

MENTAL ABILITY

1. Some translated words in an artificial language (in which the word order is not necessarily same) are given below:

mie pie sie good person sing

pie sie rie sing good lyrics

tie rie sie love good lyrics

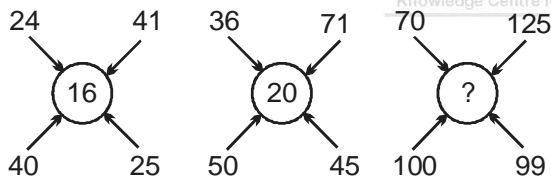
What is the translation for 'person love lyrics'?

- (A) pie tie rie (B) tie rie sie (C) rie mie tie (D) sie mie pie
2. In the given sequence, some letters are missing. Which of the given options can fill the blanks in the correct order from left to right ?

ab_ab_aaa_bbaaa_bbbb

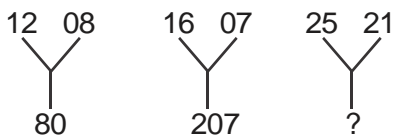
- (A) abab (B) abba (C) aabb (D) baba

3. Identify the number in the position of '?'.



- (A) 24 (B) 28 (C) 32 (D) 36

4. Find the missing number.



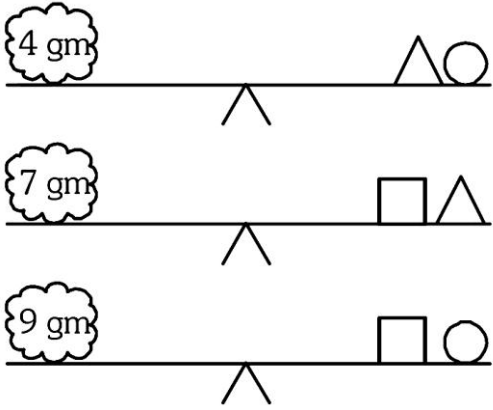
- (A) 184 (B) 210 (C) 241 (D) 425

5. If A, B, C, D are distinct decimal digits, then which of the following options is correct?

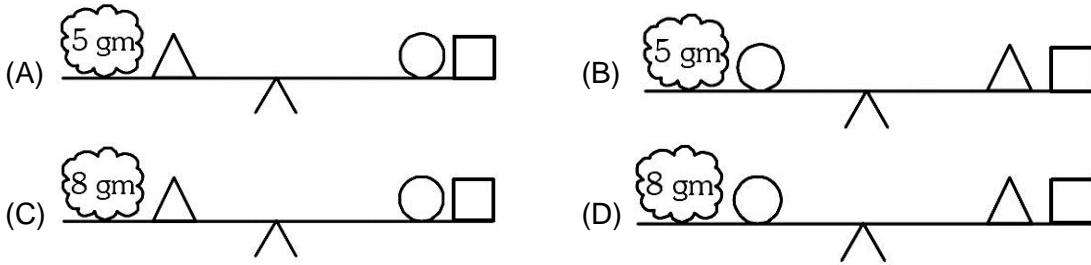
$$\begin{array}{r} A4BC \\ \times C \\ \hline 1A1DC \end{array}$$

- (A) A = 3 B = 7 C = 5 D = 9 (B) A = 2 B = 3 C = 6 D = 5
 (C) A = 3 B = 8 C = 6 D = 5 (D) A = 2 B = 3 C = 5 D = 7

6. Observe the following figure representing a balance.



Which of the following figure represents the correct balance?



7. Choose appropriate option from given alternatives such that the relationship defined by ‘:’ is preserved.

PNLJ : LIFC and VTRP : _____

- (A) ROLI (B) SOLH (C) RPOM (D) DMEN

8. A coin is in a fixed position. Another identical coin is rolled around the edge of the first one. How many complete revolutions will be made by the revolving coin before it reaches its starting position?



- (A) 1 (B) 2 (C) 3 (D) 4

9. If South-East becomes North ; and North-East becomes West; then West becomes

- (A) North – East (B) South – East (C) North – West (D) South – West

10. A cube is 6 cm in length, breadth and height. It is painted red on two opposite faces, black on the other two opposite faces and green on the left over faces. It is then cut into 216 cubes of sides 1 cm. How many small cubes have no face painted ?

- (A) 16 (B) 8 (C) 64 (D) 24

11. Find the odd-one out of the following terms:

EF22, JK42, GH24, VW90, IJ38

- (A) EF22 (B) GH24 (C) IJ38 (D) VW90

12. Choose the conclusions which logically follows from the given statements.

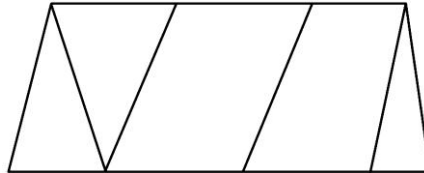
Statements :

- All the pens are papers
- All the papers are boats
- Some birds are boats.

Conclusions :

- A. Some boats are pens B. Some birds are papers C. None of the pens are birds
- (A) Only A and B (B) Only A (C) Only C (D) Only A and C

13. How many quadrilaterals are there in the given figure?



- (A) 10 (B) 11 (C) 12 (D) 13

14. Which of the following alternatives will fit in place of 'M'?

255, 3610, 4915, M, 8125

- (A) 5100 (B) 5420 (C) 6420 (D) 6422

15. Which of the following alternatives will fit in place of 'M'?

L6, O8, R11, M, X25, A42, D75

- (A) U15 (B) U16 (C) W14 (D) U14

16. Which of the following alternatives will fit in place of 'M'?

7	3	6	2
2	8	5	4
1	1	2	4
4	2	1	M

- (A) 6 (B) 5 (C) 4 (D) 3

17. If 'Σ' means 'x', 'δ' mean '÷', 'σ' means '+' and 'α' means '-' then evaluate the following expression using standard operator precedence.

$$56\delta(6\sigma 8)\Sigma 4\alpha 1$$

- (A) 52 (B) 24 (C) 15 (D) 43

18. With what operators, should the symbols @ and < be replaced so that the following expression is valid.

$$100 - 81 \div 27 @ 3 < 6 = 115$$

- (A) + and - (B) x and ÷ (C) + and x (D) ÷ and -

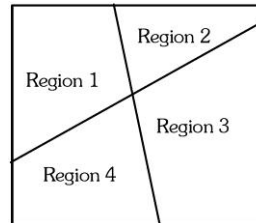
19. x is an integer such that it leaves a remainder of 2 when divided by 3, leaves a remainder of 3 when divided by 5, and leaves a remainder of 5 when divided by 7. What could be a possible value of x from among the following options?

- (A) 53 (B) 68 (C) 74 (D) 83

20. In how many ways can you distribute 10 identical balls, into two non-identical boxes so that none are empty?

- (A) 2 (B) 8 (C) 9 (D) 10

21. One line forms two regions in a plane. Similarly, two lines in a plane can form a maximum of four regions. These are shown in the figures below:



What is the maximum number of regions that can be formed by 4 lines in a plane? (Lines need not be concurrent.)

- (A) 7 (B) 8 (C) 10 (D) 11
22. You need to take 'n' arbitrary points on or inside a square of side 2 cm such that there will always be a pair of points at a distance of not more than $\sqrt{2}$ cm. What is the minimum value of 'n' ?
- (A) 2 (B) 4 (C) 5 (D) 8
23. The following facts are known about an unknown number X:
- I : The sum of digits of X is 15.
 II : The unit's digit of X is 6.
- Then which of the following statement is certainly true about X?
- (A) X is divisible by 3 but not by 6 (B) X is divisible by 6 but not by 9
 (C) X is not divisible by 6 but divisible by 9 (D) X is divisible by both 6 and 9
24. The average age of A,B and C is 43 years. Which of the following statements are required to find the eldest among them?

Statements:

I. Age of C is 65 years.

II. Age of A is 25 years.

- (A) I is sufficient (B) Both I and II are required
 (C) I and II together are not sufficient (D) II is sufficient

Directions (Q. No. 25 to 26): A class is to be taught five subjects- Hindi, Physics, Chemistry, Biology and Mathematics by five different teachers – A, B, C, D and E in five periods (1 to 5). A teacher can teach in only one of the periods. The following details are available about the teaching.

- A teaches mathematics which is not taught in the first period.
- Physics is taught by D in an even numbered period.
- Chemistry is taught in an odd period, and it precedes mathematics period.
- E teaches in the first period.
- C teaches Chemistry but not in the first or the last periods.
- Hindi is taught in the last period.

25. Which of the following statements is necessarily true?

- (A) Third period is of Hindi taught by B
 (B) Second period is of Physics taught by C
 (C) Fourth period is of Mathematics taught by A
 (D) Fifth period is of Biology taught by D

26. Which subject is taught by B ?

- (A) Physics (B) Chemistry (C) Biology (D) Hindi

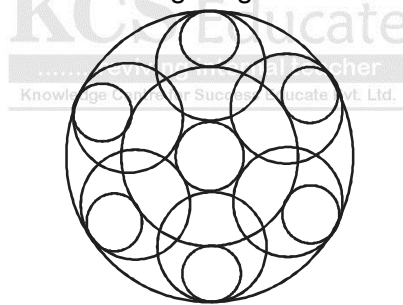
27. A solid metallic cylinder of radius 12 cm and height 175 cm is melted and moulded into another solid cylinder of height 63 cm. What is the radius of the new cylinder?
 (A) 14 (B) 4π (C) 20 (D) 5π
28. Choose the option which shows the correct mirror image of the characters given below.
 D I V E R T 6 4 7 5 A L E
 (A) D I A E B 1 0 7 1 2 V G E (B) D I A E B 1 9 4 1 2 V G E
 (C) D I A E B 1 0 4 1 2 V G E (D) D I A E B 1 0 4 1 2 A G E

Directions (Q. No. 29 to 30): There are 150 students in a class. 20 students play both hockey and kabaddi. The same numbers of students play only football. 35 students play both hockey and football but not kabaddi. 25 play both football and kabaddi but not hockey. The number of students who play only hockey is the same as the number of students who do not play any of the three mentioned games and the number of students who play only hockey is half of the number of students who play only football.

29. How many students play only kabaddi?
 (A) 10 (B) 20 (C) 30 (D) 40
30. How many students play only hockey?
 (A) 10 (B) 15 (C) 20 (D) 25
31. What will be the number in the blank box?

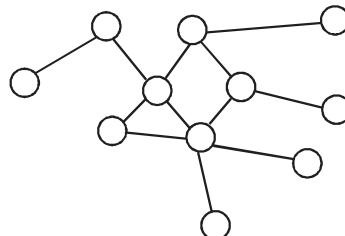
1	3	4	6	7	9
2	14	5	77	8	

- (A) 98 (B) 128 (C) 189 (D) 194
32. What is the total number of circles in the figure given below?



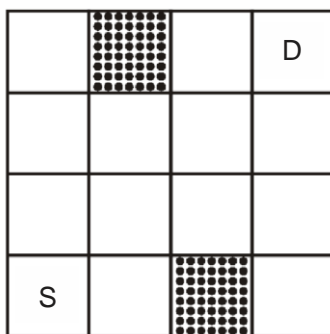
- (A) 13 (B) 14 (C) 15 (D) 16
33. A bucket contains milk mixed with water, of which 3 parts are water and 5 parts are milk. A part of the mixture is removed from the bucket and is replaced by water. What portion of the mixture should have been removed so that the new mixture contains milk and water in equal proportion?
 (A) $\frac{1}{3}$ (B) $\frac{1}{4}$ (C) $\frac{1}{5}$ (D) $\frac{1}{6}$

34. You need to colour the circles in such a way that no two circles connected by a line get the same colour. What is the minimum number of distinct colours needed to colour all the circles in the figure?



- (A) 4 (B) 5 (C) 6 (D) 7

35. From each box you can move only to the immediate right box or the immediate top box. You cannot move into or through a shaded box. How many ways are there to move from the box marked S to the box marked D?



- (A) 8 (B) 10 (C) 12 (D) 14
36. Which number will come in the place of 'M'?

16	7	2	20
25	8	2	30
36	9	5	24
49	10	7	M

- (A) 21 (B) 32 (C) 40 (D) 63
37. The square of the length of a rod AB is 72 cm^2 . If we place the rod in the corner of a room, so that the end A is always on the edge between the two walls of the corner and the end B is always on the floor, what is the maximum possible area of the triangle formed by the rod, the edge between the walls and the floor ?

- (A) 6 cm^2 (B) 12 cm^2 (C) 18 cm^2 (D) 24 cm^2

38. What is the missing term (?) in the following series?

2, 6, 6, 5, 10, 4, 14, 3, 18, ?

- (A) 1 (B) 2 (C) 19 (D) 22

39. In the question given below, there are two statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance from commonly known facts, Read all the conclusions, and then decide which of the given conclusions logically follows from the given statements?

Statements:

- (i) Some kings are beautiful.
- (ii) All the queens are kings.

Conclusions:

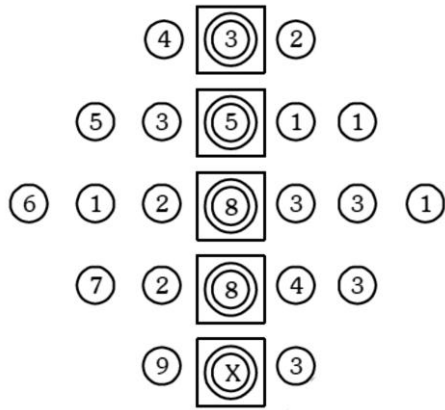
- I. All the kings are beautiful.
- II. All the queens are kings.

- (A) Only I follows (B) Only II follows
 (C) Neither I nor II follows (D) Both I and II follows

40. If prime numbers are assigned to English alphabets from A to Z in order, MAT will be

- (A) 31 1 67 (B) 41 1 67 (C) 37 2 71 (D) 41 2 71

41. What number comes inside the square in place of 'X'?



- (A) 5 (B) 6 (C) 7 (D) 8

42. Find the alphabet that will replace '?'

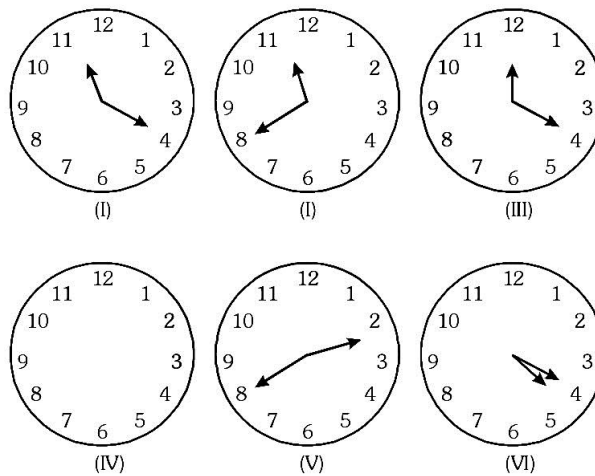
I	2	2	3	1	5
II	3	4	2	4	2
III	H	P	I	?	Y

- (A) A (B) D (C) O (D) N

43. In a certain language IMPHAL is coded as JLRFDI. How will MYSURU be coded in the same language ?

- (A) NXUSUR (B) RUSUXN (C) NXSUUR (D) NXTTUR

44. What time should the IV clock show ?



- (A) 1 : 00 (B) 1 : 20 (C) 1 : 40 (D) 2 : 00

45. How many crosses should be there in the box marked with '?'

X	X	X	XX	XX	XX X	XX X	XX	XX X	XX
X	X	XX	X	X	XX	X	?	XX X	XX XX

- (A) 1 (B) 2 (C) 3 (D) 4

46. Find the missing term.
a, b, d, __, p
(A) h (B) i (C) j (D) k
47. A is East of B and West of C, D is South-West of C, and B is South-East of E. When seen from West to East, which of the following sequences are possible?
I : EBDAC
II : DEBAC
III : EBADC
IV: EDBAC
(A) I, I and III (B) I, III and IV (C) I,II and III (D) all I, II, III and IV
48. A, B, C, and D are to be seated in a row. C and D cannot be on adjacent seat. Also, B cannot be at the third place. Which of the following must be false?
(A) A is at the fourth place (B) A is at the third place
(C) A is at the second place (D) A is at the first place
49. Mrs. Kirandeep, a driving instructor, has to arrange training schedule for some of her pupils. She has 8 new pupil who wish to book either a morning or evening of a particular day. The appointment can be given for Tuesday, Wednesday, Friday and Saturday. The instructor instructs only one pupil in morning and one in the evening session.
- Mrs. Sabita is only available Tuesday morning but Mr. Aaditya can make any time on a Wednesday.
 - Mrs. Firdaus is free on Tuesday all day but Mr. Naved is only free Wednesday evening.
 - Mrs. Seema is only available Friday morning whereas Mrs. Ritu can only make Saturday evening.
 - Mrs. Shalu is available all day Fridays whereas Mr. Ronald can make any time on a Saturday.
- Which of the following two should have morning appointments ?
(A) Mr. Ronald and Mrs. Shalu (B) Mr. Ronald and Mrs. Firdaus
(C) Mr. Aaditya and Mrs. Firdaus (D) Mr. Aaditya and Mr. Ronald
50. Just before sunset Veena and Zeba were talking to each other standing face-to-face. If Veena sees Zeba's shadow to be exactly towards the right of Zeba, which direction was Veena facing?
(A) South (B) North (C) East (D) North-East

ANSWERS

1. (C)	2. (B)	3. (B)	4. (A)	5. (D)
6. (C)	7. (A)	8. (B)	9. (B)	10. (C)
11. (B)	12. (B)	13. (C)	14. (C)	15. (B)
16. (C)	17. (C)	18. (C)	19. (B)	20. (C)
21. (D)	22. (C)	23. (B)	24. (A)	25. (C)
26. (D)	27. (C)	28. (C)	29. (C)	30. (A)
31. (D)	32. (C)	33. (C)	*34. Bonus	35. (C)
36. (A)	37. (C)	38. (B)	39. (C)	40. (D)
41. (B)	42. (A)	43. (A)	44. (B)	45. (D)
46. (A)	47. (D)	48. (D)	49. (D)	50. (A)

*NOTE :- The answer is 3, but it is not present in the options.



LANGUAGE COMPREHENSIVE (LCT)

Instructions for (Q. 1 to 5):

Read the following passage and answer the questions based on it. Choose the most appropriate answer.

It is taken for granted by the advocates of oriental learning that no native of this country can possibly attain more than a mere smattering of English. They do not attempt to prove this. But they perpetually insinuate it. They designate the education which their opponents recommend as a mere spelling-book education. They assume it as undeniable that the question is between a profound knowledge of Indian and Arabic literature and science on the one side, and superficial knowledge of the rudiments of English on the other. This is not merely an assumption, but an assumption contrary to all reason and experience. We know that foreigners of all nations do learn our language sufficiently to have access to all the most abstruse knowledge which it contains sufficiently to relish even the more delicate graces of our most idiomatic writers. There are, in this very town, natives who are quite competent to discuss political or scientific questions with fluency and precision in the English language. I have heard the very question on which I am now writing discussed by native gentlemen with a liberality and an intelligence which would do credit to any member of the Committee of public instruction. Indeed it is unusual to find, even in the literary circles of the Continent, any foreigner who can express herself/himself in English with so much facility and correctness as we find in many Indians. Nobody, I suppose, will contend that English is so difficult to an Indian as Greek to an Englishman. Yet an intelligent English youth, in a much smaller number of years than our unfortunate pupils pass at the Sanskrit college, becomes able to read, to enjoy, and even to imitate not unhappily the compositions of the best Greek authors. Less than half the time which enables an English youth to read Herodotus and Sophocles ought to enable an Indian to read Hume and Milton.

1. The writer feels that the advocates of oriental learning are
(A) cautiously open to the idea of English education.
(B) aware of the tyranny of English education.
(C) irrational in their views about English education.
(D) aware of the politics of English education.
2. Which of the following ideas does the writer have a problem with ?
(A) Some natives are proficient in discussing complex topics
(B) Knowledge of English is pitched against that of Indian and Arabic Literature.
(C) Foreigners can read and enjoy some of the difficult English writings
(D) Learning English for an Indian can be easier than learning Greek for an Englishman
3. The Foreigners discussed in the passage is
(A) an Arab. (B) a Greek (C) an Indian (D) an Englishman
4. Which of the following sentences best captures the main argument of the writer ?
(A) Many Indians are capable of using English like any Englishman.
(B) Learning English is as difficult as learning any other foreign language.
(C) The importance of English education needs to be recognised by the supporters of oriental learning.
(D) An Indian can learn English in half the time taken by an Englishman to learn Greek.
5. According to the author, it is easier for
(A) Indians to have a profound knowledge of Arabic literature and Science than learn English.
(B) Indians to learn Sanskrit than for Englishmen to appreciate Greek literature.
(C) Foreigners to learn Indian language than for Indians to learn foreign languages.
(D) Indians to appreciate English literature than for Englishmen to appreciate Greek literature.

Instructions for (Q. 6 to 10):

Read the following passage and answer the questions based on it. Choose the most appropriate answer.

Every day new careers and professional opportunities emerge. No matter how much each career option excites you, You will have to prioritize and choose the best option for yourself. Your personality, interests, abilities, aspirations, strengths and weaknesses will help to decide the most viable option for you. The following exercises are important for career planning, and following these will ensure that you are on the right track.

Self-Assessment : The entire process of career planning should be ideally done in conjunction with your career counselor, so that you have professional help at every step . A trained career counsellor can help you identify a variety of professions in which you can excel. Remember to keep your list of possible professionals long , so that your confidence in yourself does not wane.

When I took my test , the long list of professions include being a florist, teacher, counsellor, doctor and sales executive .The very idea that I have an aptitude for several professions and not just to be a doctor was very comforting. I thought to myself, “When patients get tired of me I can always be a salesman!” Do not let anyone ever tell you that you are good for nothing. Each one of us has several talents, and it is important to first identify them, and then work hard to develop them.

Self -Analysis: Another important aspect of self assessment is self-analysis or soul searching. We are the best judge of our abilities, strengths and weaknesses. If you concentrate and decide to be honest with yourself, self-analysis can help you understand your career options better.

Need for planning: If you ask adults around you whether they actually became what they had wanted to become when they were young, chances are that very few of them actually became what they aspired towards in childhood. This may not essentially be a reflection of their failure – but an indication of change. Circumstances change, ideas change, and so do people. By the time you grow up. You may end up working in profession that neither you nor your parents know about today. Of course some of you may get to work in traditional professions and move along a well-planned path. Whatever the consequence of your planning, the truth about making a plan is that it may not work. But in the words of Henry C. Link, if “you do make a plan, the chances of getting what you want significantly increase”. Centre for Success Educate Pvt. Ltd.

But one thing is quite certain: Only those of you who work hard at your studies, acquire new skills as you move along in life. Involve yourself in cultural/sports activities and attempt to plan your life will be successful

6. Career Planning is an activity that requires
- (A) analysing one’s personality, interests, abilities, aspirations, strengths and weaknesses.
 - (B) working hard at your studies, acquiring new skills as you move along in life and involving yourself in cultural/sports activities
 - (C) following three important steps in consultation with one’s career counsellor and making a plan that may work.
 - (D) understanding and being aware of the fact that whatever the consequences of one’s planning the truth about asking a plan is that it may not work.
7. This passage may be summarized as
- (A) ‘In career planning it is important to involve oneself in cultural/sports activities as much as working hard or acquiring new skills’
 - (B) ‘Before making a career choice one should learn to prioritize career options and use one’s personality, interests, abilities, aspirations, strengths and weakness to plan and decide the most viable option’.
 - (C) ‘In choosing a career, it is important not to allow anyone to tell us that we are good for nothing. Because our personality, interests, abilities, aspirations, strengths and weaknesses will help us decide the most viable career options for ourselves’.
 - (D) ‘A good career choice results when you follow traditional professions and move along a well planned path’.

8. Self-analysis is considered an important part of self-assessment because
- (A) soul searching helps us to judge our abilities honestly and helps us understand our career options better.
 - (B) we are the best judge of our abilities, strengths and weaknesses and self-analysis will enable other to analyse our abilities accurately
 - (C) by the time we grow up, we may end up working in professions that neither we nor our parents know about today.
 - (D) each one of us has career options, and it is important to first identify them and then work hard to attain them.
9. A trained career counsellor can help us
- (A) do self-analysis, so that we are honest with ourselves.
 - (B) decide whether to be a florist, teacher, counselor, doctor or sales executive, so that we can be a salesman if we cannot be a doctor.
 - (C) identify our talents because each one of us has several talents, and it is important to first identify them, and then work hard to develop them
 - (D) identify different professions that will help us use our abilities, because a trained professional can help us prioritize and choose the option that is most viable for us.
10. An important point highlighted in the passage is that
- (A) Only a trained counselor can help you make the right career choice.
 - (B) It is our abilities strengths and weaknesses that help us succeed in our career.
 - (C) There is not much use of making a plan- very few people get their plans fulfilled.
 - (D) many people do not get to pursue the career of their choice because circumstances, ideas and people changes.

Instructions for (Q. 11 to 15):

Read the following passage and answer the questions based on it. Choose the most appropriate answer.

If the fact of the fire did not immediately penetrate my consciousness', the heat of the blast did and soon propelled me from my seat. All around me, there was a confusion of upended tables, overturned chairs, bodies pitched toward the door of the dining room, and the sounds of broken glass and crockery. Fortunately the windows toward the street, large windows through which a body might pass. had been thrown open by an enterprising diner. I remember that I rolled sideways through one of these window frames and fell onto the snow and was immediately aware that I should move inside to allow others to land as I had - and it was in that moment that my altruism was finally triggered.

I rose to my feet and began to assist those who had sustained cuts and bruises and broken bones or who had been mildly crushed in the chaos. The blaze lit up the escaped diner with a light greater than any other that could be produced in the night, so that I was able to see clearly the dazed expression of those near to me. Many people were coughing and some were crying and all looked as through they had been struck by a blow to the head. A few men attempted heroics and tried to go back into the hotel to save those who remained behind and I think one student did actually rescue an elderly woman who had succumbed to paralysis beside the buffet table, but generally there was no thought of reentering the burning building once one had escaped. Indeed, so great was the heat that we in the crowd had to move farther and farther across the street until we all stood in the college quadrangle surrounded by bare oaks and elms and stately sycamores.

11. The passage describes
- (A) the heat and smoke that was generated by the sudden fire.
 - (B) the effect of the blast on unsuspecting hotel guests.
 - (C) the loss of crockery, glass and bodies in the accident.
 - (D) the layout of the college quadrangle, surrounded by bare oaks and elms and sycamores.

12. The dazed expression on people's faces was caused by
 (A) the blow to their heads
 (B) the heat generated by the blast
 (C) the suddenness and extent of damage caused by the impact of the blast
 (D) the impact of broken glass and crockery being hurled around in the confusion
13. The words in the passage that suggest there was a blast include
 (A) fire, heat, confusion, overturned and chaos.
 (B) blazed, dazed, heroic, succumbed and paralysis.
 (C) broken glass, cuts, bruises and sycamores.
 (D) rescue, quadrangle, altruism, triggered and heat.
14. 'The blaze lit up the escaped diners with a light greater than any other that could be produced in the night' can be paraphrased as
 (A) 'The fire set all the escaped diners ablaze.'
 (B) 'The light that set the escaped diners on fire was from a divine night fire'
 (C) 'The night sky was lit by such brightness that one could see the blare clearly.'
 (D) 'The fire burned in such a way that the writer could see the escaped diners clearly.'
15. The word altruism here means
 (A) 'the act of rolling across a window.'
 (B) 'a sudden movement triggered by a blast.'
 (C) selfless concern for the well being of others.
 (D) 'the dazed feeling generated by an accident.'

Instructions for (Q. 16 to 17):

The following five sentences come from a paragraph. The first and the last sentences are given. Choose the right order in which the three sentences (PQR) should appear to complete the paragraph.

16. S1. A man who possesses a strong will and firm determination finds all difficulties solved.
 S2.
 S3.
 S4.
 S5. It is therefore, the man who labours hard with a strong resolution and an unshaken will, who achieves success and makes his fortune.
- P Such a man goes on working hard and even if he fails he is never downcast.
 Q In turn failures make him all the more determined and resolute and he persists in his task till he attains the desired success.
 R To him there are a thousand ways open to steer clear of all dangers and difficulties.
- Choose from the options given below'
- (A) RPQ (B) PRQ (C) QRP (D) PQR

17. S1. Film theory is an academic discipline that aims to explore the essence of cinema and provides conceptual frameworks for understanding a film's relationship to reality, other arts, individual viewers, and society at large.
- S2.
- S3.
- S4.
- S5. Film review, on the other hand, is the way in which critics assess a film's overall quality and determine whether or not they think the film is worth recommending to viewers
- P Film theory incorporates various aspects of filmmaking, including analysis a review.
- Q One way of analysing films is by the shot by shot analysis though that is typically used only for small dips or scenes.
- R Film analysis is the process of analysing a film in terms of mise-en-scene cinematography, sound and editing.

Choose from the options given below

- (A) PQR (B) QRP (C) PRQ (D) RQP

Instructions for (Q. 18 to 19):

The following questions have the second sentence missing. Choose the appropriate Sentence from the given options to complete it

18. 1. A few months ago I went to Princeton University to see what the young people who are going to be running our country in a few decades are like.
2. _____
3. went to sleep in my hotel room around midnight, and when I awoke, my mailbox was full of replies - sent at 1 :15 a.m., 2:59 a.m., 3.23 a.m.
- (A) One senior told me that she went to bed around two and woke tip each morning at seven, she could afford that much rest because she had learned to supplement her full day of work by studying in her sleep.
- (B) As she was falling asleep she would recite a math problem or a paper topic to herself., she would then sometimes dream about it, and when she woke up, the problem might be solved.
- (C) Faculty members gave me the names of a few dozen articulate students, and I sent them e-mails, inviting them out to lunch or dinner in small groups.
- (D) Young people stay up late replying to their emails and indulging in social networking.
19. 1. We are usually inclined to look upon bad temper as a very harmless weakness.
2. _____
3. And yet all religious texts condemn it as one of the most destructive elements in human nature.
- (A) This shows that we lack judgment.
- (B) Often work pressure creates bad temper
- (C) Bad temper harms human relationship
- (D) We speak of it as a mere infirmity of nature, perhaps a family failing.

Instructions for (Q. 20 to 29):

Fill in the blank with the most appropriate option from the given alternatives.

20. We are trying to _____ correct information and dispel wrong information that is being circulated
- (A) raise (B) foster (C) cultivate (D) disseminate

21. When we decided to move, my mother wanted a place with a _____ outside every window to keep potted plants.
 (A) balcony (B) ledge (C) curtain (D) stained glass
22. While Dinesh can never acquire a choir boyish innocence, he has _____ and seems to know that an entire nation's sporting image stands on the team's sportsmanship.
 (A) mellowed (B) discarded (C) plummeted (D) flipped
23. The construction of identity (for both men and women) is _____ by culture, nationality, class and historical differences
 (A) inferred (B) interlocked (C) influenced (D) instigated
24. While we believed that BMI is a standard in measuring the fat in our body, there is a growing _____ among scientists that it may not be the best tool to do so.
 (A) concord (B) consensus (C) congruous (D) confluence
25. Under the new rule, the civic body can take _____ action against the violators by imposing a fine
 (A) punitive (B) vindictive (C) pejorative (D) diminutive
26. The SC has cautioned HCs against reversing the acquittal of an accused by the trial court unless the judgment was _____ wrong.
 (A) ostensibly (B) tangibly (C) palpably (D) allegedly
27. From the rim of the excavation site, the archaeologists was unable to surmise exactly what the _____ chamber might hold.
 (A) terra firma (B) subterranean (C) ground level (D) beneath
28. The heat was becoming unbearable as the temperature was rising _____ the rains had been delayed.
 (A) However (B) Therefore (C) Moreover (D) Nonetheless
29. Miles Davis, the jazz player, _____ supremely expressive, didn't have the range or technique to play convincingly in the bebop style.
 (A) moreover (B) though (C) nevertheless (D) on the one hand

Instructions for (Q. 30 to 35):

Select the meaning of the underlined phrases/idioms.

30. It's easy for you to splurge when you have your mom's credit card, but remember after the feast comes the reckoning.
 (A) Trust is easy to break (B) Truth can't be hidden forever
 (C) Every action has a consequence (D) Don't take your parents for granted
31. The distance between the towns is only 30 kms as the crow files.
 (A) when measured in a straight line
 (B) when measured in a random manner
 (C) when measured between the two highest point
 (D) when the curves of the road are included in the measurement
32. I didn't want to go to the exhibition but Leena twisted my arm.
 (A) forced me (B) tested me (C) fought with me (D) discouraged me
33. In this age of super specialisation, industrial engineers are in demand because they are the only ones who can see the big picture.
 (A) realistic view of something (B) complete view of something
 (A) narrow view of something (D) accurate view of something
34. What is the matter with him ? He is falling foul of his friends.
 (A) betraying (B) quarrelling with
 (C) losing touch with (D) being badly hurt by

35. She gave me a cold shoulder when I want to see her.
(A) abused me (B) insulated me (C) ignored me (D) scolded me

Instructions for (Q. 36 to 43):

In the following passage there are some numbered blanks. Fill in the blanks by selecting the most appropriate word for each blank from the given options.

Carnatic vocalist playback singer and composer Manalampalli Balamurali Krishna, who burst into the music world as a child (36) _____ passed away on 22 November 2016. The (37) _____ of Balamurali Krishna include a musical (38) _____ which showed up as his ability to (39) _____ and reproduce music heard just once, his ability to (40) _____ more than one musical instrument, his ability to compose from the age of 15 and finally, his (41) _____ voice manifested as ability to utter clearly, pronounce faithfully and accent correctly the lyrical phrases along with the (42) _____ of the underlying musical (43) _____ and microtones.

36. (A) spectacle (B) prodigy (C) paragon (D) demigod
37. (A) talents (B) potentials (C) capacities (D) advantages
38. (A) perception (B) smartness (C) denseness (D) acumen
39. (A) recite (B) retain (C) realize (D) repeat
40. (A) handle (B) work (C) create (D) manoeuvre
41. (A) abled (B) gifted (C) stunned (D) staggered
42. (A) signs (B) slots (C) tokens (D) nuances
43. (A) notes (B) marks (C) records (D) remarks

Instructions for (Q. 44 to 47):

Select the most appropriate option to fill in the blanks from the given alternatives.

44. Worries _____ all kinds of illness, from high blood pressure to stomachache
(A) believe to have caused (B) are believed to be caused
(C) are believed to cause (D) believed to be caused
45. I _____ all the books on the reading list before I attended the lecture.
(A) had read (B) have read (C) would have read (D) would read
46. Bala Chandra _____ school before. The desire to become a famous novelist led him to attend the adult literacy classes.
(A) never attends (B) was never attentive
(C) had never attended (D) will be attending
47. I set the alarm for 6.30 in the morning _____ I wouldn't miss the train.
(A) in case (B) unless (C) until (D) so that

Instructions for (Q. 48 to 50):

Select the word which means the opposite of the underlined word.

48. The activities of the cine club will conclude early next year owing to the volume of work that has kept its members occupied.
(A) continue (B) commence (C) comprehend (D) conduct
49. The town in unique in its appearance
(A) picturesque (B) singular (C) drab (D) typical
50. Mr. Prakash was candid at a history TV promotional in Mumbai recently.
(A) fickle (B) forthright (C) unapologetic (D) guarded

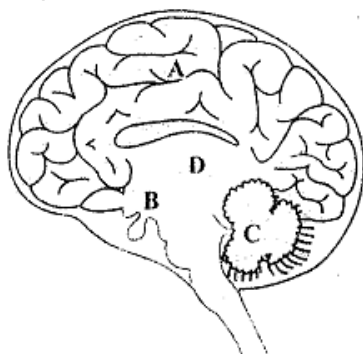
ANSWERS

- | | | | | |
|---------|---------|---------|---------|---------|
| 1. (C) | 2. (B) | 3. (D) | 4. (C) | 5. (D) |
| 6. (A) | 7. (B) | 8. (B) | 9. (D) | 10. (B) |
| 11. (B) | 12. (C) | 13. (A) | 14. (D) | 15. (C) |
| 16. (A) | 17. (C) | 18. (C) | 19. (D) | 20. (D) |
| 21. (B) | 22. (A) | 23. (C) | 24. (B) | 25. (A) |
| 26. (A) | 27. (B) | 28. (C) | 29. (B) | 30. (C) |
| 31. (A) | 32. (A) | 33. (B) | 34. (B) | 35. (C) |
| 36. (B) | 37. (A) | 38. (D) | 39. (B) | 40. (D) |
| 41. (B) | 42. (D) | 43. (A) | 44. (C) | 45. (A) |
| 46. (C) | 47. (D) | 48. (B) | 49. (D) | 50. (D) |



SCHOLASTIC APTITUDE TEST (SAT)

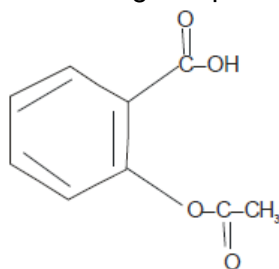
- Small cut pieces of soft stems are placed in growth medium with following plant hormones. Which combination of plant hormones will show slowest growth ?
(A) Auxin + Cytokinin (B) Gibberellins + Auxin
(C) Gibberellins + Cytokinin (D) Abscisic Acid + Auxin
- Which one of the following demonstrates the characteristics of cardiac muscle cells ?
(A) Involuntary and multinucleated (B) Unbranched and uninucleated
(C) Cylindrical and uninucleated (D) Unbranched and involuntary
- From the given figure identify the part of human brain controlling most of the involuntary actions :



- (A) A & B (B) B & C (C) C & D (D) D & A
- An animal kept in a jar has the following features.
I. It is bilaterally symmetrical.
II. It has coelomic cavity.
III. The body is segmented.
IV. It has jointed appendages.
To which phylum does the animal belong to ?
(A) Arthropoda (B) Annelida (C) Platyhelminthes (D) Mollusca
 - Read the following statements and select the correct option.
STATEMENT I : Nostoc and Bacteria are prokaryotes.
STATEMENT II : Penicillium and Spirogyra are fungi.
(A) Only Statement I is true. (B) Only Statement II is true.
(C) Both Statements I and II are true. (D) Both Statements I and III are false.
 - You find a herbaceous flowering plant growing in your school garden having leaves with parallel venation. Choose the Correct additional features the given plant would be possessing.
I. It has no secondary vascular tissues.
II. Its flower possesses three sepals.
III. It possesses tap root. IV. Its embryo has 2 cotyledons.
(A) I and II (B) I and III (C) II and IV (D) III and IV
 - Varieties of vegetables such as cabbage, broccoli and cauliflower have been produced from wild cabbage species. Such process of producing new varieties of living organisms is called
(A) Natural selection (B) Artificial selection (C) Speciation (D) Genetic drift
 - Which of the following are pairs of analogous organs ?
I. Forelimbs of horse—Wings of bat
II. Wings of bat — Wings of butterfly
III. Forelimbs of horse — Wings of butterfly IV. Wings of bird—Wings of bat
(A) I and II (B) II and IV (C) III and IV (D) II and III

9. Which of the following organisms is used as a biopesticide ?
 (A) Azolla (B) Anabaena (C) Rhizobium (D) Trichoderma
10. A tall plant (TT) is crossed with a dwarf plant (tt). All F₁ plants showed tall phenotype. Which of the following correctly defines a test cross ?
 (A) TT (F₁) × Tt(P) (B) Tt(F₁) × Tt(P) (C) tt(F₁) × Tt(P) (D) Tt(F₁) × tt(P)
11. Which one of the following pairs of causative agent and type of disease are correct ?
 (I) Leishmania – Sleeping sickness (II) Nematode – Elephantiasis
 (III) Trypanosoma – Kala azar (IV) Staphylococcus – Acne
 (A) I & II (B) II & III (C) II & IV (D) III & IV
12. Pancreatic juice contains more than one enzyme. Which among the following combination is correct ?
 (A) pepsin and lipase (B) amylase and pepsin
 (C) pepsin and trypsin (D) trypsin and lipase
13. You discover a new species of a plant. You also discover that it produces motile sperms and dominant generation has diploid cells. It belongs to
 (A) Bryophyte (B) Angiosperm (C) Gymnosperm (D) Pteridophyte
14. Every 20 minutes, one bacterium divides into two. How many bacteria will be produced after two hours, if one starts 10 bacteria ?
 (A) 2⁵ × 10 (B) 2⁵ × 10⁵ (C) 2⁶ × 10 (D) 2⁶ × 10⁶
15. The metal (M) forms an oxide, M₂O₃. The formula of its nitride will be
 (A) M₂N₃ (B) MN (C) M₂N (D) M₃N₂
16. A solution is a homogeneous mixture of two or more substances. Which of the following is a solution?
 (A) Milk (B) Smoke (C) Brass (D) Face Cream
17. 1.80 g of glucose is dissolved in 36.00 g of water in a beaker. The total number of oxygen atoms in the solution is
 (A) 12.405 × 10²³ (B) 12.405 × 10²² (C) 6.022 × 10²³ (D) 6.022 × 10²²
18. ³⁵Cl And ³⁷Cl are the two isotopes of chlorine, in the ratio 3 : 1 respectively. If the isotope ratio is reversed the average atomic mass of chlorine will be:
 (A) 35.0 u (B) 35.5u (C) 36.0u (D) 36.5u
19. The turmeric solution will turn red by an aqueous solution of
 (A) potassium acetate (B) copper sulphate
 (C) sodium sulphate (D) ferric chloride
20. A metal 'M' of moderate reactivity is present as its sulphide 'X'. On heating in air, 'X' converts into its oxide 'Y' and a gas evolves. On heating 'Y' and 'X' together, the metal 'M' is produced. 'X' and 'Y' respectively are
 (A) 'X' = cuprous sulphide, 'Y' = cuprous oxide
 (B) 'X' = cupric sulphide, 'Y' = cupric oxide
 (C) 'X' = sodium sulphide, 'Y' = sodium oxide
 (D) 'X' = calcium sulphide, 'Y' = calcium oxide
21. Which one of the following statement is incorrect about graphite and diamond ?
 (A) Graphite is smooth and slippery
 (B) Diamond is good conductor of heat
 (C) Graphite is a good conductor of electricity
 (D) Physical and chemical properties of graphite and diamond are different

22. The functional groups present in the following compound are :

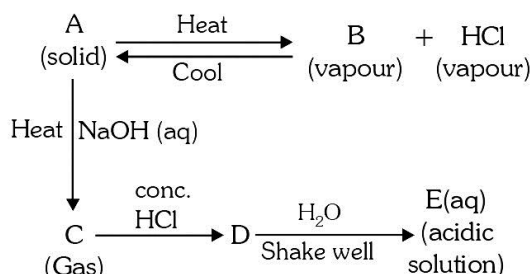


- (A) alcohol, ketone and ester (B) ester and carboxylic acid
 (C) carboxylic acid and ketone (D) ester and alcohol
23. A part of the modern periodic table is presented below in which the alphabets represent the symbols of elements.

Group →	1	2	14	15	16	17
Period ↓				M	Q	
2						
3	A	J			R	
4	E		L			T
5	G					X

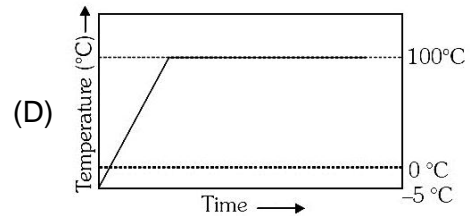
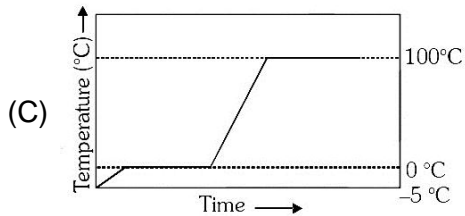
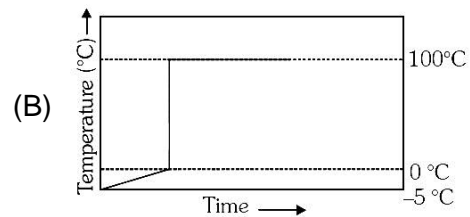
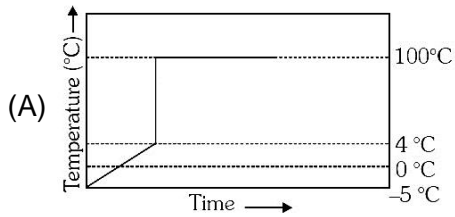
Consult the above part of the periodic table to predict which of the following is a covalent compound

- (A) RQ_2 (B) AT (C) JQ (D) JX_2
24. A compound 'X' reacts with a compound 'Y', to produce a colourless and odourless gas. The gas turns lime water milky. When 'X' reacts with methanol in the presences of concentrated H_2SO_4 , a sweet smelling substance is produced. The molecular formula of the compound 'X' is :
- (1) C_2H_4O (2) $C_2H_4O_2$ (3) C_2H_6O (4) $C_2H_6O_2$
25. The schematic diagram is given below

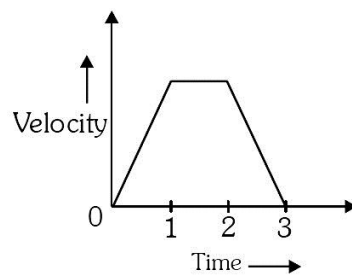


Which of the following is an incorrect statement ?

- (A) A and E are chemically same (B) A and D are chemically same
 (C) D and E are chemically same (D) C and E are chemically same
26. Which of the following is a feasible reaction?
- (A) $Ba(s) + K_2SO_4(aq) \rightarrow BaSO_4(aq) + 2K(s)$
 (B) $Zn(s) + 2AgNO_3(aq) \rightarrow Zn(NO_3)_2(aq) + 2Ag(s)$
 (C) $Mg(s) + Na_2SO_4(aq) \rightarrow MgSO_4(aq) + 2Na(s)$
 (D) $Cu(s) + MgSO_4(aq) \rightarrow CuSO_4(aq) + Mg(s)$
27. Some ice pieces kept at a temperature $-5^\circ C$ are heated gradually to $100^\circ C$ in a beaker. The temperature of the contents are plotted against time. The correct plot is:

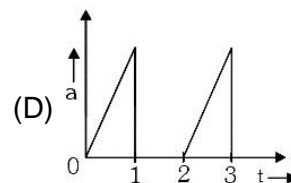
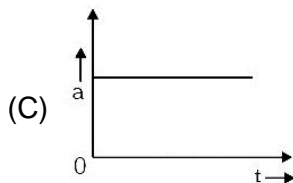
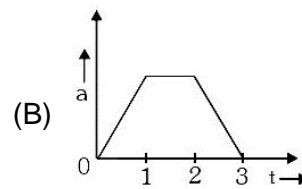
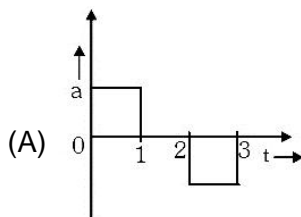


28. The velocity-time graph of an object moving along a straight line is shown below :



Which one of the following graphs represents the acceleration(a) - time(t) graph for the above motion?

.....reviving internal teacher
Knowledge Centre for Success Educate Pvt. Ltd.



29. To read a poster on a wall, a person with defective vision needs to stand at a distance of 0.4 m from the poster. A person with normal vision can read the poster from a distance of 2.0 m. Which one of the following lens may be used to correct the defective vision?

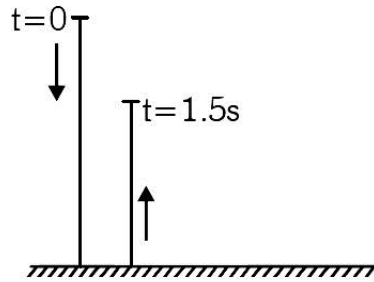
(A) A concave lens of 0.5 D

(B) A concave lens of 1.0 D

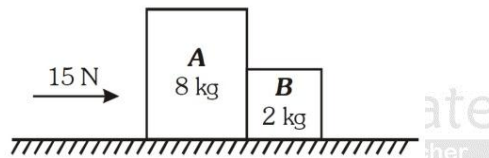
(C) A concave lens of 2.0 D

(D) A convex lens of 2.0 D

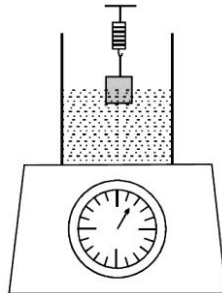
30. A ball released from rest at time $t = 0$ hits the ground. It rebounds inelastically with a velocity 5 ms^{-1} and reaches the top at $t = 1.5 \text{ s}$. What is the net displacement of the ball from its initial position after 1.5 s ? ($g = 10 \text{ ms}^{-2}$)



- (A) 1.25 m (B) 3.75m (C) 5.00m (D) 6.25 m
31. A horizontal jet of water is made to hit a vertical wall a negligible rebound. If the speed of water from the jet is ' v ' the diameter of the jet is ' d ' and the density of water is ' ρ ', then the force exerted on the wall by the jet of water is
- (A) $\frac{\pi}{4} d^2 \rho v$ (B) $\frac{\pi}{4} d^2 \rho v^2$ (C) $\frac{\pi}{8} d^2 \rho v^2$ (D) $\frac{\pi}{2} d^2 \rho v^2$
32. Two blocks A and B of masses 8 kg and 2 kg respectively, lie on a horizontal frictionless surface as shown in the figure. They are pushed by a horizontally applied force of 15 N. The force exerted by B on A is

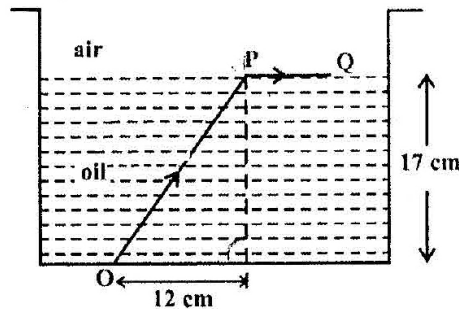


- (A) 1.5 N (B) 3.0 N (C) 4.5 N (D) 6.0 N
33. A beaker half-filled with water is put on a platform balance which is then set to zero. A 800 g mass is immersed partially in water using a spring balance as shown in the figure. If the spring balance reads 300 g, what will be the reading on the platform balance?

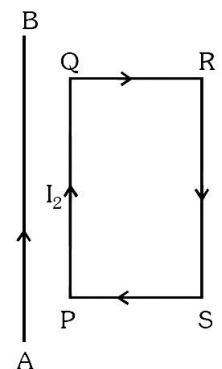


- (A) 200 g (B) 300 g (C) 500 g (D) 800 g
34. An object falls a distance H in 50 s when dropped on the surface of the earth. How long would it take for the same object to fall through the same distance on the surface of a planet whose mass and radius are twice that of the earth? (Neglect air resistance.)
- (A) 35.4 s (B) 50.0 s (C) 70.7 s (D) 100.0 s
35. A source produces sound waves under water. Waves travel through water and then into air. Which of the following statements about the frequency (f) and the wavelength (λ) is correct as sound passes from water to air?
- (A) f remains unchanged but λ decreases (B) f remains unchanged but λ increases
 (C) λ remains unchanged but f decreases (D) λ remains unchanged but f increases

36. The diameter of a wire is reduced to one-fifth of its original value by stretching it. If its initial resistance is R , what would be its resistance after reduction of the diameter ?
- (A) $\frac{R}{625}$ (B) $\frac{R}{25}$ (C) $25 R$ (D) $625 R$
37. An object of mass ' m ' moving along a straight line with a velocity ' u ' collides with a heavier mass ' M ' and gets embedded into it. If the compound system of mass $(m + M)$ keeps moving in the same direction then which of the given options is true?
- (A) The kinetic energies before and after collision are same
- (B) The kinetic energy after collision is $\frac{1}{2}(M + m)u^2$
- (C) There will be a loss of kinetic energy equal to $\frac{1}{2} \frac{m^2 u^2}{(M + m)}$
- (D) There will be a loss of kinetic energy equal to $\frac{1}{2} \frac{Mm}{(M + m)} u^2$
38. A vessel is filled with oil as shown in the diagram. A ray of light from point O at the bottom of vessel is incident on the oil - air interface at point P and grazes the surface along PQ . The refractive index of the oil is close to –



- (A) 1.41 (B) 1.50 (C) 1.63 (D) 1.73
39. A charged particle placed in an electric field falls from rest through a distance d in time t . If the charge on the particle is doubled, the time of fall through the same distance will be
- (A) $2T$ (B) T (C) $\frac{t}{\sqrt{2}}$ (D) $\frac{t}{2}$
40. AB is a long wire carrying a current I_1 , and $PQRS$ is a rectangular loop carrying current I_2 (as shown in the figure).
- Which among the following statements are correct ?
- (a) Arm PQ will get attracted to wire AB , and the arm RS will get repelled from wire AB .
- (b) Arm PQ will get repelled from wire AB and arm RS attracted to wire AB .
- (c) Forces on the arms PQ and RS will be unequal and opposite.
- (d) Forces on the arms QR and SP will be Zero.
- (A) only (a) (B) (b) and (c)
- (C) (a) and (c) (D) (b) and (d)



41. The sum of all the possible remainders, which can be obtained when the cube of a natural number is divided by 9, is
 (A) 5 (B) 6 (C) 8 (D) 9
42. When a polynomial $p(x)$ is divided by $x - 1$, the remainder is 3. When $p(x)$ is divided by $x - 3$, the remainder is 5. If $r(x)$ is the remainder when $p(x)$ is divided by $(x - 1)(x - 3)$, then the value of $r(-2)$ is
 (A) -2 (B) -1 (C) 0 (D) 4
43. For what value of p , the following pair of linear equations in two variables will have infinitely many solutions?
 $px + 3y - (p - 3) = 0$
 $12x + py - p = 0$
 (A) 6 (B) -6 (C) 0 (D) 2
44. Two quadratic equations $x^2 - bx + 6 = 0$ and $x^2 - 6x + c = 0$ have a common root. If the remaining roots of the first and second equations are positive integers and are in the ratio 3 : 4 respectively, then the common root is
 (A) 1 (B) 2 (C) 3 (D) 4
45. First term of an arithmetic progression is 2. If the sum of its first five terms is equal to one-fourth of the sum of the next five terms, then the sum of its first 30 terms is
 (A) 2670 (B) 2610 (C) -2520 (D) -2550
46. A circle C is drawn inside a square S so that the four sides of S are tangents to C . An equilateral triangle T is drawn inside C with its vertices on C . If the area of S is k times the area of T , then the value of k is
 (A) $\frac{16}{3\sqrt{3}}$ (B) $\frac{16}{\sqrt{3}}$ (C) $\frac{32}{3\sqrt{3}}$ (D) $\frac{32}{\sqrt{3}}$
47. Let AP be a diameter of a circle of radius r and PT be the tangent to the circle at the point P such that the line AT intersects the circle at B . If $PT = 8$ units and $BT = 4$ units, then r is equal to
 (A) $4\sqrt{3}$ units (B) 4 units (C) $\frac{4}{\sqrt{3}}$ units (D) $2\sqrt{3}$ units
48. If the quadratic equation $x^2 + bx + 72 = 0$ has two distinct integer roots, then number of all possible values for b is
 (A) 12 (B) 9 (C) 15 (D) 18
49. If the area of a square inscribed in a semicircle is 2cm^2 , then the area of the square inscribed in a full circle of the same radius is
 (A) 5cm^2 (B) 10cm^2 (C) $5\sqrt{2}\text{cm}^2$ (D) 25cm^2
50. If the discriminants of two quadratic equations are equal and the equations have a common root 1, then the other roots
 (A) are either equal or their sum is 2 (B) have to be always equal
 (C) are either equal or their sum is 1 (D) have their sum equal to 1
51. Three circular wires are attached in series such that, if one wire is rotated, other two also get rotated. If the diameter of a wire is $\frac{4}{5}$ times that of immediate left wire and the left most wire rotates at the speed of 32 revolutions per minute, then the number of revolutions made by right most wire per minute will be
 (A) 40 (B) 49 (C) 50 (D) 60
52. Let ABC be an equilateral triangle. If the co-ordinates of A are $(1, 2)$ and co-ordinates of B are $(2, -1)$, then
 (A) C cannot lie in the first quadrant (B) C cannot lie in the second quadrant.
 (C) C is the origin (D) C cannot lie in the third quadrant

53. Shyam wants to make a solid brick shape structure from 400 wooden cubes of unit volume each. If the sides of the solid brick have the ratio 1 : 2 : 3, then the maximum number of cubes, which can be used will be
 (A) 400 (B) 288 (C) 300 (D) 384
54. Positive integers from 1 to 21 are arranged in 3 groups of 7 integers each, in some particular order. Then the highest possible mean of the medians of these 3 groups is
 (A) 16 (B) 12.5 (C) 11 (D) 14
55. On dividing 2272 as well as 875 by a 3-digit number N, we get the same remainder in each case. The sum of the digits of N is
 (A) 10 (B) 11 (C) 12 (D) 13
56. A line ℓ passing through the origin makes an angle θ with positive direction of x-axis such that $\sin \theta = \frac{3}{5}$. The co-ordinates of the point, which lies in the fourth quadrant at a unit distance from the origin and on perpendicular to ℓ , are
 (A) $\left(\frac{3}{5}, -\frac{4}{5}\right)$ (B) $\left(\frac{4}{5}, -\frac{3}{5}\right)$ (C) (3, -4) (D) (4, -3)
57. The value(s) of k for which $x^2 + 5kx + k^2 + 5$ is exactly divisible by $x + 2$ but not by $x + 3$ is (are)
 (A) 1 (B) 5 (C) 1, 9 (D) 9
58. If $\cos^4 \theta + \sin^2 \theta = m$, then
 (A) $1 \leq m \leq 2$ (B) $\frac{1}{2} \leq m \leq 1$ (C) $\frac{3}{4} \leq m \leq 1$ (D) $\frac{3}{4} \leq m \leq \frac{13}{16}$
59. Cost of 2 apples, 3 bananas and one coconut is Rs. 26. Also the cost of 3 apples, 2 bananas and two coconuts is Rs. 35. Then the cost of 12 apples, 13 bananas and 7 coconuts is
 (A) Rs. 172 (B) Rs. 148 (C) Rs. 143 (D) Rs. 126
60. ABC is a field in the form of an equilateral triangle. Two vertical poles of heights 45 m and 20 m are erected at A and B respectively. The angles of elevation of the tops of the two poles from C are complementary to each other. There is a point D on AB such that from it, the angles of elevation of the tops of the two poles are equal. Then AD is equal to
 (A) $17\frac{5}{12}$ m (B) $20\frac{10}{13}$ m (C) $20\frac{5}{13}$ m (D) $17\frac{10}{12}$ m
61. Arrange the developments related to European history in a chronological sequence.
 I. Napoleon invaded Italy. II. Unification of Italy.
 III. Unification of Germany. IV. Vienna' Settlement.
 (A) I, III, II and IV (B) I, II, IV and III (C) I, IV, II and III (D) I, II, III and IV
62. Which of the following statements about Liberals in 19th century Europe are correct ?
 I. They favoured the Catholic Church
 II. They opposed dynastic rule with unlimited power.
 III. They were democrats.
 IV. They did not want any voting rights for women.
 (A) I, II and III (B) I, II and IV (C) II and IV (D) III and IV
63. Which of the following statements are correct?
 I. In the beginning Bombay was under the Portuguese control.
 II. Control of Bombay passed onto the French in the 17th century.
 III. The Marathas replaced the French in Bombay.
 IV. Bombay became the capital of the Presidency in early 19th century.
 (A) I, II and IV (B) I and IV (C) I, II and III (D) II, III and IV

64. Which of the following statements are correct?
 I. The Chinese introduced printing.
 II. The Buddhist missionaries introduced printing in Japan.
 III. The Chinese developed printing to facilitate their expanding trade.
 IV. Printing reached Europe through Italy.
 (A) I, II and III (B) I, II and IV (C) II, III and IV (D) I and IV

Direction (Questions 65 - 72).

Read the statements and select the correct answer from the options given below.

- (A) Statement I is true, Statement II is false.
 (B) Statement I is false, Statement II is true.
 (C) Both Statements' are true, and Statement II provides explanation to Statement I.
 (D) Both Statements are true, but Statement II does not provide explanation of Statement I.
65. Statement I: During the years of the Great Depression the economic crisis was worse in Germany.
 Statement II: The President of the Weimar Republic had the power to impose emergency.
66. Statement I : The Forest Act of 1878 categorized some forests as 'reserved forests'.
 Statement II: They were considered the best forests for people's use.
67. Statement I: Shifting cultivation was widely prevalent in different parts of India in the 19th century.
 Statement II : More and more people took to shifting cultivation when forest laws were enacted.
68. Statement I: Cricket emerged as a colonial game.
 Statement II: Cricket was started in England.
69. Statement I: Mahatma Gandhi wished everyone had clothes to wear.
 Statement. II: He wanted everyone to wear the single loin cloth as he did.
70. Statement I: The Spanish conquest of America was not a conventional military
 Statement II: One of the most powerful weapons was the spread of smallpox
71. Statement I: The silk routes led to trade and cultural links between distant parts of the world.
 Statement II: Early Christian missionaries travelled to Asia through this route.
72. Statement I: The French used forced labour in Indo-China for building canals.
 Statement II: Vietnam became a major exporter of rice in the world.
73. "Match List I (Layers of Atmosphere) and List II (Characteristics) and select the correct answer using the code given below.

List I (Layers of Atmosphere)

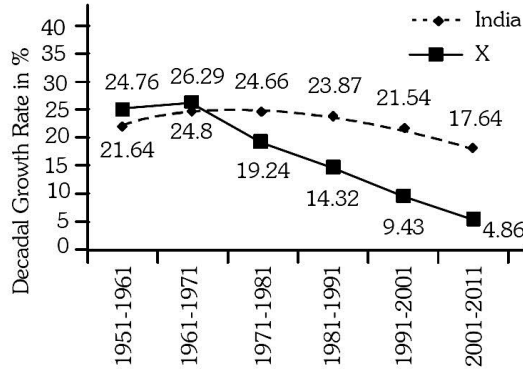
- A. Ionosphere
 B. Stratosphere
 C. Exosphere
 D. Troposphere
 (A) A-II, B-III, C-IV, D-I
 (C) A-II, B-III, C-I, D-IV

List II (Characteristics)

- I. Contains Ozone
 II. Reflects radio Waves
 III. Fall in Temperature
 IV. Extremely low air density
 (B) A-II, B-1, C-IV, D-III
 (D) A-III, B-I,C-IV, D-II

74. Which of the following statements are correct? .
 I. Rann of Kutch is formed by the recession of the sea
 II. Kuchaman, Sambhar and Didwana are salt water lakes
 III. The land to the east of. Aravallis is known as Bagar
 IV. The fertile flood plains formed by small streams in Rajasthan are known as Rohi
 (A) I, II and IV (B) I, III and IV (C) II, III and IV (D) I, II, III and IV

75. Observe the graph given below:



Identify the state with population growth rate marked by 'X' in the given graph.

- (A) Goa (B) Kerala (C) Sikkim (D) Nagaland

76. River Alaknanda forms confluences (Prayags) in Uttarakhand. Match the codes given in Figure with Table (Prayags) and select the correct answer using the code given below.

Figure	Table (Prayags)
	(I) Karn Prayag
	(II) Rudra Prayag
	(III) Nand prayag
	(IV) Vishnu Prayag

77. Match List I (Original Rock) with List II (Metamorphic Rock) and select the correct answer using the code given below:

List I

(Original Rock)

- A. Granite
B. Coal
C. Limestone
D. Shale

- (A) A-III, B-IV, C-II, D-I
(C) A-IV, B-II, C-I, D-III

List II

(Metamorphic Rock)

- I. Diamond
II. Marble
III. Slate
IV. Gneiss

- (B) A-III, B-II, C-IV, D-I
(D) A-IV, B-I, C-II, D-III

78. Observe the given map.



Which one of the following statement is NOT true about the shaded state indicated on the map?

- (A) Society predominantly follows right of female ultimogeniture
(B) The state is an example of areas with karst topography
(C) The state is a major producer of potatoes in India
(D) Some parts of the state receive extremely high rainfall

79. Match List I (Mineral Oil Refineries) with List II (States) and select the correct answer using the codes given below :

List I (Mineral Oil Refineris)

- A. Numaligarh
B. Bathinda
C. Tatipaka
D. Bina

- (A) A-IV, B-II, C-III, D-I
(C) A-II, B-I, C-IV, D-III

List II (States)

- I. Punjab
II. Andhra Pradesh
III. Madhya Pradesh
IV. Assam

- (B) A-IV, B-I, C-II, D-III
(D) A-IV, B-III, C-II, D-I

80. 'Slash and Burn Agriculture' is known by specific name in different states of India. Match the shaded states marked in the given map with codes given in the Table (Different names of Slash and Burn Agriculture) and select the correct answer using the code given below.



Table

(Different Names of Slash and Burn Agriculture)

- I. Bringa
II. Waltre
III. Dahiya
IV. Kuruwa

81. Match List I (Industries) with List II (Important Centers) and select the correct answer using the codes given below :

- (A) A-III, B-IV, C-II, D-I
(C) A-I, B-IV, C-II, D-III

- (B) A-III, B-II, C-IV, D-I
(D) A-I, B-II, C-IV, D-III

List I

(Industries)

- A. Cotton textile
B. Hosiery
C. Jute
D. Silk textile

- (A) A-I, B-III, C-IV, D-II
(C) A-III, B-II, C-I, D-IV

List – II

(Important Centers)

- I. Ludhiana
II. Rishra
III. Coimbatore
IV. Mysuru

- (B) A-IV, B-I, C-II, D-III
(D) A-III, B-I, C-II, D-IV

82. Which one of the following island is closest to the equator?

- (A) Minicoy (B) Car Nicobar (C) Little Nicobar (D) Great Nicobar

83. Which of the following characteristics are true about plantation agriculture?

- I. Generally plantation agriculture is considered as an example of subsistence farming.
II. Generally single crop is grown on a large area in plantation agriculture.
III. It has an interface of agriculture and industry.
IV. It uses capital intensive inputs .. ~

- (A) I and IV (B) III and IV (C) I, II and III (D) II, III and IV

84. Match List-1 (Vegetation zones) with List-II (Mean Annual Temperature Range) and *select* the correct answer the code given below

List I (Vegetation Zones)	List II (Mean Annual Temperature Range)
A. Alpine	I. Above 24°C
B. Temperate	II. 17°C to 24°C
C. Tropical	III. Below 7°C
D. Sub-tropical	IV. 7°C to 17°C

85. 'In a democracy, the Will of the people is supreme.' Which of the following statement concerning democracy in India best reflects this?
- (A) The President appoints the Prime Minister who is the leader of the political party possessing a majority in the Lok Sabha.
- (B) An assembly of elected representatives exercises political authority on behalf of the people.
- (C) In case of a difference between the two Houses of Parliament, the final decision is taken in a joint session of the two houses.
- (D) The permanent executive has more powers than the political executive.
86. Which of the following statements about the Panchayati Raj Institutions after the Constitutional Amendment in 1992 are false?
- I. Seats are reserved for the Scheduled Castes, Scheduled Tribes, and Other Backward Classes in the elected bodies of the Panchayati Raj
- II. Elections to the Panchayati Raj Institutions are supervised by the Election Commission of India.
- III. Elections to the Panchayati Raj Institutions are held regularly after every five years.
- IV. Half of the seats in all the States are reserved for women.
- (A) I and III (B) I and II (C) III and IV (D) II and IV

87. Match List I (political Systems) with List II (Nations) and select the answer using the codes given below.

List I (Political Systems)	List II (Nations)
A. Federal, Presidential, Republic	I. India
B. Federal, Parliamentary Republic	II. United Kingdom
C. Unitary, Parliamentary Monarchy	III. Germany
D. Presidential cum Parliamentary Republic	IV. United States of America
	V. France

- (A) A-IV, B-I, C-II, D-V (B) A-IV, B-I, C-II, D-III
- (C) A-V, B-IV, C-II, D-III (D) A-V, B-II, C-III, D-IV

88. Which of the following statements about the federal system in India are true?
- I. The Constitution of India provides for a three-fold distribution of legislative powers between the Union and the State Governments.
- II. Both the Union and the State Governments can Legislate on residuary subjects.
- III. The Parliament cannot on its own change the power-sharing arrangement between the Union and the State Governments.
- IV. The High Courts have no role in resolving disputes about the division
- (A) I and III (B) II, III and IV (C) III and IV (D) I, II and IV

89. Which of the following group of States Union Territories have only one Lok Sabha constituency?
 (A) Arunachal Pradesh, Sikkim, Lakshadweep
 (B) Goa, Meghalaya, Andaman and Nicobar Islands .
 (C) Chandigarh, Sikkim, Mizoram
 (D) Manipur, Dadra.and Nagar Haveli, Puducherry
90. Which of the following statements best reflects the 'socialist' feature of the Preamble to the Constitution of India?
 (A) There are no unreasonable restrictions on how the citizens express their thoughts.
 (B) The traditional *social* inequalities have to be abolished.
 (C) Government should regulate the ownership of land and industry to reduce socio-economic inequalities.
 (D) No one should treat a fellow citizen as inferior
91. Which of the following statements about the Indian judiciary is true?
 (A) India has an integrated judiciary.
 (B) The Judiciary in India is subordinate to the Executive.
 (C) The Supreme Court is more powerful than Parliament.
 (D) The. Chief Justice of India is appointed by the Prime Minister
92. Which of the following Fundamental Rights includes the Right to Education?
 (A) Right to Equality (B) Right to Freedom
 (C) Cultural and Educational Rights (D) Right to Constitutional Remedies
93. Which of the following is NOT an indicator of economic development?
 (A) Increased per capita income (B) Decreased infant mortality
 (C) Increased life expectancy at birth (D) Decreased women participation in job market.
94. The poverty line in Dinanagar is set at Rs.100 per capita per day. Five Hundred people live in Dinanagar of whom 50 earn Rs 30 per capita per day and another 25 earn Rs 80 per capita per day each. Everybody else earn more than Rs 100 per day per capita. What is the minimum amount that the government of Dinanagar will have to spend to completely eradicate poverty?
 (A) Rs 3000 (B) Rs 3500. (C) Rs 4000 (D) Rs 4500
95. The local telephone company sells me a landline connection only if I purchase a handset from them as well. Which of the following rights does this practice violate under the Consumer Protection Act 1986?
 (A) Right to represent (B) Right to information
 (C) Ri&ht to choose (D) Right to seek redressal
96. Match List-I (Type of Unemployment) with List-II (Characteristics) and select the correct answer using the codes given below

List I
(Type of Unemployment)

- A. Seasonal
 B. Frictional
 C. Disguised
 D. Structural
 E. Cyclical
 (A) A-V, B-III, c-iv, D-II, E-I
 (C) A-I, B-II, C-III, D-IV, E-V

List II
(Characterlstics)

- I. Occurs during boom or recession in the economy
 II. An absence of demand for a certain type of workers
 III. Occurs when moving from one job to another
 IV. Actual contribution by the additional labour is nil
 V. Job opportunities during certain months in the year
 (B) A-IV B-V , C-III, D-I E-II
 (D) A-V, B-IV, C-III, D-II, E-I

97. Suppose Indian Farmers sell wheat at Rs 50 per kg and the international price of wheat is Rs 40 per kg. What is the minimum rate of import duty Government of India must impose on imported wheat so that it does not adversely affect Indian farmers in the domestic market?
 (A) 10% (B) 20% (C) 25% (D) 30%
98. The wage rate of a worker in a country is Rs 300 per day. Which of these person(s) would you consider unemployed?
 A. Ramu is willing to work at Rs 300 a day, but cannot find work.
 B. Suresh is willing to work only at Rs 400 a day or more, and cannot find work.
 C. Shanti stays at home because she has young children to look after.
 (A) Ramu (B) Suresh (C) Ramu and Suresh (D) Ramu and Shanti
99. Which of the following can be used as collateral in Indian banks to borrow money?
 (A) Bank Passbook (B) Credit Card (C) Own House (D) Passport
100. The total agricultural land in a village is 1200 hectares. This is distributed among 320 families who form four groups in the following pattern. It is assumed that the land is distributed equally within each group. Identify the group of small farmers.

Group	Number of Families	Total amount of land owned and operated by each group (in hectares)
A	100	300
B	180	300
C	30	300
D	10	300

- (A) A (B) B (C) C (D) D

ANSWERS

- | | | | | |
|---------|---------|---------|---------|----------|
| 1. (D) | 2. (C) | 3. (C) | 4. (A) | 5. (A) |
| 6. (A) | 7. (B) | 8. (B) | 9. (D) | 10. (D) |
| 11. (C) | 12. (D) | 13. (D) | 14. (C) | 15. (B) |
| 16. (C) | 17. (A) | 18. (D) | 19. (A) | 20. (A) |
| 21. (D) | 22. (B) | 23. (A) | 24. (B) | 25. (D) |
| 26. (B) | 27. (C) | 28. (A) | 29. (C) | 30. (B) |
| 31. (B) | 32. (B) | 33. (C) | 34. (C) | 35. (A) |
| 36. (D) | 37. (D) | 38. (D) | 39. (C) | 40. (C) |
| 41. (D) | 42. (C) | 43. (A) | 44. (B) | 45. (D) |
| 46. (A) | 47. (A) | 48. (A) | 49. (A) | 50. (A) |
| 51. (C) | 52. (B) | 53. (D) | 54. (D) | 55. (A) |
| 56. (A) | 57. (D) | 58. (C) | 59. (B) | 60. (B) |
| 61. (C) | 62. (C) | 63. (B) | 64. (B) | 65. (D) |
| 66. (A) | 67. (A) | 68. (D) | 69. (A) | 70. (C) |
| 71. (C) | 72. (C) | 73. (B) | 74. (A) | 75. (B) |
| 76. (A) | 77. (D) | 78. (C) | 79. (B) | 80. (D) |
| 81. (D) | 82. (D) | 83. (D) | 84. (C) | 85. (B) |
| 86. (D) | 87. (A) | 88. (C) | 89. (C) | 90. (C) |
| 91. (A) | 92. (B) | 93. (D) | 94. (C) | 95. (C) |
| 96. (A) | 97. (C) | 98. (A) | 99. (C) | 100. (B) |