is a subset of B nor B is a subset of A

23. What least number should be subtracted from 26492518 so that the resulting number is divisible by 3 but not by 9 ?
 (a) 1 (b) 3
 (c) 4 (d) 7
24. A bell rings every 5 seconds, A second bell rings every 6 seconds and a third one rings every 8 seconds. If all the three ring at the same time at 8 : 00 a.m., at what time will they all ring together next ?
 (a) 1 minute past 8 : 00 a.m.
 (b) 2 minutes past 8 : 00 a.m.
 (c) 3 minutes past 8 : 00 a.m.
 (d) 4 minutes past 8 : 00 a.m.
25. What is the unit digit of the product of all prime numbers between 1 and 100 ?
 (a) 0 (b) 1
 (c) 2 (d) 3
26. A scooterist completes a certain journey in 10 hours. He covers half the distance at 30 kmph and the rest at 70 kmph. What is the total distance of the journey ?
 (a) 210 km (b) 400 km
 (c) 420 km (d) 500 km
27. 42 men take 25 days to dig a pond. If the pond would have to be dug in 14 days, then what is the number of men to be employed ?
 (a) 67 (b) 75
 (c) 81 (d) 84
28. At what rate percent per annum calculated in simple interest will a sum of money double in 10 years ?
 (a) 10% (b) 12%
 (c) 12.5% (d) 13.5%
29. An amount at compound interest doubles itself in 4 years. In how many years will the amount become 8 times itself ?
 (a) 8 years (b) 12 years
 (c) 16 years (d) 24 years
30. A trader marked a watch 40% above the cost price and then gave a discount of 10%. He made a net profit of Rs. 468 after paying a tax of 10% on the gross profit. What is the cost price of the watch ?
 (a) Rs 1,200 (b) Rs 1,800
 (c) Rs 2,000 (d) Rs 2,340
31. By giving 25% discount a trader earns 25% profit. If he sells the item at 10% discount, what is his profit ?
 (a) 10% (b) 40%
 (c) 45% (d) 50%
32. A person can do a job as fast as his two sons working together. If one son does the job in 6 days and the other in 12 days, how many days does it take the father to do the job ?
 (a) 9 days (b) 6 days
 (c) 4 days (d) 3 days
33. A sum of Rs. 24,000 is borrowed for $1\frac{1}{2}$ years at the rate of interest 10% per annum compounded semi-annually. What is the compound interest (x) ?
 (a) $x < \text{Rs } 3,000$
 (b) $\text{Rs } 3,000 < x < \text{Rs } 4,000$
 (c) $\text{Rs } 4,000 < x < \text{Rs } 5,000$
 (d) $x > \text{Rs } 5,000$
34. A man borrowed Rs. 40,000 at 8% simple interest per year. At the end of second year he paid back certain amount and at the end of fifth year he paid back Rs. 35,960 and cleared the debt. What is the amount did he pay back after the second year ?
 (a) Rs. 16,200 (b) Rs. 17,400
 (c) Rs. 18,600 (d) None of these
35. A ten-digit number is divisible by 4 as well as by 5. What could be the possible digit at the ten's place in the given number ?
 (a) 0, 1, 2, 4 or 6 (b) 1, 2, 4, 6 or 8
 (c) 2, 3, 4, 6 or 8 (d) 0, 2, 4, 6 or 8
36. Six years hence a father's age will be three times his son's age and three years ago father was nine times as old as his son. What is the present age of father ?
 (a) 48 years (b) 42 years
 (c) 36 years (d) 30 years
37. By adding x to 1254934, the resulting number becomes divisible by 11, while adding y to 1254934 makes the resulting number divisible by 3. Which one of the following is the set of values for x and y ?
 (a) $x = 1, y = 1$ (b) $x = 1, y = -1$
 (c) $x = -1, y = 1$ (d) $x = -1, y = -1$
38. x varies inversely as the square of y in such a way that if $x = 1$, then $y = 6$. If $y = 3$, then what is the value of x ?
 (a) $\frac{1}{3}$ (b) $\frac{1}{2}$
 (c) 2 (d) 4
39. LCM of two numbers is 14 times their HCF. The sum of LCM and HCF is 600. If one number is 80, then what is the other number ?
 (a) 40 (b) 60
 (c) 160 (d) 280
40. Two numbers have 16 as their HCF and 146 as their LCM. How many such pairs of numbers are there ?
 (a) Zero (b) Only 1
 (c) Only 2 (d) Many
41. What is the least number which when divided by 7, 9 and 12 leaves the same remainder 1 in each case ?
 (a) 253 (b) 352
 (c) 505 (d) 523
42. Which one of the following numbers is an integer ?
 (a) $[(\sqrt{2} + \sqrt{3}) / (\sqrt{3} - \sqrt{2})] + \sqrt{6}$
 (b) $[(\sqrt{2} + \sqrt{3}) / (\sqrt{3} - \sqrt{2})] + 2\sqrt{6}$
 (c) $[(\sqrt{2} + \sqrt{3}) / (\sqrt{2} - \sqrt{3})] + 2\sqrt{6}$
 (d) $[(\sqrt{2} + \sqrt{3}) / (\sqrt{2} - \sqrt{3})] + \sqrt{6}$
43. Which one of the following is true for some value of θ , where $0^\circ \leq \theta \leq 90^\circ$?
 (a) $\sin \theta = \sqrt{2}$ (b) $\sin \theta + \cos \theta = 2$
 (c) $\sin \theta + \cos \theta = 0$ (d) $\sin \theta - \cos \theta = 1$
44. If $\sin \theta + \operatorname{cosec} \theta = 2$, then what is the value of $\sin^4 \theta + \cos^4 \theta$?
 (a) 2 (b) 2^2
 (c) 2^3 (d) 1

45. Let $\theta \in R$ be such that $\sec \theta > 0$ and $2 \sec^2 \theta + \sec \theta - 6 = 0$. What is the value of $\operatorname{cosec} \theta$?
 (a) $\sqrt{5}$ (b) $\sqrt{3}/2$
 (c) $3\sqrt{5}$ (d) $2\sqrt{3}$
46. Consider a circle C of radius 6 cm with centre at O . What is the difference in the area of the circle C and the area of the sector of C subtending an angle of 80° at O ?
 (a) $26\pi \text{ cm}^2$ (b) $16\pi \text{ cm}^2$
 (c) $28\pi \text{ cm}^2$ (d) $30\pi \text{ cm}^2$
47. If $\pi = 22/7$, then what is the approximate value of 1 radian ?
 (a) $57^\circ 16' 22''$ (b) $57^\circ 15' 22''$
 (c) $57^\circ 16' 20''$ (d) $57^\circ 15' 20''$
48. Under which one of the following conditions is the trigonometrical identity $\sin x/(1 + \cos x) = (1 - \cos x)/\sin x$ true ?
 (a) x is not a multiple of 360°
 (b) x is not an odd multiple of 180°
 (c) x is not a multiple of 180°
 (d) None of the above
49. Given $3 \sin \theta + 4 \cos \theta = 5$, then what is $3 \cos \theta - 4 \sin \theta$ equal to ?
 (a) 0 (b) 3
 (c) 4 (d) 5
50. If $\sec \theta = 13/5$, then what is the value of $\frac{2 \sin \theta - 3 \cos \theta}{4 \sin \theta - 9 \cos \theta}$?
 (a) 1 (b) 2
 (c) 3 (d) 4
51. If $0^\circ \leq x \leq 90^\circ$ and $\sin x + \sqrt{3} \cos x = 1$, then what is the value of x ?
 (a) 30° (b) 45°
 (c) 60° (d) 90°
52. Two houses are collinear with the base of a tower and are at distances 3 m and 12 m from the base of the tower. The angles of elevation from these two houses of the top of the tower are complementary. What is the height of the tower ?
 (a) 4 m (b) 6 m
 (c) 7.5 m (d) 36 m
53. What is the value of $\cos 0^\circ + \cos 1^\circ + \dots + \cos 180^\circ$?
 (a) 2 (b) 1
 (c) 0 (d) -1
54. If $0^\circ < x < 90^\circ$ and $2 \sin x + 15 \cos^2 x = 7$, then what is the value of $\tan x$?
 (a) $\frac{2}{3}$ (b) $\frac{3}{2}$
 (c) $\frac{3}{4}$ (d) $\frac{4}{3}$
55. Which of the following equations is/are correct if $1 + \cos x \cos y + \sin x \sin y = 0$?
 1. $\cos x + \cos y = 0$
 2. $\sin x + \sin y = 0$
 3. $\sin x + \cos y = 0$
 Select the correct answer using the codes given below.
 (a) 1 only (b) 2 only
 (c) 3 only (d) 1 and 2
56. The angle of elevation from the bank of a river of the top of a tree standing on the opposite bank is 60° . The angle of elevation becomes 30° when observed from a point 40 metres backwards in a direction perpendicular to the length of the river. What is the width of the river?
 (a) 10 m (b) 20 m
 (c) 30 m (d) 40 m
57. What is the simplest value of $\frac{(1 - \sin A \cos A)(\sin^2 A - \cos^2 A)}{\cos A (\sec A - \operatorname{cosec} A)(\sin^3 A + \cos^3 A)}$?
 (a) $\sin A$ (b) $\cos A$
 (c) $\sec A$ (d) $\operatorname{cosec} A$
58. What is the angle which equals one-fifth of its supplement?
 (a) 15° (b) 30°
 (c) 36° (d) 75°
59. Triangles ABC and DEF are similar triangles such that $\frac{AB}{DE} = \frac{BC}{EF}$. The area of ΔABC is 16 cm^2 and that of ΔDEF is 49 cm^2 . If $BC = 2\sqrt{2} \text{ cm}$, then what is EF equal to ?
 (a) 3.5 cm (b) $(3.5)\sqrt{2} \text{ cm}$
 (c) $(3.5)\sqrt{3} \text{ cm}$ (d) 7.0 cm
60. If the distance from the vertex to the centroid of an equilateral triangle is 6 cm, then what is the area of the triangle ?
 (a) 24 cm^2 (b) $27\sqrt{3} \text{ cm}^2$
 (c) 12 cm^2 (d) $12\sqrt{3} \text{ cm}^2$
61. Consider the following statements :
 If two parallel lines are intersected by a transversal, then
 1. each pair of corresponding angles are equal
 2. each pair of alternate are unequal
 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
62. In ΔABC and ΔDEF , it is given that $AB = 5 \text{ cm}$, $BC = 4 \text{ cm}$ and $CA = 4.2 \text{ cm}$; $DE = 10 \text{ cm}$, $EF = 8 \text{ cm}$ and $FD = 8.4 \text{ cm}$. If AL is perpendicular to BC , and DM is perpendicular to EF , then what is the ratio of AL to DM ?
 (a) $\frac{1}{2}$ (b) $\frac{1}{3}$
 (c) $\frac{1}{4}$ (d) 1
63. In ΔPQR , $PQ = 4 \text{ cm}$, $QR = 3 \text{ cm}$ and $RP = 3.5 \text{ cm}$. ΔDEF is similar to ΔPQR . If $EF = 9 \text{ cm}$, then what is the perimeter of ΔDEF ?
 (a) 10.5 cm (b) 21 cm
 (c) 31.5 cm (d) Cannot be determined as data is insufficient
64. AD is the angular bisector of a ΔABC such that $BD : DC = 2 : 3$. If $AB = 7 \text{ cm}$, what is $AC : BC$?
 (a) 2 : 3 (b) 3 : 2
 (c) 21 : 10 (d) Data is insufficient

65.



In the figure given above, if $PA = x$, $RC = y$, $QB = z$, then which one of the following is correct ?

- (a) $2y = x + z$ (b) $4y = x + z$
 (c) $xy + yz = xz$ (d) $xy + xz = yz$

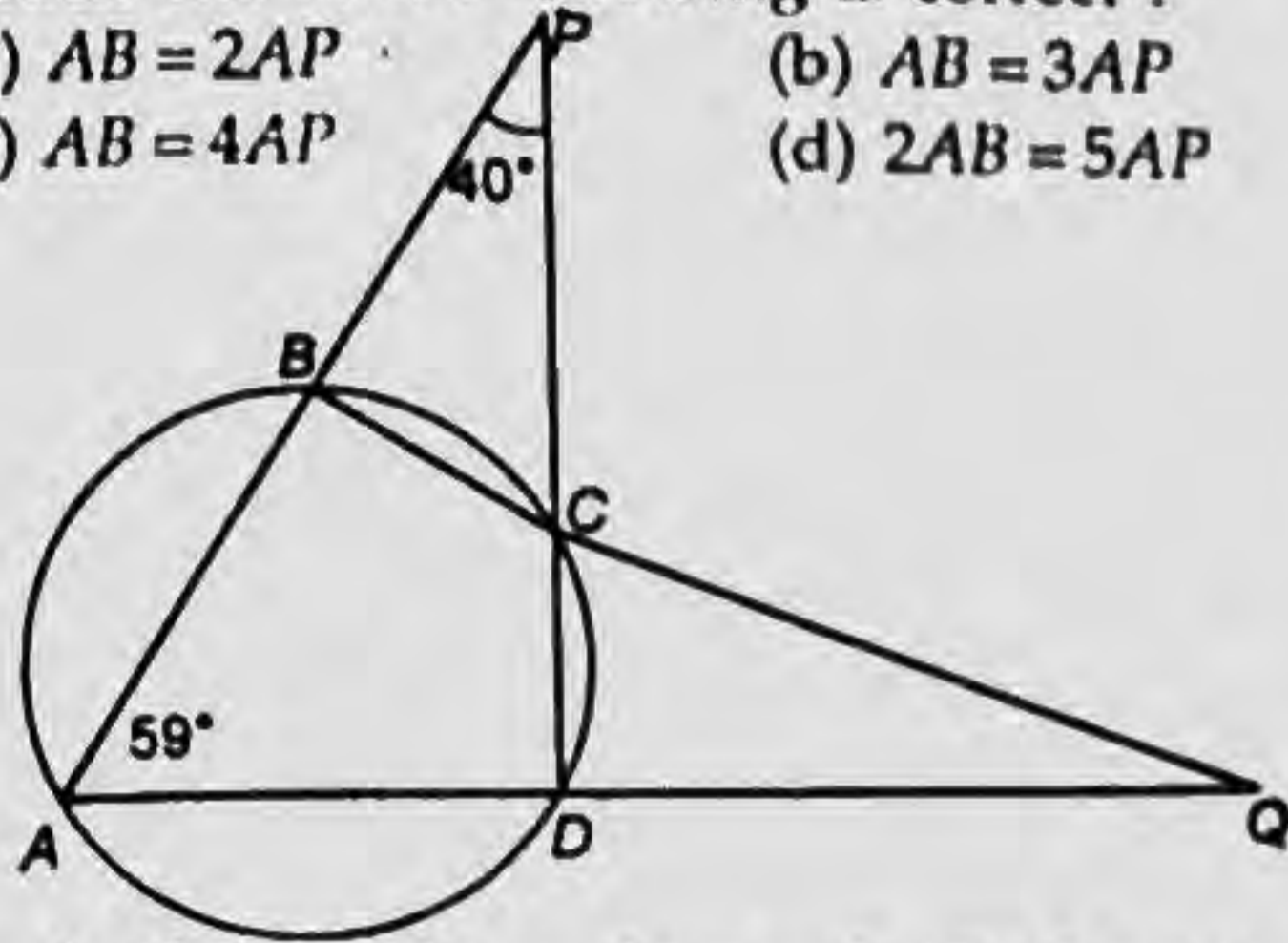
66. C is a point on the minor arc AB of a circle with centre O . If $\angle AOB = 100^\circ$, what is $\angle ACB$?

- (a) 80° (b) 90°
 (c) 100° (d) 130°

67. In a $\triangle ABC$, $AB = AC$. A circle through B touches AC at D and intersects AB at P . If D is the midpoint of AC , which one of the following is correct ?

- (a) $AB = 2AP$ (b) $AB = 3AP$
 (c) $AB = 4AP$ (d) $2AB = 5AP$

68.



In the figure given above, if $\angle PAQ = 59^\circ$, $\angle APD = 40^\circ$, then what is $\angle AQB$?

- (a) 19° (b) 20°
 (c) 22° (d) 27°

69. An obtuse angle made by a side of a parallelogram $PQRS$ with other pair of parallel sides is 150° . If the perpendicular distance between these parallel sides (PQ and SR) is 20 cm, what is the length of the side RQ ?

- (a) 40 cm (b) 50 cm
 (c) 60 cm (d) 70 cm

70. What is the area of the region of the circle which is situated outside the inscribed square of side x ?

- (a) $(\pi - 2)x^2$ (b) $(\pi - 2)x^2/2$
 (c) $2(\pi - 2)x^2$ (d) $(\pi - 2)x^2/4$

71. The area of a right-angled isosceles triangle is 72 cm^2 . What is the length of the hypotenuse ?

- (a) $6\sqrt{2}$ cm (b) 12 cm
 (c) $12\sqrt{2}$ cm (d) 24 cm

72. A rectangular field is half as wide as it is long and is completely enclosed by x m of fencing. What is the area of the field ?

- (a) $x^2/2 \text{ m}^2$ (b) $2x^2 \text{ m}^2$
 (c) $2x^2/9 \text{ m}^2$ (d) $x^2/18 \text{ m}^2$

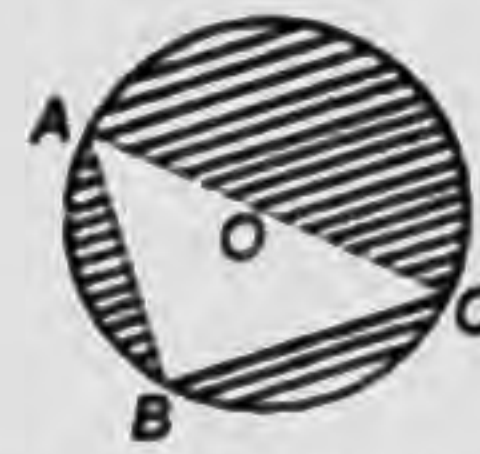
73. The volume of a cuboid whose sides are in the ratio of $1 : 2 : 4$ is same as that of a cube. What is the ratio of length of diagonal of cuboid to that of cube ?

- (a) $\sqrt{1.25}$ (b) $\sqrt{1.75}$
 (c) $\sqrt{2}$ (d) $\sqrt{3.5}$

74. If the length of a rectangle is increased by 10% and the area is unchanged, then by how much percent does the breadth decrease ?

- (a) 100/11% (b) 100/9%
 (c) 9% (d) 10%

75.



In the figure given above, the area of the shaded portion is $(\pi - 1)R^2$, where R is the radius of the circle with centre at O . What is one of the acute angles of the triangle ABC ?

- (a) 30° (b) 45°
 (c) 60° (d) Cannot be determined

76. $\triangle ABC$ is an isosceles right-angled triangle. If r is its in-radius and R is its circum-radius, then what is R/r equal to ?

- (a) $\sqrt{2} + 1$ (b) $3 + \sqrt{2}$
 (c) $\frac{5}{2}$ (d) $\sqrt{3} + \sqrt{2}$

77. If the diameter of a wire is decreased by 10%, by how much percent (approximately) will the length be increased to keep the volume constant ?

- (a) 5% (b) 17%
 (c) 20% (d) 23%

78. The diameter of a solid metallic right circular cylinder is equal to its height. After cutting out the largest possible solid sphere S from this cylinder, the remaining material is recast to form a solid sphere S_1 . What is the ratio of the radius of sphere S to that of sphere S_1 ?

- (a) $1 : 2^{\frac{1}{3}}$ (b) $2^{\frac{1}{3}} : 1$
 (c) $2^{\frac{1}{3}} : 3^{\frac{1}{3}}$ (d) $3^{\frac{1}{2}} : 2^{\frac{1}{2}}$

79. Two solid spheres of gold having diameters 3 cm and 4 cm are molten and then cast into one big sphere of gold. If the radius of this sphere is x , then what is the value of x^3 ?

- (a) 125 dm^3 (b) 15.625 dm^3
 (c) 11.375 dm^3 (d) 9.875 dm^3

80. A square has its side equal to the radius of a sphere. The square revolves round a side to generate a surface of total area S . If A be the surface area of the sphere, which one of the following is correct ?

- (a) $A = 3S$ (b) $A = 2S$
 (c) $A = S$ (d) $A < S$

81. What is the area of a right triangle of hypotenuse 313 cm and base 312 cm ?

- (a) 40 dm^2 (b) 39 dm^2
 (c) 25 dm^2 (d) 51 dm^2

82. The diameter of a bus wheel is 140 cm. The speed of the bus is 66 km per hour. What is the number of revolutions of the wheel per minute ?

- (a) 200 (b) 250 (c) 300 (d) 350

83. A wire bent in the form of a circle has a radius of 16 cm. What will be the area of a square which is formed out of the full length of such wire ?

- (a) $\pi^2/4 \text{ cm}^2$ (b) $4\pi^2 \text{ cm}^2$
 (c) $16\pi^2 \text{ cm}^2$ (d) $64\pi^2 \text{ cm}^2$

84. A swimming pool is 24 m long and 15 m broad. When x number of men dive into the pool, the height of the water rises by 1 cm. If the average amount of water displaced by one man is 0.1 m^3 , then what is the value of x ?
 (a) 36 (b) 72 (c) 108 (d) 360
85. Water is distributed to a town of 50000 inhabitants from a rectangular reservoir consisting of 3 equal compartments. Each compartment has length and breadth 200 m, 100 m respectively and 12 m depth of water in the beginning. The allowance is 20 litres per head per day. For how many days will the supply of water hold out ?
 (a) 240 days (b) 720 days
 (c) 800 days (d) 900 days
86. A right circular cylinder and a right circular cone have equal bases and equal volumes. But the lateral surface area of the right circular cone is $15/8$ times the lateral surface area of the right circular cylinder. What is the ratio of radius to height of the cylinder ?
 (a) 3 : 4 (b) 9 : 4
 (c) 15 : 8 (d) 8 : 15
87. A wax cube of edge 6 cm is melted and formed into three smaller cubes. If the edges of two smaller cubes are 3 cm and 4 cm, what is the edge of the third smaller cube ?
 (a) 5 cm (b) 4.5 cm
 (c) 4 cm (d) 3.5 cm
88. The vertical height of a right circular cone is twice its diameter and its volume is $36\pi \text{ cm}^3$. What is its vertical height ?
 (a) 4 cm (b) 8 cm
 (c) 12 cm (d) 16 cm
89. What is the geometrical mean of the variate which takes values 210, 201, 102, 20, 12, 10, 2, 1 and 0 ?
 (a) 3 (b) 2
 (c) 1 (d) 0
90. What type of classification is needed to enumerate the female population of India ?
 (a) Geographical (b) Chronological
 (c) Qualitative (d) Quantitative
91. A batsman scores 80 runs in his sixth innings and thus increases his average by 5. What is his average after six innings ?
 (a) 50 (b) 55
 (c) 60 (d) 65
92. If the mean of the variable X is M , what is the mean of variable $Y = (X - 4)/5$?
 (a) $(M - 4)/5$ (b) M
 (c) $M - 5$ (d) $5M - 4$
93. The heights of 50 students are tabulated as below :

Class interval (in cm)	Frequency
145 - 146	1
147 - 148	2
149 - 150	4
151 - 152	5
153 - 154	8

- 155 - 156
 157 - 158
 159 - 160

Which one of the following is correct about the distribution ?

- (a) It is positively skewed
 (b) It is negatively skewed
 (c) It is symmetric
 (d) It is extremely asymmetric
94. When rectangles are drawn with the areas proportional to the frequencies of the respective class intervals, what is the diagram called ?
 (a) Ogive (b) Frequency polygon
 (c) Pie diagram (d) Histogram
95. The cumulative frequency (c.f.) distribution of a variate X is given as follows :
- | | | | | | |
|------|---|---|----|-----|----|
| X | 1 | 2 | 3 | 4 | 5 |
| c.f. | 2 | 7 | 13 | k | 31 |
- What can be the frequency ($f \neq 0$) of the variate $x = 4$?
 (a) $13 < f < 31$ (b) $13 \leq f \leq 31$
 (c) $0 < f < 18$ (d) $0 < f \leq 18$
96. Which one of the following is correct ?
 (a) $\{\phi\} \subset \{\{\phi\}, \{\{\phi\}\}\}$ (b) $\{\phi\} \in \{\{\phi\}, \{\{\phi\}\}\}$
 (c) $\phi \in \{\{\phi\}, \{\{\phi\}\}\}$ (d) $\phi = \{\{\phi\}, \{\{\phi\}\}\}$

Directions :

The following four (4) items consist 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
97. **Assertion (A) :**
 When eight drops of water combine to form a single drop, the surface area of all the eight drops is greater than the surface area of big drop.
Reason (R) :
 Square of volume of a spherical body is directly proportional to cube of its surface area.
98. **Assertion (A) :**
 The mean of first seven prime numbers is greater than their median.
Reason (R) :
 Mean is always greater than median.
99. **Assertion (A) :**
 If $\tan \theta + \cot \theta = 2$, then $\tan^n \theta + \cot^n \theta = 2$ for all $n \in \mathbb{N}$.
Reason (R) :
 $\tan \theta + \cot \theta = \tan^n \theta + \cot^n \theta$ for all $n \in \mathbb{N}$.
100. **Assertion (A) :**
 The equations $2x - 3y = 5$ and $6y - 4x = 11$ cannot be solved graphically.
Reason (R) :
 The equations given above represent parallel lines.