

General English

ORDERING OF SENTENCES

Directions (For the 15 items which follow) : In the following 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.

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.

1. S_1 : Did anything happen ?

S_6 : He did not download or tamper with any of the code to which he gained access.

P : But the intruder did little more than peek and poke around.

Q : Not much, according to Microsoft.

R : He may have been some of its "Source code" the secret recipe for its software.

S : Yes, somebody invaded the firm's corporate network.

Which one of the following is the correct sequence ?

(a) R P Q S

(b) Q S R P

(c) R S Q P

(d) Q P R S

2. S_1 : Another significant change in the past five years have been the global resurgence of ethnic and religious aspirations.

S_6 : This phenomenon is evident not only in Africa and Asia but also in Europe, notably in Italy and Spain.

P : No less than 15 new States have emerged in that region since 1990.

Q : This manifests itself in many different ways.

R : Another manifestation is the growth of ethnicity or regionalism as catalyst for new political parties.

S : One is the 'new' nationalism that is thriving in the wake of the break up of the Soviet Empire.

Which one of the following is the correct sequence ?

(a) Q S P R

(b) P R Q S

(c) P S Q R

(d) Q R P S

3. S_1 : Eighteen years ago, Germany became whole and free again after forty years of cruel partition.

S_6 : On October 3, 1990, reunification was ceremoniously enacted.

P : But on November 9, 1989, the Berlin Wall was miraculously breached.

Q : Within ten months after the Wall came down, Germany had regained its national unity.

R : Not many contemporaries had expected this to happen, or to happen within the span of their lifetime.

S : The Cold War was suddenly over, the Iron Curtain collapsed, communism melted away.

Which one of the following is the correct sequence ?

(a) P R S Q

(b) R P Q S

(c) R P S Q

(d) P R Q S

4. S_1 : There are a number of bad habits which poor readers adopt.

S_6 : Young children and very poor readers often point with a finger at each word in turn.

P : Of course, there must be vigorous mental activity.

Q : But extra body movements, such as pointing with the fingers or moving the lips, do not help reading.

R : In efficient reading, the muscles of the eye should make the only external movement.

S : Most of these involve using extra body movement in the reading process.

Which one of the following is the correct sequence ?

(a) S R P Q

(b) P Q S R

(c) P R S Q

(d) S Q P R

5. S_1 : Materially advertisements do us no good.

S_6 : They have but one requirement that their intrusion should be conspicuous.

P : The advertisements tread closely on their heels and destroy its effect.

Q : Spiritually they are one of the worst avoidable evils.

R : Our buildings are covered with prints and pictures that distract and wear us.

S : Architects might give their designs dignity or the beauty of pattern.

Which one of the following is the correct sequence ?

(a) R Q P S

(b) Q R P S

(c) R Q S P

(d) Q R S P

6. S_1 : Both Rattan and his son Moti were idlers and did not like to do any work.

S_6 : In fact, they prided themselves on their inactivity and idleness.

P : The result was that their idleness increased all the more.

Q : His wife had introduced order and industry in the house.

R : Rattan's wife had died long ago, Moti had married in the preceding year.

S : She would work herself to death and earn the daily feed for both of them.

Which one of the following is the correct sequence ?

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

7. S₁ : A hundred metres further along the trail Mahesh and Rohini stopped short.

S₆ : But now mother bear-perhaps the same grizzly bear could be just over the ridge obscured by the bushes.

P : They had shouted and waved and watched through binoculars as the mother bear reared up and roared at them.

Q : Two bear cubs were playing in the creek gully about 20 metres to their right.

R : They had enjoyed the roaring of the mother bear as a distance of a kilometre and a half separated them.

S : The day before, they had seen a mother bear and two cubs.

Which one of the following is the correct sequence ?

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

8. S₁ : In an ordinary power station we burn fuel to get heat.

S₆ : However, instead of getting heat by burning fuel, we get it from the nuclear reactor.

P : In a nuclear power station we burn water into steam and then use the steam in the same way.

Q : It is from the generator that we get electricity.

R : The steam is then made to turn a turbine and through the turbine a generator.

S : This heat turns water into steam.

Which one of the following is the correct sequence ?

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

9. S₁ : One morning, a few days before Rahman, the Cabuliwallah, was due to return to his country, Tagore was working in his study.

S₆ : They had quarrelled, and Rahman had struck the man with his knife.

P : There were blood stains on his cloth, and one of the policemen carried a knife stained with blood.

Q : Suddenly he heard shouting in the street, and he saw Rahman being led away between two policemen, followed by a crowd of curious boys.

R : He learned that a certain neighbour had owed the Cabuliwallah some money, but had denied it.

S : He hurried out and stopped them to inquire what it all meant.

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

10. S₁ : An experiment was conducted in England to study what happens to the bodies and minds of people travelling at high speeds.

S₆ : Psychological tests showed that their ability to make decisions decreased quickly.

P : Then they were flown to America.

Q : Travelling also had an effect on the minds of these people.

R : They were first kept under observation in London.

S : It was found that as they travelled from one time zone to another, their blood pressure moved away from the normal.

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

11. S₁ : All the fossil fuel that we use today came from green plants.

S₆ : The income that Dr. Calvin is talking about is the sun's energy which living green plants capture and store up every day.

P : "And now we are burning it all up in just 100 or 200 years!" says Dr. Calvin.

Q : We have nearly used up all our savings.

R : It took hundreds of millions of years for those plants to change into coal, oil, and gas.

S : "It is time for us now to begin living on our income", says Calvin.

Which one of the following is the correct sequence ?

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

12. S₁ : The 'touch-me-not' plant folds up its leaves when touched.

S₆ : The folding up of the leaves is controlled by the pulvinus.

P : How is the plant able to do this?

Q : At the lower end of each leaf is a tiny swelling, called the pulvinus.

R : The pulvinus acts as the 'brain' or control centre of the leaf.

S : It is only in recent years that a possible answer has been found.

Which one of the following is the correct sequence ?

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

13. S₁ : A lower division clerk who has been working in CPWD for the past 15 years, won Rs.1 crore in the recently launched programme 'Kaun Banega Crorepati'.

S₆ : Because the publicity that he received was really disturbing him.

P : His fellow clerks in the department approached him with proposals to launch some joint projects.

Q : But he shied away from both his friends and relatives.

R : His relatives advised him to leave service and start his own business.

S : He listened to all patiently.

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

14. S₁ : What is freedom ?

S₆ : Some people feel that we actually suffer from what may be called choice fatigue.

P : There is so much choice that we find it difficult to choose.

Q : Fortunately, we are now living in a world full of choice.

R : Without the possibility of choice and the exercise of choice, we are not human beings but only inanimate objects.

S : Freedom is the right to choose.

Which one of the following is the correct sequence ?

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

15. S₁ : I did not know Nehru at all intimately.

S₆ : It is more correct to use the word captivation than impression.

P : But his personality made an immediate impression at my very first meeting with him.

Q : Nor was the effect he made just an impression.

R : This impression did not change over the years.

S : In fact, I had not even met him many times.

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

Directions (For the next 10 items) : In each of the following items, a related pair of words is followed by four pairs of words. Select the pair that best expresses a relationship similar to that expressed in the original pair.

16. Infertile : Desert

- (a) Diligent : Damp (b) Verdant : Jungle
(c) Tree : Cut (d) Skin : Wrinkle

17. Squander : Money

- (a) Foresee : Predict (b) Achieve : Victory
(c) Dally : Time (d) Trespass : Land

18. Altruism : Philanthropist

- (a) Publication : Writer (b) Soldier : War
(c) Self-denial : Puritan (d) Artist : Sculptor

19. Skate : Rink

- (a) Build : Column (b) Capital : Punishment
(c) Feathers : Bird (d) Play : Stadium

20. Sympathy : Merciless

- (a) Pathetic : Pity (b) Reticence : Frank
(c) Predictability : Routine (d) Noise : Ear

21. Society : Human

- (a) Spectators : Game (b) Jungle : Animal
(c) Kinship : Family (d) Rivals : Team

22. Ship : Disembark

- (a) Discharge : Board (b) Fail : Arrest
(c) Train : Board (d) Horse : Dismount

23. Exercise : Strength

- (a) Games : Contest (b) Defeat : Gain
(c) Business : Resource (d) Practice : Skill

24. Education : Illiterate

- (a) Rude : Well-mannered (b) Experience : Naive
(c) Money : Miserly (d) Expel : Admit

25. Light : Opaque

- (a) Air : Hermetic (b) Document : Author
(c) Sand : Desert (d) Wood : Tree

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 rearrange 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

- P : the effect
Q : is very bad
R : on children
S : of cinema

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.

26. Climate

P : cultures and political structures

R : in that it affects the entire

R : change is a truly unifying phenomenon

S : world irrespective of national borders

Which one of the following is the correct sequence ?

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

27. This may

P : after decades of relative neglect and even reversal

Q : when land reforms were finally put back on

R : go down as the year

S : the nation's policy agenda

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

28. There is, however,

P : to clear the backlog in respect of education and poverty alleviation programmes

Q : a strong perception that reservation

R : unless it is followed by sincere and intensive efforts

S : alone cannot transform the lives of oppressed people

Which one of the following is the correct sequence ?

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

29. More than ever before,

P : good governance and sound public policies for the benefit of its people

Q : to provide leadership and to deliver

R : the continued prosperity of Asia depends

S : on the ability of its politicians and policy makers

Which one of the following is the correct sequence ?

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

30. In the post-genetic

P : of choice for the entire spectrum of research

Q : has acquired the status of the experimental animal or the animal model system

R : particularly in the last two decades or so the mouse

S : engineering era of modern biology

Which one of the following is the correct sequence ?

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

31. It was not

P : conditions with fuel prices climbing to dizzy heights

Q : but resentment arising out of harsh economic

R : which led to the recent protests in Myanmar

S : an inspiration for democracy

Which one of the following is the correct sequence ?

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

32. You have been writing to me often about

P : getting a first prize in sports etc.

Q : but my daughter

R : distinguishing in a fancy dress show, or

S : such achievements make me apprehensive of your educational progress

Which one of the following is the correct sequence ?

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

33. The Secretary announced that

P : to find an answer to these questions

Q : in an attempt

R : a national workshop on technical training had been organised

S : by the Confederation of Engineering Industry

Which one of the following is the correct sequence ?

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

34. Technology transfer

P : from one country to another

Q : either through a government policy

R : or via private channels of communications

S : implies the transfer of technical knowledge

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

35. Physical training

P : the character of

Q : who are going to be responsible citizens

R : can shape well

S : young boys and girls

Which one of the following is the correct sequence ?

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

36. His favourite subject

P : the secrets of life and of nature

Q : because Science reveals

R : happens to be Science

S : which men did not know in the past

Which one of the following is the correct sequence ?

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

37. From my plane flying over Namibia

P : stretching 320 kilometres away

Q : a shore of pink and silver sand

R : I looked down at a haunting sight

S : edged by a line of smoking surf

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

38. I was

P : to see a mongoose

Q : just in time

R : with an egg in its mouth

S : scurrying across the grass

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

39. How strange that a refugee

P : should fall in love

Q : when he had got to America

R : with a girl less than half his age

S : who had by the skin of his teeth escaped death in Germany

Which one of the following is the correct sequence ?

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

40. I think it should be necessary for eggs

P : by the poulterer

Q : as soon as they are laid

R : to be stamped with the date

S : by the hen

Which one of the following is the correct sequence ?

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

41. Reuter reports that soldiers

P : fought each other in the streets of the capital today

Q : crack down on demonstrators

R : of armies loyal to rival political factions

S : following the week-end military

Which one of the following is the correct sequence ?

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

42. The old lady

P : wanted to sell her precious table

Q : having the capacity to pay a huge amount as its price

R : to someone

S : with gold-coated legs and glossy surface

Which one of the following is the correct sequence ?

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

SYNONYMS

Directions (For the 17 items which follow) : Each of the following 17 items consists of a word in capital letters followed by four words or groups of words. Select the word or group of words that is most similar in meaning to the word in capital letters.

43. SLOTHFUL

- (a) Fraught with risk
(c) Revengeful

- (b) Lazy
(d) Lenient

44. PREPOSTEROUS

- (a) Predefined
(c) Absurd

- (b) Obvious
(d) Arduous

45. BREATHTAKING

- (a) Tiring
(c) Spectacular

- (b) Costly
(d) Trick

46. INSIDIOUS

- (a) Substantial
(c) Instantaneous

- (b) Unstable
(d) Cunning

47. COMMISERATION

- (a) Sympathy
(c) Slip of tongue

- (b) Simplification
(d) Arrogance

48. CONGENITAL

- (a) Compulsory
(b) Dating from birth
(c) Official
(d) Pertaining to commerce

49. REPRISAL

- (a) Surprise
(c) Revision

- (b) Award
(d) Retaliation

50. CELERITY

- (a) Grace
(c) Slipperiness

- (b) Fame
(d) Speed

51. QUAGMIRE
 (a) Rugged cliff (b) Lacking in morals
 (c) Quizzical (d) Whirlpool
52. FRUGAL
 (a) Quiet (b) Economical
 (c) Shy (d) Generous
53. BANAL
 (a) Hostile (b) Commonplace
 (c) Forbidden (d) Genial
54. RETICENCE
 (a) Modesty
 (b) Caution
 (c) Cognizance
 (d) Tendency to keep silent
55. PREMONITION
 (a) Sadness (b) Strength
 (c) Warning (d) Advice
56. EFFRONTERY
 (a) Affirmation (b) Commentary
 (c) Rudeness (d) Compliance
57. PHLEGMATIC
 (a) Thin (b) Even-tempered
 (c) Worldly (d) Huge
58. SEMANTIC
 (a) Mild-mannered
 (b) Pertaining to financial matters
 (c) Pertaining to meaning of words
 (d) Tenable
59. PEDAGOGICAL
 (a) Related to evolutionary process
 (b) Pertaining to teaching methods
 (c) Pertaining to dictatorship
 (d) Pertaining to social customs

COMPREHENSION

Directions (For the 30 items which follow) : In this Section, you have seven 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 of life, be it pragmatic or otherwise, a basic fact that confronts us squarely and unmistakable 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

As civilization proceeds in the direction of technology, it passes the points of supplying all the basic essentials of life, food, shelter, cloth, and warmth. Then we are faced with a choice between using technology to provide and fulfil needs which have hitherto been regarded as unnecessary or, on the other hand, using technology to reduce the number of hours of work which a man must do in order to earn a given standard of living. In other words, we either raise our standard of living above that necessary for comfort and happiness or we leave it at this level and work shorter hours. I shall take it as axiomatic that mankind has, by that time, chosen the latter alternative. Men will be working shorter and shorter hours in their paid employment.

60. "Then we are faced with a choice ..." what does 'then' refer to ?
 (a) When automation takes over many aspects of human life
 (b) The present state of civilization
 (c) The past stage of civilization
 (d) After having provided the basic essentials of life
61. What does the passage suggest about the use of technology ?
 (a) It creates new and essential needs for mankind
 (b) It is opposed to the basic essentials of life
 (c) It is complementary to a raised standard of living
 (d) It is responsible for man's love of comfort and happiness
62. What does increased use of technology imply ?
 (a) An advanced stage in human civilization
 (b) A backward step in human culture
 (c) Unnecessary comfort and happiness for mankind
 (d) Man's zest for more and more work
63. What does the author suggest ?
 (a) Man will gradually rise above his present stage in civilization
 (b) Man will gradually settle down to the same stage with fewer hours of work
 (c) Man will gradually raise his standard of living by working longer hours
 (d) Man will gradually earn a given standard of living with the help of technology

Passage II

It is said that ideas are explosive and dangerous. To allow them unfettered freedom is, in fact, to invite disorder. But, to this position, there are at least two final answers. It is impossible to draw a line round dangerous ideas, and any attempt at their definition involves monstrous folly. If views, moreover, which imply disorder are able to disturb the foundations of the state, there is something supremely wrong with the governance of the state. For disorder is not a habit of mankind. We cling so eagerly to our accustomed ways that, as even Burke insisted, popular violence is always the outcome of a deep popular sense of wrong.

64. What is the central point that the passage emphasizes ?
- It is unnecessary to define dangerous ideas
 - Dangerous ideas are born out of the enjoyment of freedom
 - A well-governed state is unaffected by dangerous ideas
 - Dangerous ideas originate from man's preoccupation with politics
65. From a close study of the passage, which one of the following statements emerges most clearly ?
- The author is against the exercise of political freedom
 - He is indifferent to dangerous and explosive ideas
 - He welcomes violence as a method to change governments
 - He warns that violence is the outcome of popular dissatisfaction with the government
66. The author says, "We cling eagerly to our accustomed ways". Which one of the following statements may be considered as the assumption of the author ?
- We are afraid of social changes
 - Mankind is averse to any disorder
 - We have developed inertia that makes us incapable of social action
 - There is an all-round lack of initiative in the society
67. Which of the following statements may most correctly bring out the significance of the opinion of Burke quoted in the passage ?
- Burke advocated violence against injustice
 - Burke's opinion coincides with the author's opinion on explosive and dangerous ideas
 - Burke hated any popular uprising
 - Burke had no belief in political liberty

Passage III

The psychological causes of unhappiness, it is clear, are many and various. But all have something in common. The typical unhappy man is one who, having been deprived in youth of some normal satisfaction, some come to value this one kind of satisfaction more than any other, and has therefore given to his life a one-sided direction, together with a quite undue emphasis upon the achievement as opposed to the activities connected with it. There is, however, a further development which is very common in the present day. A man may feel so completely thwarted that he seeks no form of satisfaction, but only distraction and oblivion. He then becomes a devotee of 'pleasure'. This is to say, he seeks to make life bearable by becoming less alive. Drunkenness, for example, is temporary suicide — the happiness that it brings is merely negative, a momentary cessation of unhappiness.

68. Who is a typical unhappy man ?
- One who has been deprived of normal satisfaction in youth
 - One who finds life unbearable and attempts suicide
 - One who does not mind momentary unhappiness
 - One who seeks every form of satisfaction
69. "One sided direction" refers to the pursuit of which one of the following ?
- Drinking and forgetfulness
 - The satisfaction one had been deprived of
 - Activities leading to happiness
 - Every form of psychological satisfaction
70. Which one of the following is the correct statement ?
- Drinking helps the unhappy only to
- forget their dissatisfaction
 - get sublime happiness
 - get the motivational needs fulfilled
 - concentrate harder
71. What does "becoming less alive" imply?
- Neglect of health
 - Decline in moral values
 - Living in a make believe world
 - Leading a sedentary way of living

Passage IV

What is to be the limit of forgiveness? It would probably have been allowed by many of the ancients that an unforgiving temper was not to be commended. They would have said, we are not to exact a penalty for every nice offence, we are to overlook some things, we are to be blind sometimes. But they would have said at the same time, we must be careful to keep our self-respect, and to be on a level with the world. On the whole, they would have said, it is the part of a man fully to requite to his friends their benefits and to his enemies their injuries.

72. Which one of the following is the correct statement ?
- According to the writer we must
- ignore an offence if it is nice
 - forgive people if they bring us nice presents
 - forgive pretty offenders
 - not punish each and every offence
73. Which one of the following is the correct statement ?
- We must
- be blind if we want to forgive others
 - be blind to the faults of our friends
 - be indifferent to what others do
 - overlook certain things
74. Which one of the following is the correct statement ?
- In ancient times people were
- ordered to lose their tempers
 - permitted to lose their tempers and not forgive their enemies
 - told that it was not good to have an unforgiving temper
 - advised to forgive each and every offence committed by both friends and foes
75. What is the underlying tone of the passage ?
- We must be forgiving in general
 - We must forgive our friends
 - There is no limit whatsoever to our duty to forgive
 - We must always punish the wrong doer

Passage V

Once upon a time I went for a week's holiday in the Continent with an Indian friend. We both enjoyed ourselves and were sorry when the week was over, but on parting our behaviour was absolutely different. He was plunged in despair. He felt that because the holiday was over all happiness was over until the world ended. He could not express his sorrow too much. But in me the Englishman came out strong. I could not see what there was to make a fuss about. It wasn't as if we were parting forever or dying. "Buck up", I said, "do buck up". He refused to buck up, and I left him plunged in gloom.

76. What is the Continent in the context of the passage ?
(a) An island (b) The countryside
(c) Africa (d) Europe
77. What does the author mean by 'buck up' ?
(a) Buckle yourself up (b) Stand up
(c) Cheer up (d) Shut up
78. Why was the Indian friend plunged in despair ?
(a) He was hopeless
(b) He experienced racial discrimination
(c) He would never be so happy again
(d) He had spent lot of money
79. What does 'But in me the Englishman came out strong' imply ?
(a) He was a strong Englishman
(b) He had the typical English character
(c) The Englishman went out of him
(d) He started following Indian traditions
80. What is the author's intention in the passage ?
(a) To contrast the Indian character with the English character
(b) To show that an Indian is sorrowful
(c) To ridicule the Indian traditions
(d) To praise the Englishman

Passage VI

The world is very full of people-appallingly-full, it has never been so full before, and they are all tumbling over each other. Most of these people one doesn't know and some of them one doesn't like. Well, that is one to do? There are two solutions. One of them is the Nazi solution. If you don't like people, kill them, banish them, and segregate them. The other way is much less thrilling, but it is on the whole the way of the democracies, and I prefer it. If you don't like people, put up with them as well as you can. Don't try to love them : you can't, you'll only strain yourself. But try to tolerate them.

81. What does the author mean by 'appallingly' ?
(a) He is making an appeal to the leaders of the masses
(b) In disconcertingly large numbers
(c) Very interesting
(d) Unpredictably
82. Which one of the following is the correct statement?
According to the writer Nazi solution is
(a) the easiest solution (b) the readiest solution
(c) the national solution (d) the Hitlerian solution
83. Which one of the following is the correct statement ?
The author thinks that the other solution is much less thrilling because it is
(a) dull (b) based on tolerance
(c) not based on love (d) lacking in adventure

84. Which one of the following is the correct statement ?

The author prefers the second solution because
(a) he likes it
(b) he is not a Nazi
(c) he is essentially being a democrat
(d) there is no other way

Passage VII

We should preserve Nature to preserve life and beauty. A beautiful landscape, full of green vegetation, will not just attract our attention but will fill us with infinite satisfaction. Unfortunately, because of modernization, much of nature is now yielding to towns, roads and industrial areas. In a few places some Natural reserves are now being carved out to avert the danger of destroying Nature completely. Man will perish without Nature, so modern man should continue this struggle to save plants, which give us oxygen, from extinction. Moreover, Nature is essential to man's health.

85. What does 'Nature' in the passage mean ?
(a) Countryside covered with plants and trees
(b) Physical power that created the world
(c) Inherent things that determine character
(d) Practical study of plants and animals
86. Which one of the following is the correct statement ?
According to the passage,
(a) beauty is only skin-deep
(b) everything is beautiful in its natural state
(c) there is beauty in Nature
(d) Nature is a moral teacher
87. What does the writer suggest ?
(a) We should not modernize, so that Nature can be preserved
(b) While modernizing we should be careful not to destroy Nature completely
(c) All Nature has been destroyed by modern living
(d) Carving out Natural reserves will hamper the growth of industries
88. What does 'struggle' in the passage mean ?
(a) Man's struggle to exist in the world
(b) Man's struggle to save Nature
(c) Man's struggle to catch up with modern trends
(d) Man's struggle to conserve oxygen
89. Why a beautiful landscape 'will fill us with infinite satisfaction' ?
(a) We love beauty
(b) It is full of green vegetation
(c) It will ensure our future existence
(d) It will show our command over Nature

SPOTTING ERRORS

Directions (For the 15 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 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/(a) singed/(b) a very sweet song./(c) No error./(d)

Q. We worked/(a) very hard/(b) throughout the season./(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.

90. Old age and infirmity/(a) had began to/(b) catch up with him./(c) No error./(d)

91. Its colour makes/(a) the moth undistinguished/(b) from the branch it rests on./(c) No error./(d)

92. With only a week/(a) to go for the election/(b) things are really hotting up. /(c) No error./(d)

93. Romanticism of melancholy/(a) in art and literature are the reasons/(b) for insensitivity of those suffering from depression./(c) No error./(d)

94. Taking life as it comes/(a) I am someone who thrives one challenges and believe that my purpose in life /(b) is to give one hundred percent to very opportunity that comes my way./(c) No error./(d)

95. The police were baffled/(a) and Sherlock Holmes was/(b) called in to investigate./(c) No error./(d)

96. The boat came/(a) abreast at us /(b) and signalled us to stop. /(c) No error./(d)

97. The Chairman's comments/(a) on future policy introduced/(b) a jarring note for the proceedings. /(c) No error./(d)

98. The collapse of the business /(a) was a moral blow to the/(b) business tycoon and his family./(c) No error./(d)

99. The taxi /(a) came at 8 o'clock/(b) in the next morning./(c) No error./(d)

100. The main determination/(a) of economic success is/(b) our ability to control inflation./(c) No error./(d)

101. Because of /(a) extenuating circumstances/(b) the court acquitted him from the crime./(c) No error./(d)

102. In consideration for/(a) the bereaved family's feelings/(b) the papers did not print the story./(c) No error./(d)

103. No sooner had/(a) he arrived then/(b) he was asked to leave again./(c) No error./(d)

104. I haven't been/(a) to New York before and/(b) neither my sister./(c) No error./(d)

ANTONYMS

Directions (For the 16 items which follow) : Each of the following 16 items consists of a word in capital letters, followed by four words or groups of words. Select the word or group of words that is furthest in meaning to the word in capital letters.

105. PUERILE
(a) Fresh
(c) Matured thinking

(b) Suspenseful
(d) Easily attainable

106. IGNOMINY
(a) Entrance
(c) Eligibility

(b) Activity
(d) Honour

107. PENURIOUS
(a) Timid
(b) Without any perforation
(c) Affluent
(d) Inescapable

108. SCURRILOUS
(a) Scandalous
(c) Primary

(b) Admiration
(d) Opposition

109. ENNUI
(a) Poverty
(c) Excitement

(b) Shortage
(d) Fearlessness

110. SLAPDASH
(a) Careful
(c) Pervasive

(b) Violent
(d) Scarce

111. CHIMERICAL
(a) Complement
(c) Hypercritical

(b) Feasible
(d) Spurious

112. THWART
(a) Encourage
(c) Agonize

(b) Suffer
(d) Pacify

113. VENERATION
(a) Embezzlement
(c) Disrespect

(b) Awe
(d) Far-Sighted

114. INVECTIVE
(a) Adjective
(b) Polite language
(c) Pertaining to legal matters
(d) Brief

115. COPIOUS
(a) Shortage
(c) Warm

(b) Imitation
(d) Delightful

116. ACERBIC
(a) The accused
(c) Unpleasant

(b) Polite
(d) Improbable

117. ASCETIC
(a) Ardent
(b) Indulging in pleasures
(c) Careless
(d) Patriotic

118. UBIQUITOUS
(a) Honest
(b) Rarely found anywhere
(c) Out of fashion
(d) Scrupulous

119. PARSIMONIOUS
(a) Partisan
(c) Revealing

(b) Permissible
(d) Extravagant

120. EPHEMERAL
(a) Mysterious
(c) Long-lasting

(b) Impolite
(d) Exciting

1. Which one of the following diagrams shows the direction and duration of wind?
 (a) Cartogram (b) Climogram
 (c) Ergograph (d) Star diagram
2. June 21 is the longest day of the year for those living in the Northern hemisphere. What is the shortest day of the year for those living in the Southern hemisphere?
 (a) March 21 (b) September 21
 (c) December 21 (d) June 21
3. Which one of the following countries is not a founder member of OPEC?
 (a) Algeria (b) Kuwait
 (c) Iraq (d) Iran
4. Bar is a unit of which one of the following?
 (a) Force (b) Energy
 (c) Pressure (d) Frequency
5. With which one of the following countries, India shares maximum length of the border?
 (a) Bangladesh (b) Pakistan
 (c) China (d) Nepal
6. Consider the following statements :
 1. Doris Lessing becomes the oldest person to win the Nobel Prize in Literature (2007).
 2. She is a school dropout.
 3. Jane Moor is the pseudonym of Doris Lessing.
 Which of the statements given above is/are correct?
 (a) 1 only (b) 1 and 2 only
 (c) 2 and 3 only (d) 1, 2 and 3
7. Liberhan Commission has been appointed to deal with which one of the following?
 (a) Anti-Sikh Riots, 1984
 (b) Demolition of Babri Masjid
 (c) Godhra Incident
 (d) Mumbai Communal Riots
8. Which one of the following industries is not recommended by Investment Commission as National Thrust Area?
 (a) Tourism
 (b) Information Technology
 (c) Agro-processing
 (d) Textiles
9. The Kyoto Protocol commits the developed nations, including economics in transition to reduce emissions of greenhouse gases by which one of the following during the years 2008-2012?
 (a) An average of 4% below 1990 levels
 (b) An average of 5% below 2000 levels
 (c) An average of 4.2% below 2000 levels
 (d) An average of 5.2% below 1990 levels
10. According to the provisions of the Fiscal Responsibility and Budget Management (FRBM). Act, 2003 and FRBM Rules, 2004, the Government is under obligation to present three statements before the Parliament along with the Annual Budget. Which one of the following is not one of them?
 (a) Macroeconomic Framework Statement
 (b) Fiscal Policy Strategy Statement
 (c) Medium-term Fiscal Policy Statement
 (d) Statement showing Short term Fiscal Policy
11. What is an ECO-MARK?
 (a) A scheme for labelling pollution-free industrial unit
 (b) A scheme for labelling environment friendly consumer product
 (c) A cost-effective production technique
 (d) An international certification recognizing eco-friendly building
12. Which among the following is the oldest board under the Department of Commerce?
 (a) The Rubber Board (b) The Tea Board
 (c) The Coffee Board (d) The Tobacco Board
13. Which one of the following pairs is not correctly matched?
 (a) Fiat : Italy
 (b) Nissan : Japan
 (c) Toyota : Japan
 (d) Hyundai : Germany
14. Consider the following statements :
 1. At the time of independence, the Government of India followed the calendar based on Saka era.
 2. The National Calendar commenced on Chaitra 1 Saka, 1879 corresponding to March 22, 1957 AD.
 Which of the statements given above is/are correct?
 (a) 1 only (b) 2 only
 (c) Both 1 only 2 (d) Neither 1 nor 2
15. The Sun Temple of Konark was built by Narasimhadeva I. To which dynasty did he belong to?
 (a) Somavamsi dynasty
 (b) Imperial Ganga dynasty
 (c) Suryavamsi Gajapati dynasty
 (d) Bhoi dynasty
16. Which of the following is a rich source of energy?
 (a) Protein (b) Lipid
 (c) Carbohydrate (d) Vitamin
17. In human body, what is the number of cervical vertebrae?
 (a) 5 (b) 7
 (c) 8 (d) 12
18. The terms Lubb and Dubb relate to which one of the following?
 (a) Heart (b) Eyes
 (c) Teeth (d) Lungs
19. In normal adult human, what is the rate of heartbeat per minute?
 (a) 72-80 (b) 70-75
 (c) 80-97 (d) 82-87
20. Which one of the following is considered as the easily digestible source of protein?
 (a) Egg albumin (b) Soybean
 (c) Fish flesh (d) Red meat
21. Which of the following plants is not capable of manufacturing own food?
 (a) Algae (b) Mushroom
 (c) Carrot (d) Cabbage
22. Which one of the following peaks is the highest?
 (a) Nanda Devi
 (b) Kanchenjunga
 (c) Godwin Austen
 (d) Nanga Parbat
23. Which one of the following is the correct order in which the following cities are located from West to East?
 (a) Alwar-Gorakhpur-Ranchi-Bhagalpur
 (b) Bhagalpur-Ranchi-Alwar-Gorakhpur
 (c) Ranchi-Alwar-Bhagalpur-Gorakhpur
 (d) Gorakhpur-Bhagalpur-Ranchi-Alwar

24. Which one of the following pairs is correctly matched?

	County	Currency
(a)	Myanmar	Baht
(b)	Thailand	Kyat
(c)	Cambodia	Riel
(d)	Vietnam	Rupiah

25. Which waterway separates India from Sri Lanka?

- (a) Eight Degree Channel
 (b) Palk Strait
 (c) Ten Degree Channel
 (d) Andaman Sea

26. Which one of the following countries is not a UN member country?

- (a) Greece
 (b) Taiwan
 (c) Portugal
 (d) Australia

27. Consider the following statements :

The South-West Monsoon originates in India due to

- low pressure in the Punjab plain
- high pressure in areas South of India
- equatorial low being filled up by descending air current
- the Himalayas

Which of the statements given above are correct?

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

28. Which one of the following iron and steel plants was established with the British collaboration?

- (a) Bhilai
 (b) Rourkela
 (c) Bokaro
 (d) Durgapur

29. Which of the following divides India into Northern and Southern parts?

- (a) Equator
 (b) Tropic of Cancer
 (c) Tropic of Capricorn
 (d) Arctic Circle

30. Which one of the following is the oldest oil refinery in India?

- (a) Haldia
 (b) Koyali
 (c) Digboi
 (d) Mathura

31. Consider the following events :

- Jallianwala Bagh Massacre
- Second Civil Disobedience Movement
- Congress Split at Surat
- Boycott of Simon Commission

Which one of the following is the correct chronological order of the above events?

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

32. The characteristic odour of Garlic is due to which one of the following?

- (a) Chlorine-containing compounds
 (b) Fluorine-containing compounds
 (c) Nitrogen-containing compounds
 (d) Sulphur-containing compounds

33. What does airbag, used for safety of car driver, contain?

- (a) Sodium bicarbonate
 (b) Sodium azide
 (c) Sodium nitrite
 (d) Sodium peroxide

34. Which colour of heat radiation represents the highest temperature?

- (a) Blood red
 (b) Dark cherry
 (c) Salmon
 (d) White

35. Which one of the following is correct?

A concrete wall generally,

- (a) only reflects sound
 (b) only absorbs sound
 (c) only transmits sound
 (d) absorbs and transmits sound

36. What would be the best choice for window material to keep the outside heat away?

- (a) Single-pane glass
 (b) Double-pane glass without a gap in between
 (c) Double-pane glass with water filled in between
 (d) Double-pane glass with air in between

37. What is the pH value of pure water?

- (a) 1
 (b) 6
 (c) 7
 (d) 10

38. A ray of light is incident on a plane mirror at an angle 30° with the normal at the point of incidence. The ray will be deviated from its incidence direction by what angle ?

- (a) 30°
 (b) 60°
 (c) 120°
 (d) None of these

39. Who gave the first evidence of the Big-Bang theory?

- (a) Edwin Hubble
 (b) Albert Einstein
 (c) S. Chandrasekhar
 (d) Stephen Hawking

40. The density of water varies with temperature which helps the aquatic animals to live in cold water. At what temperature is the density of water maximum?

- (a) 1°C
 (b) 2°C
 (c) 3°C
 (d) 4°C

41. Why is it difficult to see through fog?

- (a) Rays of light suffer total internal reflection from the fog droplets
 (b) Rays of light are scattered by the fog droplets
 (c) Fog droplets absorb light
 (d) The refractive index of fog is extremely high

Directions : Each of the next four (4) items consists 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 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

42. Assertion (A) : Steam is more harmful for human body than the boiling water in case of burn.

Reason (R) : Boiling water contains more heat than steam.

43. Assertion (A) : Red blood cells burst when placed in water.

Reason (R) : Due to osmosis, water enters into red blood cells.

44. Assertion (A) : The percentage of the earth's surface covered by India is 2.4%.

Reason (R) : On the Mercator's map of the world, India is shown much smaller than Canada.

45. Assertion (A) : An award made by a Lok Adalat is deemed to be a decree of a Civil Court.

Reason (R) : Award of Lok Adalat is final and binding on all parties, and no appeal lies against thereto before any court.

46. Which one of the following is not identified by Central Pollution Control Board as heavily polluting industry?

- (a) Pulp and Paper (b) Sugar
(c) Tea (d) Fertilizer

47. Consider the following statements :

1. The Golden Quadrilateral connects the four major cities of Delhi, Mumbai, Bengaluru and Kolkata.
2. The North-South Corridor will pass through Hyderabad.

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

48. Among the following which Mughal Emperor introduced the policy of Sulh-i-kul?

- (a) Babar (b) Humayun
(c) Akbar (d) Shahjahan

49. Who built the *Ibadatkhana* at Fatehpur Sikri?

- (a) Akbar (b) Jahangir
(c) Shahjahan (d) Aurangzeb

50. Malik Kafur was whose General?

- (a) Balban
(b) Alauddin Khalji
(c) Muhammed bin Tughluq
(d) Firoz Shah Tughluq

51. Among the following, who is given the credit of carrying Jainism in South Indian?

- (a) Sudharmana (b) Indrabhuti
(c) Bhadrabahu (d) Sthulabhadra

52. Which one of the following is not a feature of North Indian temple architecture?

- (a) Sikhara (b) Garbha Griha
(c) Gopura (d) Pradakshina

53. Which one of the following was the capital of Hoysalas?

- (a) Malkhed (b) Dwarasamudra
(c) Somnathpur (d) Badami

54. What is the correct chronological order in which the following kings ruled in India?

1. Bimbisara
2. Mahapadma Nanda
3. Kanishka I
4. Skandagupta

Select the correct answer using the code given below :

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

55. Who of the following revolutionaries set up the United India House in the USA?

- (a) Ramnath Puri and Vir Savarkar
(b) Taraknath Das and G. D. Kumar
(c) Lala Hardayal and Bhagat Singh
(d) Harnam Singh and Bhagwan Singh

56. With reference to Indian freedom struggles, who among the following was labelled as 'Moderate' leader in the Congress?

- (a) Gopal Krishna Gokhale
(b) Bipin Chandra Pal
(c) Lala Lajpat Rai
(d) Aurobindo Ghose

57. During Indian freedom struggle, which one of the following happened earliest?

- (a) Simon Commission
(b) Gaya Session of Congress
(c) Tripuri Session of Congress
(d) Gandhi-Irwin Pact

58. The Rani Jhansi Regiment, the Women's Regiment of the Azad Hind Fauj, was under whose command?

- (a) Usha Mehta (b) Anne Mascarene
(c) Aruna Asaf Ali (d) Lakshmi Sehgal

59. What was the reason or ground for the British Empire to annex Sambalpur in 1850?

- (a) Lack of proper governance
(b) Death of its ruler without any heir
(c) Subsidiary Alliance
(d) Its involvement in a conspiracy against British Rule

60. At which of its Session, did the Congress officially accept, the 'socialistic pattern of society'?

- (a) Nagpur Session of 1959
(b) Avadi Session of 1955
(c) Bombay Session of 1953
(d) Calcutta Session of 1957

61. Who of the following is the Chairman of the 13th Finance Commission?

- (a) Vijay Tendulkar
(b) M. Damodaran
(c) Vijay Kelkar
(d) Y.V. Reddy

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

List-I (Folk Dance)		List-II (State)	
A.	Bhavai	1.	Mizoram
B.	Thabal Chongba	2.	Asom
C.	Cheraw	3.	Manipur
D.	Bhortal Nritya	4.	Rajasthan

Codes :

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

63. Two Greenfield airport projects in India are being implemented on Build Own Operate Transfer (BOOT) basis. One is at Bengaluru. Where is the other one located?

- (a) Hyderabad (b) Chennai
(c) Kolkata (d) Mumbai

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

List-I (Institute of Indian Systems of Medicine)		List-II (Location)	
A.	National Institute of Unani Medicines	1.	Kolkata
B.	National Institute of Homoeopathy	2.	Jaipur
C.	National Institute of Ayurveda	3.	Chennai
D.	National Institute of Siddha	4.	Bengaluru

Codes :

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

65. Consider the following statements :
1. Currently three waterways have been declared as the national waterways of India.
 2. The Sadiya-Dhubri stretch of river Brahmaputra is the longest national waterway.
- 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
66. Consider the following statements :
1. BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) is visualized as a bridging link between ASEAN and SAARC.
 2. It was formerly known as the Bangkok Agreement.
- 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
67. Who is the Chairman of second Administrative Reforms Commission ?
- (a) Bimal Jalan (b) Dr. Karan Singh
(c) M. Veerappa Moily (d) Ahmed Patel
68. Which one of the following is not a member of ASEAN ?
- (a) Cambodia (b) Malaysia
(c) Singapore (d) South Korea
69. Dr. C. Rangarajan Committee is associated with which one of the following ?
- (a) Pricing and Taxation of Petroleum Products
(b) Estimation of National Income
(c) TAX Structure
(d) Estimation of Money Supply
70. Where is the International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) located ?
- (a) Bengaluru (b) Hyderabad
(c) Coimbatore (d) Machilipatnam
71. What is 'Super 301' ?
- (a) A name of modern computer
(b) A new variety of wheat
(c) American Trade Law
(d) A new vaccine for AIDS
72. Who is the Managing Director of IMF ?
- (a) Rodrigo Rato
(b) Dominique Strauss-Kahn
(c) Daniel Vasella
(d) Alberto Foutana
73. Which one of the following sites of the Indus Valley Civilization had an ancient dockyard ?
- (a) Kalibangan (b) Lothal
(c) Rangpur (d) Harappa
74. How many hours of daylight does the equator experience on September equinox ?
- (a) 8 hours (b) 9 hours
(c) 10 hours (d) 12 hours
75. What is the period covered by the recommendations of the 12th Finance Commission ?
- (a) Year 2004-2009 (b) Year 2005-2010
(c) Year 2006-2011 (d) Year 2007-2012
76. Which of the following nutrients is not a structural component of the plant ?
- (a) Nitrogen (b) Calcium
(c) Phosphorus (d) Potassium
77. Where is the Central Rice Research Institute located ?
- (a) Bengaluru (b) Kanpur
(c) Coimbatore (d) Cuttack

78. Dim-vision in the evening and night results from the deficiency of which one of the following ?
- (a) Vitamin A (b) Vitamin E
(c) Vitamin B₁₂ (d) Vitamin C
79. Consider the following statements :
1. Noble Peace Prize is presented annually in Oslo by the king of Norway.
 2. The Nobel laureate receives three things—a diploma, a medal and a document confirming the prize amount.
- 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
80. Consider the following statements :
1. India has 10 Pressurized Heavy Water Reactors (PHWRs).
 2. The spent fuel from the PHWRs is reprocessed into plutonium.
 3. All imported reactors are under the safeguards of the International Atomic Energy Agency (IAEA).
- Which of the statements given above is/are correct ?
- (a) 1 only (b) 2 only
(c) 2 and 3 only (d) 1, 2 and 3
81. Who among the following won the Wimbledon Women's Tennis Championship, 2007 ?
- (a) Amelie Mauresmo
(b) Venus Williams
(c) Marion Bartoli
(d) Svetlana Kuznetsova
82. Adoor Gopalakrishnan, the recipient of Padma Vibhushan Award, 2006 is associated with which one of the following fields ?
- (a) Civil Services
(b) Art
(c) Literature and Education
(d) Social Work
83. Consider the following statements :
1. Dinosaurs roamed the earth during the Mesozoic era.
 2. All Dinosaur and other reptiles such as Ichthyosaurus and Pterosaur became extinct due to unknown reasons in Triassic period.
- 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
84. Match List-I with List-II and select the correct answer using the codes given below the Lists :

List-I (Celestial Body)		List-II (Roman God)	
A.	Mercury	1.	God of the Underworld and Death
B.	Pluto	2.	God of Commerce, Eloquence and Skill
C.	Mars	3.	God of the Sea
D.	Neptune	4.	God of War

Codes :

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

85. The persons working in textile factories such as carpet weavers are exposed to which of the following occupational diseases ?
 (a) Asbestosis
 (b) Asthma and Tuberculosis
 (c) Silicosis
 (d) Siderosis
86. What is mixed farming ?
 (a) Growing of several crops in a planned way
 (b) Growing Rabi as well as Kharif crops
 (c) Growing several crops and also rearing animals
 (d) Growing of fruits as well as vegetables
87. Who among the following was the first European to encounter the Cacao plant, from which chocolate is made ?
 (a) Christopher Columbus
 (b) John Cabot
 (c) Hernando Cortez
 (d) De Leon
88. 'Misch metal' is widely used in the manufacture of which of the following ?
 (a) Material of car brake
 (b) Smoke detectors
 (c) Cigarette lighters
 (d) Emergency lights
89. The 2010 Commonwealth Games will be hosted by New Delhi. Two new disciplines will be added to the games. What are they ?
 (a) Billiards and Kabaddi
 (b) Tennis and Archery
 (c) Basketball and Volleyball
 (d) Tennis and Billiards
90. What is Jeweller's rouge ?
 (a) Ferric oxide
 (b) Ferrous oxide
 (c) Ferrous carbonate
 (d) Ferric carbonate
91. Who among the following Indian freedom fighters made an attempt to estimate the per capita income of India ?
 (a) Gopal Krishna Gokhale
 (b) Feroze Shah Mehta
 (c) Surendranath Banerjee
 (d) Dadabhai Naoroji
92. Which of the following vested the secretary of state for India with supreme control over the Government of India ?
 (a) Pitt's India Act, 1784
 (b) Government of India Act, 1858
 (c) Indian Councils Act, 1861
 (d) Minto-Morley Reforms, 1909
93. Amongst the following, who cooperated with Raja Ram Mohan Roy in the implementation of his educational programmes ?
 (a) Dwarkanath Tagore
 (b) David Hare
 (c) Henri Derozio
 (d) William Jones
94. Which Philosophical system was founded by Vallabhacharya ?
 (a) Maharashtra Dharma
 (b) Shuddhadvaita
 (c) Anekantavada
 (d) Visistadvaita
95. In early medieval India, what did the term *Jital* refer to ?
 (a) Weight
 (b) Diet
 (c) Coin
 (d) Game
96. What were the *ahdis* of Akbar's time ?
 (a) Village level money-lenders
 (b) Village guards

- (c) Cashiers working in diwani
 (d) Foot-soldiers in the army
97. With reference to Delhi Sultanate, who was the founder of Sayyid Dynasty ?
 (a) Khizr Khan
 (b) Mubarak Shah
 (c) Muhammad Shah
 (d) Alauddin Alam Shah
98. Which one among the following kinds of organisms resides in the roots of pulse plants to do nitrogen fixation ?
 (a) Bacteria
 (b) Fungi
 (c) Protozoa
 (d) Virus
99. Cloves, used as a spice, are derived from which of the following plant parts ?
 (a) Seeds
 (b) Fruits
 (c) Flower buds
 (d) Young leaves
100. In the human body, Cowper's glands form a part of which one of the following ?
 (a) Digestive system
 (b) Endocrine system
 (c) Reproductive system
 (d) Nervous system
101. Which one of the following glands produces the Growth Hormone (Somatotropin) ?
 (a) Adrenal
 (b) Pancreas
 (c) Pituitary
 (d) Thyroid
102. Which one of the following groups of animals are primates ?
 (a) Giraffes and Zebras
 (b) Kangaroos and Koalas
 (c) Lemurs and Lorises
 (d) Rabbits and Hares
103. Which one of the following is included in the world list of Biosphere Reserves by UNESCO ?
 (a) Kinnaur Region
 (b) Spiti Valley
 (c) Nallamalai Hills
 (d) Sunderbans
104. Consider the following statements :
 1. Cigarette smoking exposes a person to benzene.
 2. Benzene is a known carcinogen.
 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
105. Which of the following gases is released from rice fields in the most prominent quantities ?
 (a) Carbon dioxide
 (b) Methane
 (c) Carbon monoxide
 (d) Sulphur dioxide
106. Consider the following statements :
 1. The Gandhara art of the Peshawar Valley is known for some of the finest sculptures made in dark grey schist.
 2. The Kushanas were the first Indian kings to have portraits of themselves made in their shrines.
 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
107. Match List-I with List-II and select the correct answer using the codes given below the Lists :

	List-I (Name)	List-II (Game)
A.	Dola Banerjee	1. Badminton
B.	Aparna Popat	2. Snooker
C.	Anuja Thakur	3. Chess
D.	Parimarjan Negi	4. Archery

Codes :

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

108. Who among the following was the first Law Minister of India ?

- (a) Jawahar Lal Nehru
(b) Maulana Abul Kalam Azad
(c) Dr. B. R. Ambedkar
(d) T. Krishnamachari

109. Financial distribution between the Union and the State takes place on the basis of the recommendations of which one of the following ?

- (a) The National Development Council
(b) The Inter-State Council
(c) The Planning Commission
(d) The Finance Commission

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

List-I (Schedule in the Constitution of India)		List-II (Subject)	
A.	Tenth Schedule	1.	Languages
B.	Eighth Schedule	2.	Provisions as to disqualification on the grounds of defection
C.	First Schedule	3.	Validation of certain Acts and Regulations
D.	Ninth Schedule	4.	The States

Codes :

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

111. As which one of the following, does carbon occur in its purest form in nature ?

- (a) Carbon black
(b) Graphite
(c) Diamond
(d) Coal

112. In which Part of the Constitution, details of citizenship are mentioned ?

- (a) I (b) II
(c) III (d) IV

113. Consider the following statements :

- Ministry of Parliamentary Affairs constitutes Consultative Committees of Members of both the Houses of Parliament.
- The main purpose of these Committees are to provide a forum for formal discussions between the Government and Members of Parliament on policies and programmes of the Government.

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

114. Consider the following statements :

- The Union Executive consists of the President and the Council of Ministers with the Prime Minister as the head.
- The President may, by writing under his hand addressed to the Vice-President, resign his office.
- Executive power of the Union is vested in the Prime Minister.

Which of the statements given above is/are correct/

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

115. What does the 93rd Constitutional Amendment deal with ?

- (a) Inclusion of Bodo, Dogri, Maithili and Santhali languages in the Eighth Schedule
(b) Inclusion of service tax levied by Union and collected and appropriated by the Union and the states in the Seventh Schedule
(c) Free and compulsory education for all children between the age of 6 and 14 years
(d) No reservation in Panchayats need to be made in favour of Scheduled Castes in Arunachal Pradesh

116. At which one of the following places, East-West Corridor connecting Silchar and Porbandar and North-South Corridor connecting Srinagar and Kanyakumari, intersect each other ?

- (a) Jhansi (b) Agra
(c) Jabalpur (d) Nagpur

117. Which one of the following is not an insect borne disease ?

- (a) Beriberi (b) Kala azar
(c) Malaria (d) Plague

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

List-I (Disease)		List-II (Part of Human Body Affected)	
A.	Conjunctivitis	1.	Eyes
B.	Dermatitis	2.	Joints
C.	Gout	3.	Skin
D.	Meningitis	4.	Spinal Cord

Codes :

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

119. Which of the following parts of blood carry out the function of body defence ?

- (a) Red blood cells
(b) White blood cells
(c) Platelets
(d) Haemoglobins

120. Where is the national institute of nutrition located?

- (a) Bengaluru (b) Hyderabad
(c) Mysuru (d) Pune

1. x varies directly as y and inversely as square of z . When $y = 4$ and $z = 14$, $x = 10$. If $y = 16$ and $z = 7$, what is x ?
 (a) 180 (b) 160
 (c) 154 (d) 140
2. Which of the following numbers is a prime?
 (a) 667 (b) 861
 (c) 481 (d) 331
3. On dividing 4996 by a certain number, the quotient is 62, and the remainder is 36. What is the divisor?
 (a) 80 (b) 85 (c) 90 (d) 95
4. Ram can do a piece of work in 6 days and Shyam can finish the same work in 12 days. How much work will be finished if both work together for 2 days?
 (a) One-fourth of the work
 (b) One-third of the work
 (c) Half of the work
 (d) Whole of the work
5. What is the sum of two numbers whose difference is 45, and the quotient of the greater number by the lesser number is 4?
 (a) 100 (b) 90 (c) 80 (d) 75
6. An amount of Rs x at compound interest at 20% pa for 3 yr becomes y . What is $y : x$?
 (a) 3 : 1 (b) 36 : 25
 (c) 216 : 125 (d) 125 : 216
7. A refrigerator and a camera were sold for Rs 12,000 each. The refrigerator was sold at a loss of 20% of the cost and the camera at a gain of 20% of the cost. The entire transaction results in which one of the following?
 (a) No loss or gain
 (b) Loss of Rs 1,000
 (c) Gain of Rs 1,000
 (d) Loss of Rs 2,000
8. What is the value of $\sqrt{7.84} + \sqrt{0.0784} + \sqrt{0.000784} + \sqrt{0.00000784}$?
 (a) 3.08 (b) 3.108
 (c) 3.1008 (d) 3.1108
9. What is the value of x in $1 + \frac{1}{1 + \left\{ \frac{1}{1 + \left(\frac{1}{1 + \frac{1}{x}} \right)} \right\}} = \frac{11}{7}$?
 (a) 1 (b) 3
 (c) $\frac{1}{2}$ (d) $\frac{7}{11}$
10. Which one of the following is correct?
 (a) $-\frac{7}{10} < -\frac{2}{3} < -\frac{5}{8}$ (b) $-\frac{5}{8} < -\frac{2}{3} < -\frac{7}{10}$
 (c) $-\frac{5}{8} < -\frac{7}{10} < -\frac{2}{3}$ (d) $-\frac{7}{10} < -\frac{5}{8} < -\frac{2}{3}$
11. If 1 is subtracted from the numerator of a fraction it becomes $(1/3)$, and if 5 is added to the denominator, the fraction becomes $(1/4)$. Which fraction shall result if 1 is subtracted from the numerator and 5 is added to the denominator?
 (a) $5/12$ (b) $7/23$ (c) $1/8$ (d) $2/3$
12. If $(2x - 3y < 7)$ and $(x + 6y < 11)$, then which one of the following is correct?
 (a) $x + y < 5$ (b) $x + y < 6$
 (c) $x + y \leq 5$ (d) $x + y \leq 6$
13. If $(x + y + z = 0)$, then what is $(x + y)(y + z)(z + x)$ equal to?
 (a) $-xyz$ (b) $x^2 + y^2 + z^3$
 (c) $x^3 + y^3 + z^3 + 3xyz$ (d) xyz
14. If $(a + b = 3)$, then what is the value of $(a^3 + b^3 + 9ab)$?
 (a) 18 (b) 27
 (c) 81 (d) Cannot be determined due to insufficient data
15. If one-third of a two digit number exceeds its one-fourth by 8, then what is the sum of the digits of the number?
 (a) 6 (b) 13 (c) 15 (d) 17
16. A bike travels a distance of 200 km at a constant speed. If the speed of the bike is increased by 5 km an hour, the journey would have taken 2 h less. What is the speed of the bike?
 (a) 30 km/h (b) 25 km/h
 (c) 20 km/h (d) 15 km/h
17. If $\sin x - \cos x = 0$, then what is the value of $\sin^4 x + \cos^4 x$?
 (a) 1 (b) $\frac{3}{4}$ (c) $\frac{1}{2}$ (d) $\frac{1}{4}$
18. A vertical stick 10 cm long casts a shadow 8 cm long. At the same time a tower casts a shadow 30 m long. What is the height of the tower?
 (a) 37.5 m (b) 36 m
 (c) 32.5 m (d) 32 m
19. The smallest side of a right-angled triangle has length 2 cm. The tangent of one acute angle is $\frac{3}{4}$. What is the hypotenuse of the triangle?
 (a) 5 cm (b) 2.5 cm
 (c) 1.25 cm (d) $\frac{10}{3}$ cm
20. What is the expression $\frac{\tan x}{1 + \sec x} - \frac{\tan x}{1 - \sec x}$ equal to?
 (a) cosec x (b) 2 cosec x
 (c) 2 sin x (d) 2 cos x
21. If $\tan x = \frac{3}{4}$, $0^\circ < x < 90^\circ$, then what is the value of $\sin x \cos x$?
 (a) $\frac{3}{5}$ (b) $\frac{4}{5}$
 (c) $\frac{12}{25}$ (d) $\frac{13}{25}$

22. Which one of the following is correct ?
 (a) $\tan x > 1, 45^\circ < x < 90^\circ$
 (b) $\sin x > 1/2, 0^\circ < x < 30^\circ$
 (c) $\cos x > 1/2, 60^\circ < x < 90^\circ$
 (d) $\sin x = \cos x$ for some value of $x; 30^\circ < x < 45^\circ$

23. What is the expression $(\sin^4 x - \cos^4 x + 1) \operatorname{cosec}^2 x$ equal to ?
 (a) 1 (b) 2
 (c) 0 (d) -1

24. If $x + y = 90^\circ$, then what is $\sqrt{\cos x \operatorname{cosec} y - \cos x \sin y}$ equal to ?

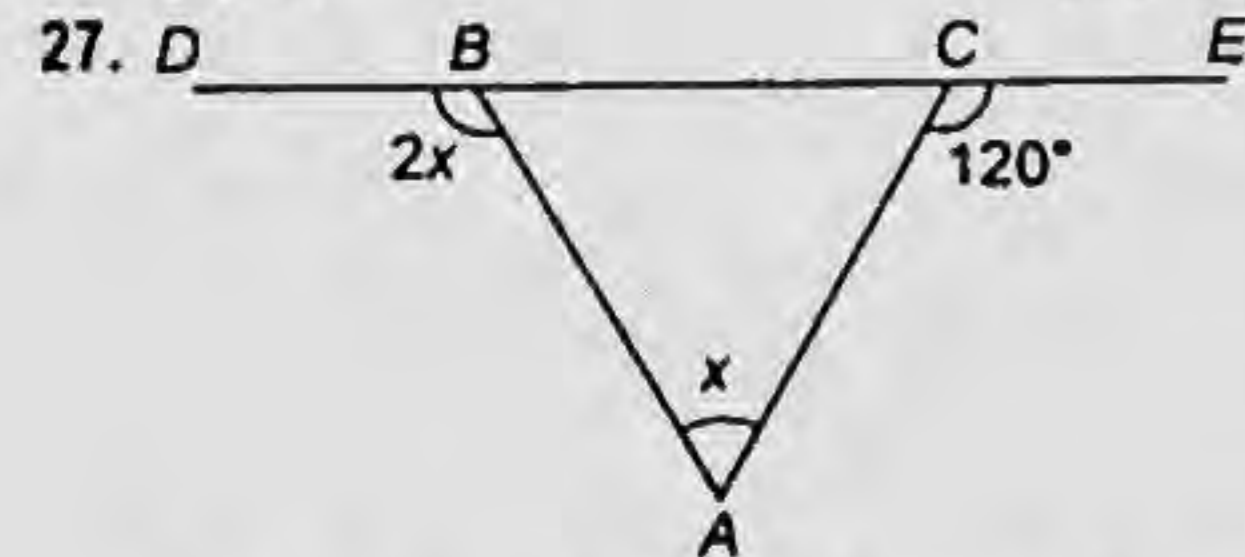
- (a) $\cos x$ (b) $\sin x$
 (c) $\sqrt{\cos x}$ (d) $\sqrt{\sin x}$

25. The angle between the legs of a compass is 60° and each leg is 10 cm long. How far apart are the points on which the legs of the compass rest ?

- (a) 5 cm (b) 10 cm
 (c) $5\sqrt{3}$ cm (d) $10\sqrt{3}$ cm

26. The vertical angle of an isosceles triangle is 15° more than each of its base angles. What is the vertical angle ?

- (a) 35° (b) 55°
 (c) 65° (d) 70°



In the figure given above, what is the value of x ?

- (a) 30° (b) 40°
 (c) 45° (d) 60°

28. Consider the following :
 The length of a side of a cube is 1 cm. Which of the following can be the distance between any two vertices ?

1. 1 cm
 2. $\sqrt{2}$ cm
 3. $\sqrt{3}$ cm

Select the correct answer using the code given below

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

29. Three cubes of metal whose edges are 6 cm, 8 cm and 10 cm respectively are melted and a single cube is formed. What is the length of the edge of the newly formed cube ?

- (a) 10 cm (b) 12 cm
 (c) 16 cm (d) None of these

30. An average Indian family allocates its monthly income under different heads as follows

Items	Percentage Share
Food	40
House Rent	15
Saving	x
Transport	12
Miscellaneous	23

A pie diagram of this data is to be drawn. What is the value of x if the angle which the sector representing saving makes at the centre is 36° ?

- (a) 13 (b) 11 (c) 10 (d) 8

31. From a series of 50 observations, an observation with value 45 is dropped, but the mean remains the same. What was the mean of 50 observations ?

- (a) 50 (b) 49 (c) 45 (d) 40

32. The yield of paddy per plot of one acre were obtained from a number of plots from two different districts in a State and are summarized in the following table

Yield of paddy per plot in quintals	District A No. of plots	District B No. of plots
38.0-41.0	25	14
41.0-44.0	36	29
44.0-47.0	59	35
47.0-50.0	30	54
50.0-53.0	25	41

Which one of the following statements is correct ?

- (a) The mode for district A is higher than the mode for district B.
 (b) The mode for district B is higher than the mode of district A.
 (c) Both the distributions are symmetric
 (d) Both the distributions have the same mean.

33. If every number of a finite set is increased by any number k , the measure of central tendency should also increase by k . Which one of the following measures of central tendency does not have this property ?

- (a) Arithmetic mean
 (b) Median
 (c) Mid-range *ie*, the arithmetic mean of the largest and smallest numbers
 (d) Geometric mean

34. If the median of the distribution (arranged in ascending order) 1, 3, 5, 7, 9, x , 15, 17 is 8, what is the value of x ?

- (a) 11 (b) 13
 (c) $9 < x < 15$ (d) $9 \leq x \leq 15$

35. In statistics, a suitable graph for representing the partitioning of total into sub parts is

- (a) An ogive (b) A pictograph
 (c) A histogram (d) A pie chart

Directions : Each of the next 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

36. Assertion (A) : Zero is a whole number.
 Reason (R) : Every integer is a whole number.

37. Assertion (A) : If two triangles are congruent, then their corresponding angles are equal.

Reason (R) : Two congruent triangles have same area.

38. Assertion (A) : $\sec^2 23^\circ - \tan^2 23^\circ = 1$

Reason (R) : $\sec^2 \theta - \tan^2 \theta = 1$ for all real values of θ .

39. Assertion (A) : $\sin 1^\circ < \cos 1^\circ$

Reason (R) : $\sin \theta < \cos \theta$ when $0^\circ < \theta < 90^\circ$.

40. The perimeter of a square S_1 is 12 m more than perimeter of the square S_2 . If the area of S_1 equals three times, the area of S_2 minus 11, then what is the perimeter of S_1 ?

- (a) 24 (b) 32
(c) 36 (d) 40

41. The cost of 4 books and 3 pencils is same as that of 8 books and 1 pencil. This cost will be same as that of which one of the following ?

- (a) 2 books and 6 pencils
(b) 5 books and 5 pencils
(c) 6 books and 2 pencils
(d) 12 books and 4 pencils

42. What is/are the solutions of the set of homogeneous equations $(4x + 2y = 0)$ and $(6x + 3y = 0)$?

- (a) $x = 0, y = 0$ only
(b) $x = 0, y = 0$ and $x = 1, y = -2$ only
(c) An infinite number of solutions
(d) No solution

43. What is one of the roots of the equation

$$\sqrt{\frac{2x}{3-x}} - \sqrt{\frac{3-x}{2x}} = \frac{3}{2}?$$

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

44. If α, β are the roots of the equation $(x^2 - 3x + 2 = 0)$, then which equation has the roots $(\alpha + 1)$ and $(\beta + 1)$?

- (a) $x^2 + 5x + 6 = 0$ (b) $x^2 - 5x - 6 = 0$
(c) $x^2 + 5x - 6 = 0$ (d) $x^2 - 5x + 6 = 0$

45. If α, β are the roots of the equation $(ax^2 + bx + c = 0)$, then what is the value of $\alpha^3 + \beta^3$?

- (a) $\frac{b^3 + 3abc}{a^3}$ (b) $\frac{a^3 - b^3}{3ab}$
(c) $\frac{3abc - b^3}{a^3}$ (d) $\frac{b^3 - 3abc}{a^3}$

46. What is the LCM of $(6x^3 + 60x^2 + 150x)$ and $(3x^4 + 12x^3 - 18x^2)$?

- (a) $6x^2(x+5)^2(x-1)$
(b) $3x^2(x+5)^2(x-1)$
(c) $6x^2(x+5)^2(x-1)^2$
(d) $3x^2(x+5)(x-1)^2$

47. If the HCF of $(x^2 + x - 12)$ and $(2x^2 - kx - 9)$ is $(x - k)$, then what is the value of k ?

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

48. What is the HCF of $(x^2 + bx - x - b)$ and $[x^2 + x(a - 1) - a]$?

- (a) $x + b$ (b) $x + a$ (c) $x + 1$ (d) $x - 1$

49. If $(3x^3 - 2x^2y - 13xy^2 + 10y^3)$ is divided by $(x - 2y)$, then what is the remainder ?

- (a) 0 (b) $y + 5$
(c) $y + 1$ (d) $y^2 + 3$

50. If $(x^3 + 5x^2 + 10k)$ leaves remainder $-2x$ when divided by $(x^2 + 2)$, then what is the value of k ?

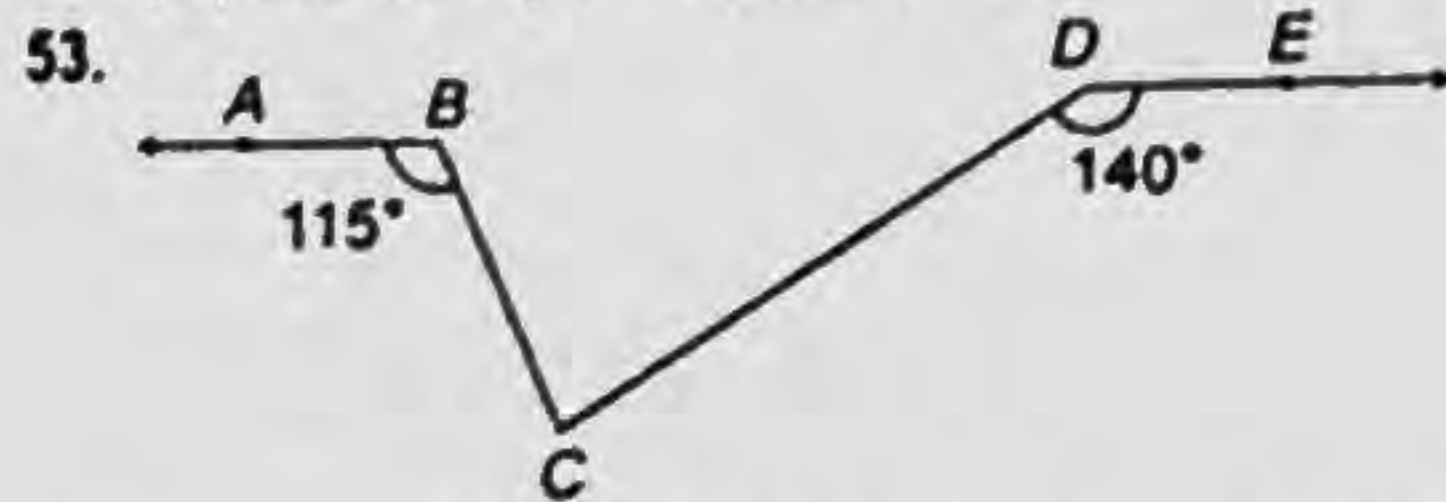
- (a) -2 (b) -1 (c) 1 (d) 2

51. If $(5x^2 + 14x + 2)^2 - (4x^2 - 5x + 7)^2$ is divided by $(x^2 + x + 1)$, what is the remainder ?

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

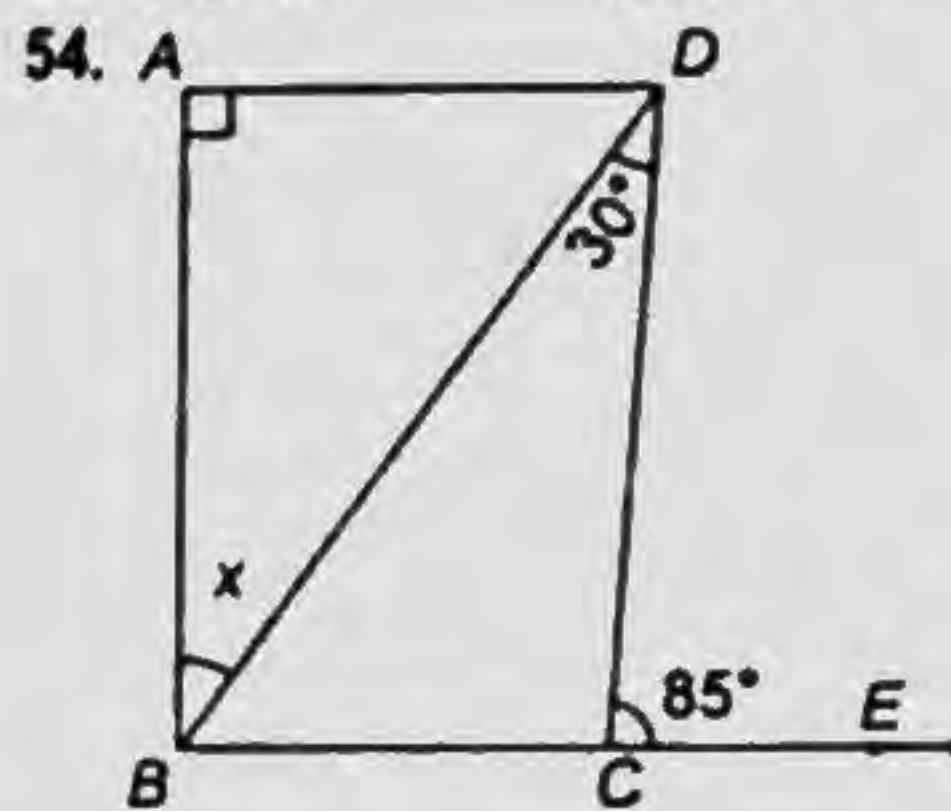
52. What is/are the factor(s) of $(x^{29} - x^{24} + x^{13} - 1)$?

- (a) $(x - 1)$ only
(b) $(x + 1)$ only
(c) $(x - 1)$ and $(x + 1)$
(d) Neither $(x - 1)$ nor $(x + 1)$



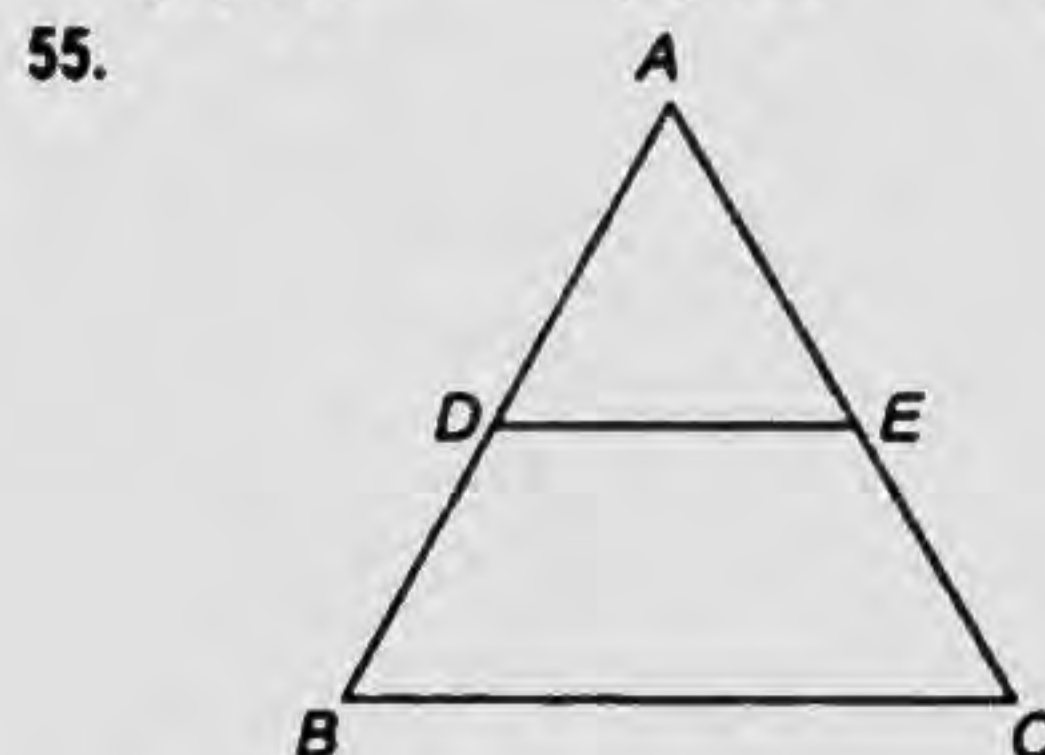
Given that $AB \parallel DE$, $\angle ABC = 115^\circ$, $\angle CDE = 140^\circ$. What is $\angle BCD$?

- (a) 45° (b) 55° (c) 65° (d) 75°



Given that $AD \parallel BE$, $\angle DCE = 85^\circ$, $\angle BDC = 30^\circ$, then what is the value of x ?

- (a) 30° (b) 35° (c) 45° (d) 55°



In the figure shown above, DE is parallel to BC and the ratio of the areas of $\triangle ADE$ and trapezium $BDEC$ is $4 : 5$. What is $DE : BC$?

- (a) 1 : 2 (b) 2 : 3
(c) 4 : 5 (d) None of these

56. Consider the following statements :

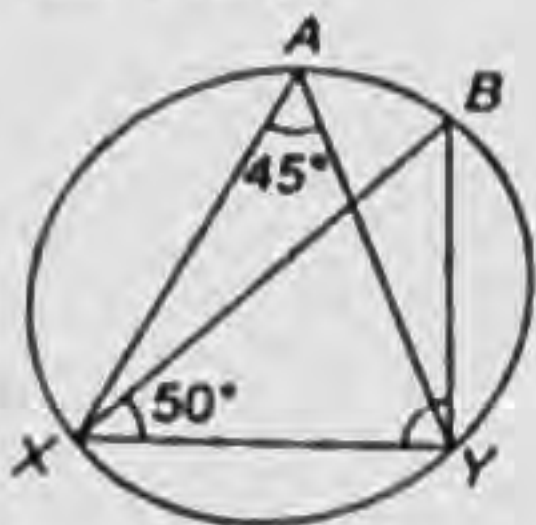
A triangle can be constructed if its

- two sides and the included angles are given
- three angles are given.
- two angles and the included side are given.

Which of the statements given above are correct ?

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

57.



In the figure given above, what is $\angle BYX$ equal to ?

- (a) 85° (b) 50°
(c) 45° (d) 90°

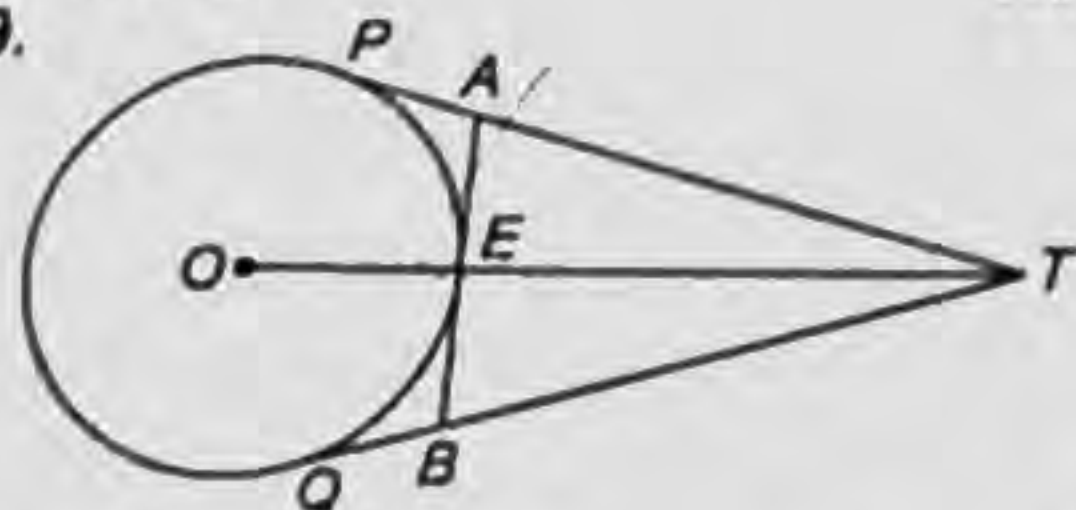
58.



In the figure shown above, the radius OA is equal to the chord AB . Then what is $\angle APB$?

- (a) 30° (b) 60°
(c) 15° (d) 45°

59.



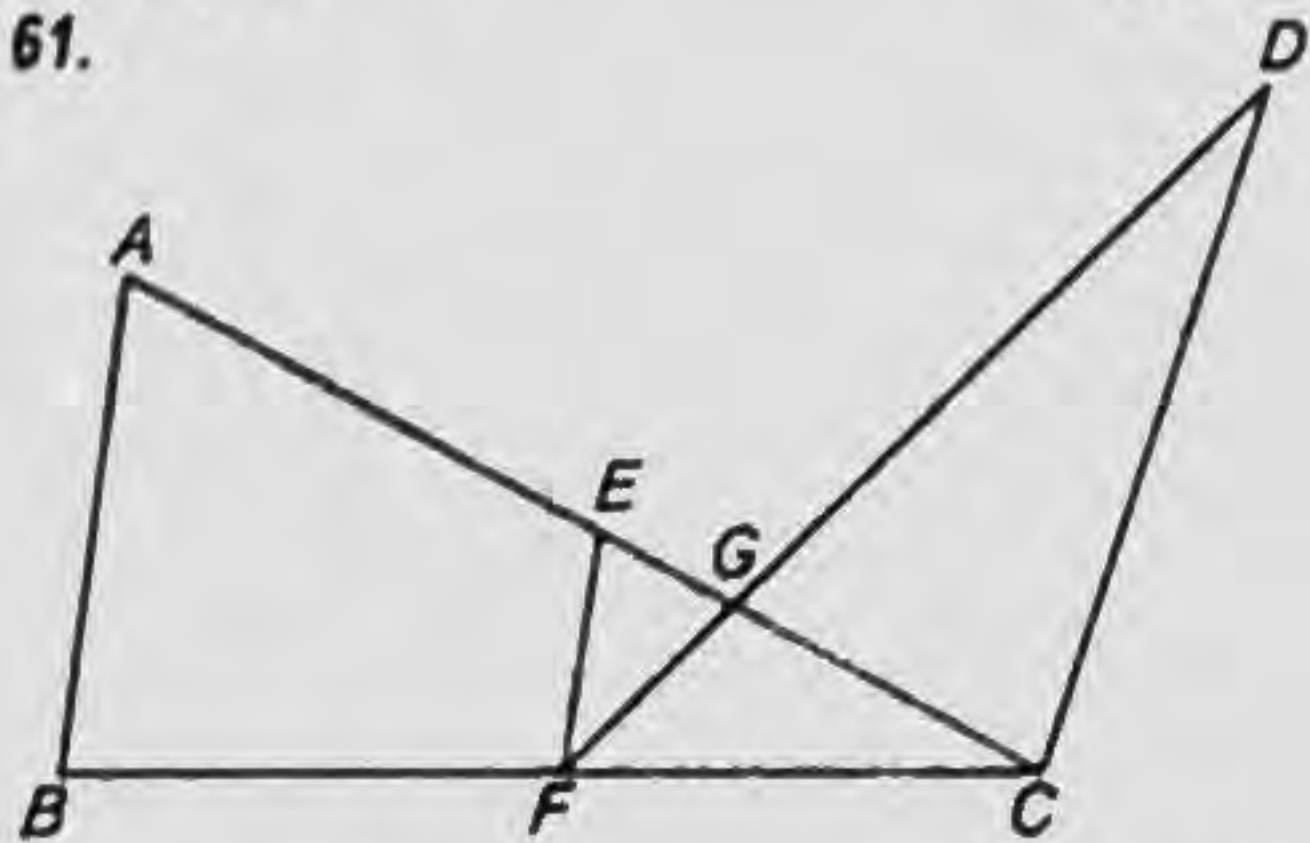
From a point T , 13 cm away from the centre O of a circle of radius 5 cm, tangents PT and QT are drawn. What is the length of AB ?

- (a) $\frac{19}{3}$ cm (b) $\frac{20}{3}$ cm
(c) $\frac{40}{13}$ cm (d) $\frac{22}{3}$ cm

60. With A, B, C as centres, three circles are drawn such that they touch each other externally. If the sides of the $\triangle ABC$ are 4 cm, 6 cm and 8 cm, then what is the sum of the radii of the circles ?

- (a) 9 cm (b) 10 cm
(c) 12 cm (d) 14 cm

61.



AB, EF and CD are parallel lines. Given that, $EG = 5$ cm, $GC = 10$ cm, $AB = 15$ cm and $DC = 18$ cm. What is the value of AC ?

- (a) 20 cm (b) 24 cm
(c) 25 cm (d) 28 cm

62. LM is a straight line and O is a point on LM . Line ON is drawn not coinciding with OL or OM . If $\angle MON$ is one-third of $\angle LON$, what is $\angle MON$ equal to ?

- (a) 45° (b) 60°
(c) 75° (d) 80°

63. What is the least number of straight lines for a bounded plane figure ?

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

64. Consider the following statements :

- Two lines intersected by a transversal are parallel if
1. the pairs of corresponding angles are equal.
2. the interior angles on the same side of the transversal are supplementary.

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

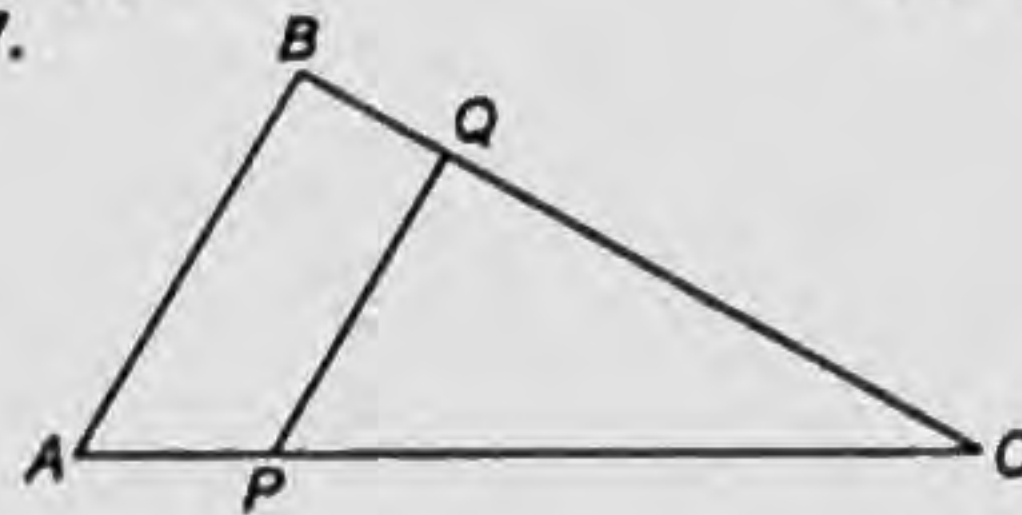
65. If two circles C_1 and C_2 have three points in common, then which one of the following is correct ?

- (a) C_1 and C_2 are concentric
(b) C_1 and C_2 are the same circle
(c) C_1 and C_2 have different centres
(d) None of the above

66. What is the number of tangents that can be drawn to a circle from a point on the circle ?

- (a) 0 (b) 1
(c) 2 (d) 3

67.



In the given triangle, AB is parallel to PQ . $AP = c$, $PC = b$, $PQ = a$, $AB = x$. What is the value of x ?

- (a) $a + \frac{ab}{c}$ (b) $a + \frac{bc}{a}$
(c) $b + \frac{ca}{b}$ (d) $a + \frac{ac}{b}$

68. If $(ab^{-1})^{2x-1} = (ba^{-1})^{x-2}$, then what is the value of x ?

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

69. For what value of k , does the equation $[kx^2 + (2k + 6)x + 16 = 0]$ have equal roots ?

- (a) 1 and 9 (b) -9 and 1
(c) -1 and 9 (d) -1 and -9

70. A person bought a certain number of books for Rs 80. If he had bought 4 more books for the same sum, each book would have cost Re 1 less. What is the price of each book ?

- (a) Rs 10 (b) Rs 8
(c) Rs 5 (d) Rs 4

71. If $A = \{1, 2, 3, 4\}$, what is the number of subsets of A with at least three elements ?

- (a) 3 (b) 4
(c) 5 (d) 10

72. The product of the roots of $x^2 - 3kx + 2k^2 - 1 = 0$ is 7 for a fixed k . What is the nature of roots ?
 (a) Integral and positive
 (b) Integral and negative
 (c) Irrational
 (d) Rational, but not integral
73. Consider the following statements :
 1. $\frac{1}{22}$ cannot be written as a terminating decimal.
 2. $\frac{2}{15}$ can be written as a terminating decimal.
 3. $\frac{1}{16}$ can be written as a terminating decimal.
 Which of the statements given above is/are correct ?
 (a) 1 only
 (b) 2 only
 (c) 1 and 3
 (d) 2 and 3
74. What is the expression $(x+y)^{-1}(x^{-1}+y^{-1})(xy^{-1}+x^{-1}y)^{-1}$ equal to ?
 (a) $x+y$
 (b) $(x^2+y^2)^{-1}$
 (c) xy
 (d) (x^2+y^2)
75. If $(ab - b + 1 = 0)$ and $(bc - c + 1 = 0)$, then what is $(a - ac)$ equal to ?
 (a) -1
 (b) 0
 (c) 1
 (d) 2
76. What is the square of $(2 + \sqrt{2})$?
 (a) A rational number
 (b) An irrational number
 (c) A natural number
 (d) A whole number
77. Let S be a set of all even integers. If the operations
 1. addition
 2. subtraction
 3. multiplication
 4. division
 are applied to any pair of numbers from S , then for which operations is the resulting number in S ?
 (a) 1, 2, 3 and 4
 (b) 1, 2 and 3 only
 (c) 1 and 3 only
 (d) 2 and 4 only
78. The LCM of three different numbers is 150. Which of the following cannot be their HCF ?
 (a) 15
 (b) 25
 (c) 50
 (d) 55
79. Out of a sum of Rs 640, a part was lent at 6% simple interest and the other at 9% simple interest. If the interest on the first part after 3 yr is equal to the interest on the second part after 6 yr, then what is the second part ?
 (a) Rs 120
 (b) Rs 140
 (c) Rs 160
 (d) Rs 180
80. Let p, q, r be natural numbers. If m is their LCM and n is their HCF, consider the following :
 1. $mn = pqr$ iff each p, q, r is prime
 2. $mn = pqr$ iff p, q, r are relatively prime in pairs.
 Which of the above is/are correct ?
 (a) 1 only
 (b) 2 only
 (c) Both 1 and 2
 (d) Neither 1 nor 2
81. A three digit number has digits h, t, u (from left to right) with $h > u$. If the digits are reversed and the number thus formed is subtracted from the original number, the unit's digit in the resulting number is 4. What are the other two digits of the resulting number from left to right ?
 (a) 5 and 9
 (b) 9 and 5
 (c) 5 and 4
 (d) 4 and 5
82. If 78 is divided into three parts which are proportional to $1, \frac{1}{2}, \frac{1}{6}$, then what is the middle part ?
 (a) $\frac{28}{3}$
 (b) 13
 (c) $\frac{52}{3}$
 (d) $\frac{117}{5}$
83. Ram had Rs 2 lakh, part of which he lent at 15% pa and rest at 12% pa. Yearly interest accrued was Rs 27,600. How much did he lend at 15% ?
 (a) Rs 1,20,000
 (b) Rs 1,00,000
 (c) Rs 80,000
 (d) Rs 60,000
84. Successive discounts of $12\frac{1}{2}\%$ and $7\frac{1}{2}\%$ are given on the marked price of a cupboard. If the customer pays Rs 2,590, then what is the marked price ?
 (a) Rs 3,108
 (b) Rs 3,148
 (c) Rs 3,200
 (d) Rs 3,600
85. A train started from a station with a certain number of passengers. At the first halt, $\frac{1}{3}$ rd of its passengers got down and 120 passengers got in. At the second halt, half of the passengers got down and 100 persons got in. Then, the train left for its destination with 240 passengers. How many passengers were there in the train when it started ?
 (a) 540
 (b) 480
 (c) 360
 (d) 240
86. Let P denote the product $2 \cdot 3 \cdot 5 \dots 59 \cdot 61$ of all primes from 2 to 61. Consider the sequence $P + n$ ($2 \leq n \leq 59$). What is the number of primes in this sequence ? (n is a natural number)
 (a) 0
 (b) 16
 (c) 17
 (d) 58
87. A bag contains 50 paise, 1 rupee and 2 rupee coins in the ratio 2 : 3 : 4. If the total amount is Rs 240, what is the total number of coins ?
 (a) 90
 (b) 150
 (c) 180
 (d) 200
88. From a rectangular sheet of cardboard of size 5 cm \times 2 cm, the greatest possible circle is cut off. What is the area of the remaining part ?
 (a) $(25 - \pi) \text{ cm}^2$
 (b) $(10 - \pi) \text{ cm}^2$
 (c) $(4 - \pi) \text{ cm}^2$
 (d) $(10 - 2\pi) \text{ cm}^2$
89. A chord AB of a circle of radius 20 cm makes a right angle at the centre of the circle. What is the area of the minor segment in cm^2 ? ($\pi = 3.14$)
 (a) 31.4
 (b) 57
 (c) 62.8
 (d) 114

90. The minute hand of a clock is 14 cm long. How much distance does the end of the minute hand travel in 15 min? ($\pi = \frac{22}{7}$)

- (a) 11 cm (b) 22 cm
(c) 33 cm (d) 44 cm

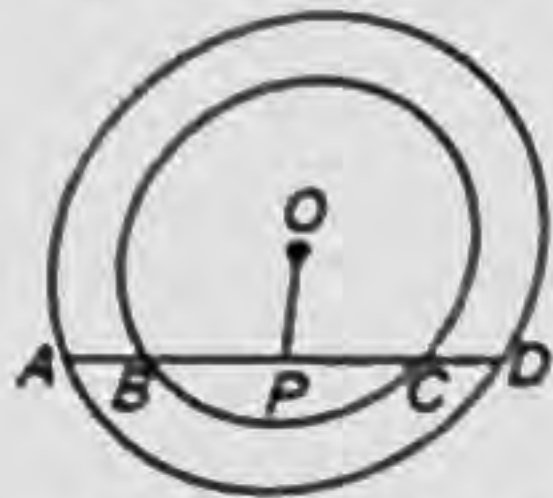
91. In which one of the following pairs does the first number represent the perimeter of one face of a cube and the second number represent the volume of the cube?

- (a) (16, 32) (b) (20, 125)
(c) (9, 27) (d) (10, 100)

92. A square of side x is taken. A rectangle is cut out from this square such that one side of the rectangle is half that of the square and the other is $\frac{1}{3}$ the first side of the rectangle. What is the area of the remaining portion?

- (a) $\left(\frac{3}{4}\right)x^2$ (b) $\left(\frac{7}{8}\right)x^2$
(c) $\left(\frac{11}{12}\right)x^2$ (d) $\left(\frac{15}{16}\right)x^2$

93.



In the figure given above, AD is a straight line, OP perpendicular to AD and O is the centre of both circles. If $OA = 20$ cm, $OB = 15$ cm and $OP = 12$ cm, what is AB equal to?

- (a) 7 cm (b) 8 cm
(c) 10 cm (d) 12 cm

94. The diameters of two right circular cones are equal. If their slant heights are in the ratio 3 : 2, then what is the ratio of their curved surface areas?

- (a) 9 : 4 (b) $\sqrt{3} : \sqrt{2}$
(c) 3 : 2 (d) 2 : 3

95. From a solid cylinder whose height is 4 cm and radius 3 cm, a conical cavity of height 4 cm and base radius 3 cm is hollowed out. What is the volume of the remaining solid?

- (a) 9π cm³ (b) 15π cm³
(c) 21π cm³ (d) 24π cm³

96. A conical flask of base radius r and height h is full of milk. The milk is now poured into a cylindrical flask of radius $2r$. What is the height to which the milk will rise in the flask?

- (a) $\frac{h}{3}$ (b) $\frac{h}{6}$ (c) $\frac{h}{9}$ (d) $\frac{h}{12}$

97. From a wooden cylindrical block, whose diameter is equal to its height, a sphere of maximum possible volume is carved out. What is the ratio of the volume of the utilised wood to that of the wasted wood?

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

98. What is the number of spherical balls of 2.5 mm diameter that can be obtained by melting a semicircular disc of 8 cm diameter and 2 cm thickness?

- (a) 6144 (b) 3072
(c) 1536 (d) 768

99. If the circumference of the inner edge of a hemispherical bowl is $\frac{132}{7}$ cm, then what is its capacity?

- (a) 12π cm³ (b) 18π cm³
(c) 24π cm³ (d) 36π cm³

100. In a right angled triangle with sides a and b , and hypotenuse c , the altitude drawn on the hypotenuse is x . Then which one of the following is correct?

- (a) $ab = cx$ (b) $ax = bc$
(c) $bx = ac$ (d) $ab = 2cx$