## MOCK CET

## For 1-5:

Directions: For each of the following questions, four probable answers have been given. Select the most appropriate alternative as the answer.

1. Your bathroom tap is leaking and is a constant source of irritating noise. You would :
(1) sleep with pillows upon your ears.
(2) put a bucket underneath.
(3) try to put up a cork upon the mouth of the tap.
(4) call a plumber to repair the tap
2. While you board a train at the station, you find a suitcase beneath your seat. You would :
(1) report the matter to the police.
(2) open up the suitcase to look through its contents.
(3) try to find out the address of the owner from the papers etc. in the suitcase.
(4) finding no one to claim it, take it into your own possession.
3. While attending your friend's party, you see your friend's muffler catching fire from the candle on the table behind him. You would :
(1) ask you friend to see behind him.
(2) rush to call friend's mother.
(3) rush and taking out the muffler from his neck, drop it and pour water on it.
(4) take out the muffler and throw it away.
4. On reaching the railway station, you find that the train you wanted to catch is just to start and there is hardly any time for purchasing the ticket. The best thing for you is to:
(1) rush to the train rather than miss it and inform the T.T.I, at the next stoppage about your inability to purchase the ticket.
(2) rush to the train and perform your journey quietly.
(3) first purchase the ticket and then catch the train-if it is there.
(4) miss the train rather than take the risk of boarding the moving train.
5. While sitting in a park, you observe that a smart young man comes to the place on a scooter, leaves it there and goes away with someone else on a motorbike. You would:
(1) chase the person
(2) inform the police at the nearby booth.
(3) call back the person
(4) remain engaged in your enjoyment.

## For Q.6-10 :

Directions: In each question below are given two statements followed by four conclusions numbered I, II, III, and IV. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follow the two given statements, disregarding commonly known facts.
6. Statements : Some teachers are students. All students are girls.

Conclusions: I. All teachers are girls. II. Some girls are teachers.
III. Some girls are students. IV. All students are teachers
(1) Only I follows
(2) Only I, II and III follow
(5) None follows
(3) All follow
(4) Only II and III follow

7
7.

| Statement: | All windows are rods. |
| :--- | :--- |
| Conclusions: | I. All frames are rods. |
|  | III. Some windows are frames |

(1) Only I follows
(3) Only either II or III follows
(5) None follows
8. Statements :

## Conclusions: I. All students are members.

III. Some students are member.
(1) Only I follows

All members are students.
(3) Only I and III follow
(5) All follow

9
Statement
Conclusions: I. No cloth is a bag
III. Some bags are clothes.
10. Statement : All soaps are clean

Conclusions : I. Some clean are soaps.
III. Some wet are soaps.
(1) Only I follows
(3) Only I or III follows
(5) None follows

Some rods are frames.
II. All frames are windows
IV. No window is a frame.
(2) Only II and III follow
(4) Only either I or IV follows

No student is a girl.
II. No member is a girl.
(2) Only I and II follow
(4) Only II and III follow

Some marbles are bags.
II. All marbles are bags.
IV. No marble is a cloth

All clean are wet.
II. Clean is soap.
IV. All wet are soaps.
(2) Only I and II follow
(4) None follows

## For Q. 11-15:

Directions: In each question below is given a statement followed by two assumptions numbered I and II. An Assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement. Give answer (1) if only assumption I is implicit; (2) if only assumption II is implicit; (3) if either I or II is implicit;(4) if neither I nor II is implicit and (5) if both land II are implicit.
11. Statement: "Join $X$-coaching classes -we guarantee your success"-an advertisement.

Assumptions: I. such coaching classes are well equipped.
II. students joining coaching classes expected success.
12. Statement : "According to me, you should get your child examined by a specialist doctor"- A tells B.
Assumptions: I. Specialist doctors are able to diagnose better than ordinary doctors.
II. B will certainly not agree with A's advice
13. Statement : Lack of stimulation in the first four or five years of life can have adverse consequences.

Assumptions: I. A great part of the development of observed intelligence occurs in the earliest year of the life.
II. 50 percent of the measurable intelligence at age 17 is already predictable by the age of four.
14. Statement : The present examination system needs overhauling thoroughly.

Assumption: I. The present examination system is obsolete.
II. Overhauling result in improvement.
15. Statement : "Banking services are fine tuned to meet growing business needs"- An advertisement.

Assumptions: I. Banking is a part of business activity.
II. Industrialists prefer better banking services.

For Q. 16 - 20:
Directions : In each question below is given a statement followed by two courses of action numbered I and II course of action is a step or administrative decision to be taken for improvement, follow-Up, or further action regard to the problem, policy etc. on the basis of the information given in the statement. You have to assume everything in the statement to be true, then decide which of the two given suggested courses of actions logically follows for pursuing.
Give answer (1) if only I follows; (2) if only II follows; (3) if either I or II follows; (4) if neither I nor II follow, and (5) if both I and 11 follow.
16. Statement : since its launching in 1981, Vdyudoot has so far accumulated losses amounting to Rs 153 crore during the last ten years.
Courses of action: I. Vaydoot should be directed to reduce wasteful expenditure and to increase pas air liner economically viable.
II. An amount of about Rs 300 crore should be provided to Vayudoot to make the airliner economically viable.
17. Statement : A recent study shows that children below five die in the cities of the developing countries mainly from diarrhoea and parasitic intestinal worms.
Course of action : I. Government of the developing countries should take adequate means to improve the hygienic conditions in the cities.
II. Children below five years in the cities of the developing countries need to be kept under constant medication.
18. Statement : Every year at the beginning or at the end of the monsoons, we have some cases of conjunctivitis, but this year, it seems to be a major epidemic, witnessed after nearly four years.
Course of action: I. Precautionary measure should be taken after every four years to cheek this epidemic.
II. People should be advised to drink boiled water during winter season
19. Statement : Exporters in the capital are alleging that commercial banks are violating a Reserve Bank of India directive to operate a post shipment export credit denominated in foreign currency at international interest rates from January this year.
Course of action: I. The officers concerned in the commercial bank are to be suspended.
II. The RBI should be asked to stop giving such directives to commercial banks.
20. Statement : One of the problems facing the food processing industry is the irregular supply of raw material. The producers of raw material are not getting a reasonable price.

Course of action : I. The government should regulate the supply of raw material to other industries also.
II. The government should announce an attractive package to ensure regular supply of raw material for food processing industry.
For Q. 21-25:
Directions: In each of the following questions, a statement is followed by two conclusions. Give answer (1) if the conclusion I follows; (2) if conclusion II follows; (3) if both I and II follow; (4) if either I or II follows; and (5) if neither I nor II follows.
21. Statement : Ten persons who were on the waiting list could finally get berth reservation the Frontier Mail.
Conclusions : I. Wait listed passengers generally find it difficult to get breath reservation to the Frontier Mail.
II. The number of berths available on the Frontier Mail is small.
22. Statement : Apart from the educational value of newspapers, their entertainment value should also be realised.

Conclusions: I. people take newspapers to be means of education.
II. The entertainment value of newspapers is relised properly.
23. Statement : These apples are too expensive to be bad .

Conclusions: I. when apples are in short supply, the prices go up.
II. The higher the selling price, the superior is the quality of the commodity.
24. Statement : In deserts, camels are indispensable for people to travel from one place to another.

Conclusions: I. Camels are the only cheapest mode of transport available in deserts.
II. There are plenty of camels in deserts.
25. Statement : Of all the television sets manufactured in India, the 'Solar' brand the largest sale.
I. Volume of sales of all the brands of television sets manufactured in India, is known.
II. The production of no other television set in India is as large as that of ‘solar'.

## For Q. 26 - 30 :

Directions: Read the following passage and examine each inference given below it in the context of this passage.
Mark answer (1) if the inference is definitely true; (2) if the inference is probably true; (3) if the data is inadequate; (4) if the inference is probably false and (5) if the inference is definitely false.

The space exploration has been done mainly by using unmanned satellites called space probes containing large variety of latest scientific instruments on board. These space probes have provided us the close up pictures and other data about planets and other bodies in the outer space. The climax of the intensive American space programme came when Neil Armstrong became the first man to set foot on the moon on July 20, 1969. Originally, the artificial satellites were launched for studying the upper atmosphere of earth.
26. The space probes have increased our knowledge about space and bodies in it.
27. Space probes are meant to study the upper atmosphere of earth only.
28. Neil Armstrong was the first man to go into space.
29. Space probes are provided with computers.
30. Moon has been explored by man.
31. Count the number of triangles and squares in the following figure.
(1) 44 triangles, 10 squares
(2) 14 triangles, 16 squares
(3) 24 triangles, 6 .squares
(4) 24 triangles, 9 squares


For Q. 32-35:
Each of the questions 32 to 35 has 5 views of some cubes. Determine how many different cubes are involved in each case. Mark the answers as follows.
(1) if only one cube is involved;
(2) if two cubes are involved;
(3) If three cubes are involved;
(4) If four cubes are involved
(5) If five cubes an involved;
32.

33.

33.

34.


For Q. 36 - 40 :
A parking garage has four levels - Blue, Green, Red and Yellow. There are eight spaces available for rental : three on Blue, one on Green, two on Red and two on Yellow. The management must assign six cars $L, M, N, 0, P$ and $Q$ - to these places, subject to the following conditions.
Two cars must be assigned to Red and at least one of the cars must be assigned to each of the other levels. Cars $L$ and $O$ must be assigned to the same level. Car M cannot be assigned to yellow. Car Q must be assigned to Red.
36. Which of the following is not an acceptable assignment of cars to levels?
(1) L and O to Yellow
(2) $P$ and $M$ to Green
(3) Q and M to Red
(4) $Q$ and $N$ to Red
(5) Q and $P$ to Red
37. If $P$ is assigned to Green, which of the following is a complete and accurate list of those cars that could be among the ones assigned to Blue ?
(1) L and O
(2) M and N
(3) $\mathrm{M}, \mathrm{N}$ and O
(4) L, N and O
(5) L, M, N and O
38. Which of the following must be true?
(1) If $L$ and $O$ are assigned to Blue and $M$ is assigned to Red, then $N$ is assigned to Yellow.
(2) If $L$ and $O$ are assigned to Blue and $P$ is assigned to Green, then $N$ is assigned to Yellow.
(3) If $L$ and $O$ are assigned to Blue and $N$ is assigned to Yellow, then $P$ is assigned to Green.
(4) If $L$ and $O$ are assigned to Blue and $N$ is assigned to Yellow, then $M$ is assigned to Red.
(5) If L and O are assigned to Blue and M is assigned to Green, then P is assigned to Yellow.
39. If $L$ and $O$ are assigned to Blue, how many different allotments of cars to Red are possible?
(1) 1
(2) 2
(3) 3
(4) 4
(5) 5
40. If $N$ is assigned to Green, which of the flowing additional conditions would make it necessary assign $P$ to Yellow?
(1) L must be assigned to Blue
(2) $M$ must be assigned to Blue
(3) M must be assigned to Red
(4) There a must be exactly one car assigned to Blue
(5) There must be exactly two cars assigned to Yellow

## For Q.41-50 :

Directions: In each of the following questions, various terms of a letter series are given with one term missing as shown by (?). Choose the missing term out of the given alternatives.
(1) DWQ
(2) DQW
(3) WDQ
(4) WQD
(5) QWD
42. DF GJ KM NQ RT ?
(1) UW
(2) YZ
(3) $X Z$
(4) UX
(5) YA
43. DCXW

FEVU HGTS?
(1) LKPO
(2) $A B Y Z$
(3) JIRQ
(4) LMRS
(5) None of these
44. AB DEF

HUK
STUVWX
(1) MNOPQ
(2) LMNOP
(3) L MNO
(4) QRSTU
(5) None of these
45. $\mathrm{C}, \mathrm{G}, \mathrm{L}, \mathrm{R},(\ldots .$.$) .$
(1) $Y$
(2) S
(3) U
(4) Z
(5) None of these
46. (.....) ayw, gec, mki, sqo.
(1) Zxw
(2) bzw
(3) usq
(4) may
(5) $x y v$
47. G, H, J, M, (....), V
(1) T
(2) $S$
(3) $R$
(4) U
(5) Q
48. Y W U S Q (.....) (......)
(1) N, J
(2) $M, L$
(3) J, R
(4) L, M
(5) O, M

49 ABP, CDQ, EFR, (....)
(1) GHS
(2) GHT
(3) HGS
(4) GHR
(5) None of these
50. P3C, R5F, T81, V12L (...)
(1) Y170
(2) X17M
(3) X 170
(4) X160
(5) None of these
51. In a certain code, RIPPLE is written as 613382 and LIFE is written as 8192. How is PILLER written in that code?
(1) 318826
(2) 318286
(3) 618826
(4) 328816
(5) None of these
52. If ROSE is code das 6821, CHAIR is coded as 73456 and PREACH is coded as 961473 , what will be the code for SEARCH?
(1) 246173
(2) 214673
(3) 214763
(4) 216473
(5) None of these
53. If in a certain code, TWENTY is written as 863985 and ELEVEN is written as 323039 , how is TWELVE written in that code?
(1) 863203
(2) 863584
(3) 863903
(4) 863063
(5) None of these
54. If GIVE is coded as 5137 and BAT is coded as 924 , how is GATE coded?
(1) 5427
(2) 5724
(3) 5247
(4) 2547
(5) None of these
55. If PALE is coded as 2134 , EARTH is coded as 41590 , how is PEARL coded in that code?
(1) 29530
(2) 24153
(3) 25413
(4) 25430
(5) None of these
56. If train is called bus, bus is called tractor is called car, ear is called scooter, scooter is called bicycle is called moped, which is used to plough a field?
(1) Train
(2) Bus
(3) Tractor
(4) Car
(5) Moped
57. If lead is called stick, stick is called nib, nib is called needle, needle is called rope and rope is called thread, what will be fined in a pen to write with it?
(1) Sack
(2) Lead
(3) Needle
(4) Nib
(5) Thread
58. If rose is called poppy, poppy is called lily, lily is called lotus and lotus is called glandiola, which is the king of flowers?
(1) Rose
(2) Lotus
(3) Poppy
(4) Lily
(5) Glandiola
59. If rat is called dog, dog is called mangoose, mangoose is called lion, lion is called-snake and snake is called elephant, which is reared as pet?
(I) Rat
(2) Dog
(3) Mangoose
(4) Lion
(5) Elephant.
60. If finger is called toe, toe is called foot, foot is called thumb, thumb is called ankle, ankle is called palm and palm is called knee, which one finger has a different name?
(1) Thumb
(2) Ankle
(3) Knee
(4) Palm
(5) Toe
61. If sti nro kti stands for clouds pour down; nro bsi mit stands for down he goes; and bsi nro zpi stands for died down he, which word would mean goes?
(1) nro
(2) mit
(3) kti
(4) bsi
(5) None of these
62. If cinto baoli tsi nzro mean here village is Sarurpur; mhi cinto keepi tsi oind means her first love is literature; and oind geit tsi cinto pki means literature collection is her hobby, which word would mean literature?
(1) cinto
(2) baoli
(3) oind
(4) geit
(5) None of these
63. In a certain code language, kew xas huma deko means she is eating apples; kew tepo qua means she sells toys and sul lim deko means I like apples. Which word in that language means she and apples?
(1) xas \& deko
(2) xas \& kew
(3) kew \& deko
(4) kew \& xas
(5) deko \& tepo
64. If gnr tag wg qmp stands for Seoul Olympic Organising Committee, hyto gnr emf standsfor Summer Olympic games and esm sdr hyto stands for modem games history, which would be the code for summer?
(1) hyto
(2) gnr
(3) emf
(4) zog
(5) None of these
65. In a certain code language, Pat Zoo, Sim means Eat Good Mangoes; Pus sim Tim means Mangoes and Sweets and Tim Zoo Kit means Purchase Good sweets. Which word in that language means Good?
(1) Zoo
(2) Pus
(3) Sim
(4) Tim
(5) Kit

For Q. 66-70: Choose the missing number in the series:
66. $5,11,17,25,33,43$ (?)
(1) 50
(2) 53
(3) 61
(4) 55
67. $4,9,13,22,35$, (?)
(1) 51
(2) 57
(3) 55
(4) 53
68. 1, 2, 3, 6, 9, 18, (?), 54
(1) 27
(2) 25
(3) 30
(4) 33
69. $66,36,18$, (?)
(1) 8
(2) 10
(3) 6
(4) 12
70. $2,6,3,4,20,5,6,(?), 7$
(1) 42
(2) 30
(3) 49
(4) 35

## For Q. 71-75:

Directions: Data on 450 candidates, who took an examination in Social Sciences, Mathematics and Science, is given below :

Passed in all the subjects 167
Failed in all the subjects 60
Failed la Soc M Sciences 175
Failed in Mathematics 199
Failed in Science 191
Passed in Social Science only 62
Passed in Mathematics on If 48
Passed in Science only 52
71. How many failed in one subject only?
(1) 56
(2) 61
(3) 144
(4) 152
72. How many failed in two subjects only?
(1) 6
(2) 61
(3) 152
(4) 162
73. How many failed in Social Sciences only?
(1) 15
(2) 21
(3) 30
(4) 42
74. How many passed at least in one subject?
(1) 167
(2) 304
(3) 390
(4) 450
75. How many passed in Mathematics and at least one more subject?
(I) 94
(2) 170
(3) 203
(4) 210

76 If it is possible to make a meaningful word with the second, the sixth, the ninth and the twelfth letters of the word CONTRIBUTION, which of the following will be the last letter of that word? If more than one such words can be made, give M as the answer and if no such word is there, give X as the answer.
(1) T
(2) O
(3) N
(4) M
(5) $X$
77. How Many pairs of letters-are three in the word PENCIL which have as many letters between them in the word as in the alphabet?
(1) Nil
(2) One
(3) Two
(4) Three
(5) None of these
78. How many independent words can STAINLESS be divided into with out changing the order of the letters and using each letter only once?
(1) Nil
(2) One
(3) Two
(4) Three
(5) None of these
79. If a meaningful word can be formed by rearranging the letters USCALA, the first letter so formed is the answer. If no such letter can be formed the answer is X ?
(1) C
(2) S
(3) $A$
(4) L
(5) U
80. How many pairs of letters are there in the word LANGUISH which have as many letters between them in the word as in the alphabet?
(1) Two
(2) Three
(3) One
(4) Nil
(5) None of these
81. Which letter will be the sixth to the right of the eleventh letter from the right end of the alphabet?
(1) K
(2) V
(3) J
(4) U
(5) None of these
82. Which letter will be seventh to the left of the fourteenth letter form right end of the alphabet?
(1) F
(2) T
(3) S
(4) E
(5) None of these
83. If the letters of the above given alphabet interchange positions, so that $A$ takes the place of $Z$ and $Z$ takes the place of $A$; $B$ takes the place of $Y$ and $Y$ takes the place of $B$ and soon, what will be the thirteenth letter from the right?
(1) $M$
(2) N
(3) O
(4) L
(5) None of these
84. In the English alphabet, which letter will be to the immediate left of $M$ ?
(1) N
(2) L
(3) O
(4) K
(5) None of these
85. If the second half of the alphabet is written in the reverse order, which letter will be the tenth to the right of ninth letter from your left?
(1) V
(2) $S$
(3) T
(4) U
(5) None of these
86. Vijay ranks seventh from the top and $28^{\text {th }}$ from the bottom in a class. How many students are there in the class?
(1) 34
(2) 35
(3) 36
(4) 37
(5) None of these
87. In a row of girls, if Madhu who is tenth from the left and Veena who is ninth from the right interchange their places, Madhu becomes fifteenth from the left. How many girls are there in the row?
(1) 16
(2) 18
(3) 19
(4) 22
(5) None of these
88. Rasheed ranked thirteenth from the top and twenty sixth from the bottom among those who have passed in the annual examination in a class. If six students have failed in the annual examination, what was the total number of students in that class?
(1) 38
(2) 44
(3) 45
(4) 5
(5) None of these
89. In a row of 16 boys, when Prakash was shifted by two places towards the left, he became $7^{\text {th }}$ from the left end. What was his earlier position from the right end of the row?
(1) $7^{\text {th }}$
(2) $8^{\text {th }}$
(3) $9^{\text {th }}$
(4) $10^{\text {th }}$
(5) None of these
90. A bus for Delhi leaves every thirty minutes from a bus stand. An enquiry clerk told a passenger that the bus had already left ten minutes ago and the next bus will leave at 9.35 a.m.
At what time did the enquiry clerk give this information to the passenger?
(1) 9:05
(2) $9: 10$
(3) $9: 20$
(4) $9: 25$
(5) $9: 15$

## For Q. 91 - 100 :

Directions: Read the following information carefully and answer the questions given below it. Following are the criteria for promotion from Grade D and B in one institute. The employee must-
(1) be a graduate with minimum 50\% marks.
(2) not be more than 45 years of age as on 10.11.1991.
(3) obtain the minimum prescribed marks in Promotion Test (PT). Minimum marks are Part A-35, part B-25 and in Aggregate 70.
(4) have at least 10 years of service in the institute out of which at least four years should be in grade $D$.
(5) not have any adverse remark in Confidential Report (C. R.). However, if a candidate -
(6) full fills all other criteria except that at (2) and is less than 50 years, the case may be referred to the Governing Board.
(7) full fills all other criteria but does not have four years of service in Grade D, the case is to be referred to the Director provided the employee has obtained 120 or more marks in Aggregate in the Promotion Test.

Based on the above criteria and the information given in each of the following questions, you have to decide on the promotability of each case. Mark answer (1) if the employee is to be promoted; (2) if the case is to be referred to the Governing Board; (?) If the case is to be referred to the Director ; (4) if the data given are not sufficient to make the decision; and (5) if the employee is not to be promoted.
91. Kamal Ahuja joined the Institute 9 years back in Grade C. After 2 years, he was promoted in Grade D with two increments. He got 76 \% in her graduation and was 30 years old a on 10.8.91. He has no adverse remark in his C.R.
92. Archana Sabharwal whose date of birth is 25.8 .46 is a graduate with $51 \%$ marks. There is no adverse remark in her C.R. She has obtained 40 and 30 marks in Part A and B respectively of P.T. She has served the institute for 15 years and was promoted to Grade D six years back.
93. 30 years old (as on 21.5.91) Rachna Bansal has completed 11years and was a promoted to Grade D, two tears back. She is a graduate with $65 \%$ marks obtained 130 marks in aggregate in P.T with 80 marks in part B .she does not have any adverse remark in her C.R.
94. Arvind Kumar who is in Grade D for the last five years is a graduate with $55 \%$ marks. He joined the institute in Grade C and was promoted after five years. He was 40 years old as on 28.4 .90 and does not have any adverse remark in his C.R. He has obtained 40 and 50 marks in Part A and $B$ respectively of P.T.
95. Nitin Sharma obtained 40 and 30 marks in Part A and Part B of P.T. respectively. He does not have any adverse remark in his C.R. He has completed 15 years of service out of which 6 years are in Grade D.
96. 42 year old (as on 5.5.91) Manish Srivastava, who has put in 20 years of service in the institute was promoted to Grade $D$ three years back. He is a Science Graduate with $60 \%$ marks and has obtained 80 marks in Part A and 45 marks in Part B of P.T. and there is no adverse remark in his C.R.
97. Mohit Khurana has obtained highest marks among all the employees in the P.T. aggregate as well as in each part. He is a. Graduate with $80 \%$ marks. He was 47 years old as on 6.9.91 and there is no adverse remark in his C.R. He has completed 10 years service in Grade D.
98. Sumit Arora is a graduate with $60 \%$ marks. He does not have any adverse remark in his C.R. He has obtained 80 and 50 marks in Part A and B respectively of P.T. His date of birth is 21.10.1948. He has completed 10 years of service and was recently promoted to Grade D.
99. Anil chowdhury, whose date of birth is 4.9.1947 is a graduate with $50 \%$ marks. He has had 12 years of service in the institute out of which 5 years is in Grade D. He does not have any adverse remark in the C.R. He has obtained 50marks in part A and 25 marks in Part B of P.T.
100. 32 year old (as on 11.10.91) Geeta Madhavan is a Home Science Graduate with $52 \%$ marks. She has completed 10 years of service in the institute in Grade D only. She has obtained $56 \%$ marks in Part A and 75 marks in aggregate in P.T.

## For Q. 101-104 :

I. L, $M, Z$ and $P$ are all possible
II. All M are L
III. All L are Z
IV. Some $Z$ are $L$
IV. No M are Z
VI. No Pare both M and L but not $Z$
101. Which of the above statements contradicts previous ones ?
(1) III
(2) IV
(3) V
(4) VI
102. If statements II and III are true, which of the other statements must also be true ?
(1) IV only
(2) V only
(3) VI only
(4) IV and V only
103. If $X$ is an $L$, it must also be :
(1) M only
(2) P only
(3) Z only
(4) L and Z only
104. Given the above statements, which of the following must be false?
(1) There are some L's
(2) Some Z's are not L
(3) There are some P's which are Z's but not M or L
(4) There cannot be any $Z$ 's that are not $L$ or $M$

## For Q. 105-108 :

- P drank more at a party than W and left later than V
- T drank more than $\mathbf{P}$ and less than $V$ and left later than $P$ and earlier than $S$.
- U drank less than $\mathbf{Q}$ and more than V and left later than S .
- W drank more than $\mathbf{R}$ and left earlier than $V$.

105. Which of the following left earliest?
(1) $P$
(2) $S$
(3) T
(4) W
106. Which of the following drank the least?
(1) P
(2) R
(3) T
(4) U
107. Based on the above information, which of the following is true?
(1) $V$ was the second to leave and drank the most.
(2) $U$ was the last to leave and bank the most.
(3) T was the third-to-last to leave an d drank more than at least three other partygoers.
(4) $S$ was the second-to-last to leave and drank the most.
108. If $S$ drank more than $W$, which of the following drank more than $S$ ?
(1) $P$ and $R$
(2) P, Q, U and V
(3) P, R and Q
(4) Cannot be determined from the information given

## For Q.109-114 :

A child is stringing 11 different coloured beads on a string. Of the 11, four are yellow, three are red, two are blue and two are green.

- The are beads are adjacent to one another.
- The blue beads are adjacent to one another
- The green beads are not adjacent to one another.
- A red bead is at one end of the string and a green bead is at the other end.

109. If the sixth and seventh beads are blue and the tenth bead is red, which of the following must be true?
(1) The second bead is green
(2) The fifth bead is yellow.
(3) The eighth bead is green
(4) A green bead is next to a yellow bead.
110. If the four yellow beads are next to each other, and if the tenth bead is yellow, which of the following beads must be blue?
(1) the fourth
(2) the fifth
(3) the sixth
(4) the seventh
111. If each blue bead is next to a green bead and if the four yellow beads are next to each other, then which of the following beads must be yellow?
I. the fourth
II. the fifth
III. the sixth
IV. the seventh
(1) I and II only
(2) II and III only
(3) III and IV only
(4) II, III and IV
112. If the fifth and sixth beads are blue and the ninth bead is red, which of the following must be true?
(1) One of the green beads is next to a blue bead.
(2) One of the red beads is next to a green bead.
(3) Each yellow bead is next to at least one other yellow bead.
(4) The second bead is yellow.
113. If the fifth, eighth, ninth and tenth beads are yellow, which of the following must be true?
I. The fourth bead is green
II. The sixth bead is blue.
III. Each green bead Is next at least one yellow bead.
(1) I only
(2) II only
(3) I and II only
(4) I, II and III
114. If one green bead is next lo a red bead and the other green bead is next to a blue bead, which of the following must be true?
(1) The second bead 18 blue
(2) The fourth bead is green
(3) The fourth bead is yellow
(4) The seventh head is yellow

## For Q. 115-120:

A geneologist has determined that $M, N, P, Q, R, S$ and $T$ are the father, the mother, the aunt, the brother, the sister, the wife and the daughter of $X$, but she has been unable to determine which person has which status. However, she does know :

- $\quad P$ and $Q$ are of the same sex.
- $\quad \mathrm{M}$ and N are not of the same sex.
- $\quad S$ was born before $M$.
- $\quad Q$ is not the mother of $X$.

115. How many of the seven people $M, N, P, Q, R, S$ and $T$-are female?
(I) 3
(2) 4
(3) 5
(4) 6
116. Which of the following must be true?
(1) $M$ is a female
(2) N is a female
(3) $P$ is a female
(4) $Q$ is a male
117. If T is the daughter of X , which of the following must be true?
(1) $M$ and $P$ are of the same sex.
(2) $M$ and $Q$ are of the same sex.
(3) $P$ is not of the same sex as $N$.
(4) $R$ is not of the same sex as $S$.
118. It M and Q are sisters, all of the following must be true EXCEPT :
(1) $N$ is a male
(2) $M$ is $X$ 's mother
(3) Q is $X$ 's aunt
(4) T is X 's daughter
119. If S is N 's grandfather, then which of the following must be true?
(1) $R$ is N's aunt
(2) X is P's son
(3) M is X 's brother
(4) $Q$ is S's husband
120. If $M$ is $X$ 's wife, all of the following could be true EXCEPT:
(1) $S$ is $X$ 's daughter
(2) $P$ is $X$ 's sister
(3) Q is X 's sister
(4) R is X's father

For Q. 121-125:
Directions : In each of the following questions, there is a set of four figures labeled $A, B, C$ and $D$ called the Problem Set followed by a set of five other figures labeled 1, 2, 3, 4 and 5 called the Answer Set. Fig. (C) contains a question-mark. Select a suitable figure from the Answer set which will substitute this question-mark so that a series is formed by the figures $A, B, C$ and $D$ taken in order. The number of the selected figures is the answer.


Directions for questions 126-130: Out of the given five figures, four are similar in a certain way and form a group, while one figure is not like the other four. Which one of the figures does not belong to this group?
126.

127.

128.

129.

130.


For Q. 131-140 :
Directions: Each of the following questions, consists of five figures marked A, B, C, D, and E, called the Problem Figures followed by five other figures marked 1, 2, 3, 4 and 5 called the Answer Figures. Select a figure from amongst the answer figures which will continue the same series as established by the five problem figures.

PROBLEM FIGURES
131.


AHSWER FIGURES

132.

133.

134.

135.

136.

137.

138.

139.

140.


| $\Delta \square O$ + $\times-$ | $\begin{array}{r}\Delta \square O \\ -8+ \\ \hline\end{array}$ | $\begin{array}{r} X \Delta \square \\ +\quad 0 \\ \hline \end{array}$ | $\Delta \bigcirc \square$ $\times+$ $\times+$ | $\Delta \square O$ $\times+$ |
| :---: | :---: | :---: | :---: | :---: |

141. Find the percentage increase volume of a solid sphere if the surface area increases by $21 \%$.
(1) $30 \%$
(2) $42 \%$
(3) $21 \%$
(4) $33.1 \%$
142. $X, Y$ and $Z$ are real of numbers. $\frac{X-Y}{X+Z}=Y^{2} / Z^{2}$; Express $Z$ in terms of $X$ and $Y$.
(1) $\frac{X+Y}{X Y}$
(2) $\frac{X Y}{X^{2}-Y^{2}}$
(3) $\frac{X Y}{X-Y}$
(4) $\frac{1}{X}-\frac{1}{Y}$
143. In a school $90 \%$ of die pupils play football. $85 \%$ play cricket and $65 \%$ play volley ball. What is the least percent that play a little three games ?
(1) 20
(2) 30
(3) 40
(4) 50
144. A man is cycling at 10 kmph along a straight road on a misty day when visibility is 50 m . A car passes him and disappears from the cyclist's view in the mist in six seconds later. Find the speed of the car in Kmph.
(1) 48
(2) 42
(3) 35
(4) 40
145. A loan of Rs 3,000 is to be paid back in three equal annual installments. Find each installment with interest if interest is to be compounded annually on the balance at $10 \%$ and is to be paid with each installment.
(1) Rs. 1300; Rs. 1200; Rs. 1100
(2) Rs. 1260; Rs. 1200; Rs. 1140
(3) Rs. 1200; Rs. 1200; Rs. 1200
(4) Rs. 1350; Rs. 1200; Rs. 1050
146. Two concentric circles are such that the inner circle encloses a region of the same area as the region between the circles. The outer circle has a circumference of 528 m . Find the circumference of the inner circle.
(1) 264 m
(2) $84 \pi \mathrm{~m}$
(3) $84 \sqrt{ } 2 \pi \mathrm{~m}$
(4) 396 m
147. Find $N$ for which $\frac{N-1}{N}+\frac{N+2}{N}+\ldots \ldots \ldots+1 / N=3, N$ being a natural number.
(1) 7
(2) 6
(3) 5
(4) 4
148. A school boy on holiday spent some time in travel 90 km on his bicycle and the rest on foot.

He paddled four hours more than he walked. If he had ridden on his bike for as many hours as he had walked and walked as many hours as he had ridden, he would have covered 50 km by bike and 50 km on foot. For how many hours did he walk ?
(1) 2 hrs .
(2) $2 \frac{1}{2}$ hrs.
(3) 3 hrs
(4) $I^{1} / 2$ hrs.
149. $P$ is a point in the interior of an equilateral triangle of side 10 cm . $\mathrm{PL}, \mathrm{PM}$ and PN are drawn perpendiculars from $P$ to the sides of the triangle. Then $P L+P M+P N$ is equal to :
(1) $5 \sqrt{3} \mathrm{~cm}$
(2) 5 cm
(3) 10 cm
(4) none of these
150. A group of 100 students were tested in Chemistry, Physics and Biology. Twenty eight failed in Chemistry, 32 failed in Physics and 36 failed in Biology. 10 failed in both Chemistry and Physics. 14 failed in both Physics and Biology, 12 failed in both Biology and Chemistry. Four failed in all the three subjects. Find the number of Students who passed in all the subjects.
(1) 40
(2) 36
(3) 38
(4)34
151. A parallelogram and an equilateral triangle have the same area. One side of the parallelogram coincides with a side of the triangle, and the adjacent side of the parallelogram is parallel to one side of the triangle. The ratio of the length of the larger side of the parallelogram to that of the adjacent side is as:
(1) $2: \sqrt{ } 3$
(2) $3: 2$
(3) $1: 1$
(4) $2: 1$
152. Eight passengers can be seated in a mini-bus, four on a bench seat $A$ facing the direction in which the bus travels and four other on another bench B facing first.
$\left|\begin{array}{ll}X & X \\ X & X \\ X & X \\ A & B\end{array}\right|$

In how many ways can they be seated, if two of them insist on sitting in teach $A$ and two others refusing to sit in bench B ?
(1) 1028
(2) 2304
(3) 216
(4) 576

## For Q. 153-160: Read the passage and answer the questions.

There are logical difficulties in the notion of Sin. We are told that Sin consists disobedience to God's commands, but we are also told that God is omnipotent. If He is, nothing contrary to his will can occur; there fore when the sinner disobeys His commands, He must have intended this to happen. St. Augustine boldly accepts this view, and asserts that men are led to sin by a blindness with which God afflicts them. But most theologians, in modem times, have felt that, if God causes men to sin, it is not fair to send them to Hell what they cannot help. We are told that sin consists in acting contrary to God's will. This, however, does not get rid the difficulty. Those who, like Spinoza, take God's omnipotence seriously, deduce that there can be no such thing as $\sin$. This leads to frightful results. Why! said Spinoza's contemporaries, was it not wicked of Nero to murder mother? Was it not wicked of Adam to eat the apple? Is one action just as good as another? Spinoza wriggles, But does not find any satisfactory answer. If everything happens in accordance with God's will, God must have wanted to Nero murder his mother; therefore, since God is good, the murder must have been a good thing. From this augment there is no escape.

The Roman Catholic Church demands legislation such that, if a woman becomes pregnant syphilitic man, she must not artificially internet her pregnancy, but must allow a probably syphilitic child to be born, in order that, after a few years of misery on earth, it may spend eternity in limbo (assuming its parents to be non-Catholics) The British State considers it the duty of an Englishman to kill people who are not English whenever a election of elderly gentlemen in Westminster tells him to do so. Such instances suffice to illustrate the fact that Church and State are implacable enemies of both intelligence and virtue.

Suppose we wish - as I certainly do - to find arguments against Nietzsche's ethics and politics, what arguments can we find? The question is: If Buddha and Nietzsche were confronted could either produce an argument that ought to appeal to the impartial listener? I am not thinking of political arguments. We can imagine them appearing before the almighty, as in the first chapter of the Book of Job, and offering advice as to the sort of world He should create. What could either say?

Buddha would open the argument by speaking of the lepers, outcast and miserable; the poor,
foiling with aching limbs and barely kept alive by scanty nourishment; the wounded in battle, dying in slow agony; the orphans, illtreated by cruel guardians; and even the most successful haunted by the thought of failure and death. From all this load of sorrow, he would say, a way of salvation must be found, and salvation can only come through love.

Nietzsche, whom only Omnipotence could restrain from interrupting, would burst out when his turn came : 'Good heavens, man, you must learn to be of rougher fibre. Why go about snivelling because trivial people suffer Or, for that matter, because great men suffer? Trivial people suffer trivially, great men suffer greatly, they are noble, Your ideal is a purely negative one, absence of suffering, which can be completely secured by non-exist-ence. I, on the other hand, have positive ideals: I admire Alcibiades, and the Emperor Frederick II, and Napoleon. For the sake of such men, any misery is worthwhile, I appeal to you. Lord, as the greatest of creative artists, do not let Your artistic impulses be curbed by the degenerate, fear-ridden meanderings of this wretched psychopath.'

Buddha, who in the courts of Heaven has learnt all history since his death, and has mastered science with delight in the knowledge and sorrow at the use of which men have put it, replies with calm urbanity : You are mistaken, Professor Nietzsche, in thinking my ideal a purely negative one. True, it includes a negative element, the absence of suffering ; but it has in addition quite as much that is positive as is to be found in your doctrine. Though I have no special admiration for Alcibiades and Napoleon, I too have my heroes: My successor Jesus, because he told men to love their enemies; the man who discovered how to master the forces of nature and secure food with less lab our, the medical men who have shown how to diminish disease; the poets and artists and musicians who have caught glimpses of the Divine Beatitude. Love and knowledge and delight in beauty are not negations; they are enough to fill the lives of great men that have ever lived.

All the same,' Nietzische replies, 'Your world; would be insipid. You should study Heraclitus, whose works survive complete in the celestial library. Your love is compassion;, which is elicited by pain; your truth, if you are honest, is pleasant, and only 'to be known through suffering; and as to beauty, what is more beautiful than the tiger, who owes his splendors to fierceness? No, If the Lord should decide for your world, I fear we should all die of boredom.'
'You might,' Buddha replies, 'because you love pain, and your love of life is a sham. But those who really love life would be happy as no one is happy in the world as it is.'

According to saint Thomas, evil is, unintentional, not an essence, and has an accidental cause which is good. All things tend to be like God, who is the End of all things. Human happiness does not consist in carnal pleasures honour, glory, wealth, worldly power, or goods of the body, and is not seated in the sense. Man's ultimate happiness does not consist in acts of moral virtue, because these are means; it consists in the contemplation of God. But the knowledge of God possessed by the majority does not suffice; nor the
knowledge of Him obtained by faith. In this life, we cannot see God in His essence, or have ultimate happiness; but hereafter we shall see Him face to face. (Not literally we are warned, because God has no face.) This will happen not by our natural power, but by the divine light; Bind even then, we shall not see all of Him.
153. "There are logical difficulties in the notion of sin." Which of the following is not true regarding this statement?
(1) God's existence proves the irrelevance of sin
(2) Murder is a good thing not categorized as sin
(3) Infringement of God's desire will-lead to damnation
(4) $\operatorname{Sin}$ is an unintentional fault as pay God's decree
154. The author is least likely to agree with the statement that:
(1) St. Augustine believes in the act of sin as God 's intention
(2) If God's commands are not followed then a sin is committed
(3) Nietzche's ethics give a lot of scope for debate.
(4) None of the above
155. The author firmly believes that the Church and the State are:
(1) sympathetic to the cause of the rationalist
(2) Not open to criticism of reach other
(3) lifelong enemies of those seeking true light and grandeur in life's vision
(4) enemies of the rationalist
156. Which of the following is deducible from the passage ?
(1) Spinoza believed killing to he good
(2) Only English people are allowed to stay in Britain
(3) God's goodness and omnipresence allow sins
(4) Buddha admired Jesus Christ as a hero
157. Following are Buddha's arguments for a better world except that:
(1) love is the main component of deliverance
(2) the physically disabled and the failures of society need compassion
(3) the ultimate divinity of purpose is to experience pain
(4) knowledge and love are the positive doctrine of creation
158. Following are Neitzsche's ethics and politics except that:
(1) plebeians and Great-minded cannot be categorised together
(2) Napolean's ideals were a positive artistic asset
(3) The world will be monotonous without suffering
(4) Alcibiades is not worthy of self-affliction
159. The central idea being followed in the passage can be inferred as :
(1) the need for change of moral code of our generation
(2) the creation of another world
(3) elucidation of the fact that sin is the main doctrine of imperfection
(4) exploring the different religious facets of our planet
160. Nietzsche:
(1) was a cruel man who relished pain, suffering and misery
(2) had no acute compunctions about pain and suffering
(3) never wanted happiness
(4) always wanted unhappiness

## For Q. 161 - Q. 167 :

Directions: The following questions are based on VERBAL ANALOGIES. For each question, select the alternative that exhibits a similar relationship as shown by the QUESTION PAIR.
161. Grin : Chuckle
(1) smile : cough
(2) snigger : laugh
(3) sniff : taste
(4) boast : banker
162. Shelve: defer
(1) shimmy : loosen
(2) shindy : row
(3) shield : give up
(4) shirk: confuse
163. Surreptitious : stealth
(1) vituperative : wickedness
(2) rambunctious: unruliness
(3) facetious : tolerance
(4) recusant: submissiveness
164. Stippled: dotted
(1) grave : ricey
(2) streaked: stuffled
(3) piebald : pinto
(4) shiny : astral
165. Tongs: pick
(1) scissors : splice
(2) rake : burn
(3) colander : strain
(4) nut : jam
166. Squak : complaint
(1) whoop : circle
(2) pester : infect
(3) squeak : inform
(4) gloat : pride
167. Scuff: walk
(1) spar : fight
(2) banter : laugh
(3) wave : wand
(4) drag : pull

## For Q.168-Q.175 :

## Directions : Fill in the blanks.

168. Slyness is .... through abnormal behavior in various ..,.
(1) shown, kinds
(2) developed, things
(3) removed, people
(4) manifested, ways

169 ...., there is a widespread .... among the educated youth which makes them increasingly alienated.
(1) Luckily, dedication
(2) Unfortunately, frustration
(3) Nevertheless, optimism
(4) Co-incidentally, feeling
170. Right from the earliest ages, India's $\qquad$ developed a sense of unity and .. .. among its people
(1) culture, commonness
(2) population, diversification
(3) rulers, commitment
(4) heritage, disparity
171. In many countries . ... development arising out of fast technological $\qquad$ has led to some problems.
(1) cultural,
(2) agricultural, development
(3) meager, inventions
(4) excessive, progress
172. The problem of.... another war has assumed great urgency because of the .... of nuclear weapons.
(1) winning, growth
(2) preventing, invention
(3) stopping, need
(4) precipitating, disarmament
173. Disarmament and development in our time are.... inter-related bat.... development will depend on a change in the world's political thinking.
(1) inevitably, substantial
(2) closely, real
(3) universally, ultimate
(4) naturally, final
174. How many of the books published each year in India make ....contribution towards improving men's....with each other.
(1) sensational, reservations
(2) referential, behaviors
(3) Significant, relationship
(4) incorporated, obligation
175. Due to .... rain fall this year, they had to .... cut in water supply.
(1) scanty, lift
(2) regular, clamp
(3) sufficient,
(4) inadequate, impose

## For Q176-Q. 180 :

## Directions: Select the antonym.

176. Desponding
(1) irretrievable
(2) wretched
(3) hopeful
(4) inextricable
177. Impoverish
(1) replenish
(2) dissipate
(3) squander
(4) use
178. Inordinate
(1) outrageous
(2) moderate
(3) superfluous
(4) extravagant
179. Exordium
(1) prom
(2) prelude
(3) prologue
(4) epilogue
180. Idiosyncrasy
(1) generality
(2) singularity
(3) individuality
(4) peculiarity

## For Q.181- Q. 185 :

Directions : Refer to the data below :


The shops in the city are divided between three broad categories
(1) Basic needs shops (B)
(2) Once over shops (O)
(3) Miscellaneous shoos (M)

THE DISTRIBUTION OF TYPES OF SHOPS FROM

181. The maximum\% increase in the number of shops over the previous year is in :
(1) 1991
(2) 1992
(3) 1993
(4) 1994
182. The number of M-type shops in 1992 is more than the number of O-type shops in 1991 by :
(1) $<1000$
(2) $>1000$
(3) 1000
(4) Can't say
183. The number of which type of shop is always (from 91-94) highest?
(1) B
(2) 0
(3) M
(4) Can't say
184. What is the percentage increase in the number of O-type shops from 1991 to 1994 ?
(1) $<200 \%$
(2) $300 \%$
(3) $>200 \%$
(4) $100 \%$
185. The number of $B$ type shops in 1994 is what \% of the number of $M$ type in 1993 ?
(1) $50 \%$
(2) $<50 \%$
(3) $>50 \%$
(4) None of these

## For Q. 186-Q. 190 :

## Directions : Refer to the data below :


186. What is the average attendance for the six given days?
(1) 73.8
(2) 49.6
(3) 77.2
(4) 81.9
187. The number of days on which was the attendance higher than the average for the six given days, is :
(1) 1
(2) 2
(3) 3
(4) 5

188 Highest \% increase in attendance compared with the previous day, is on :
(1) Monday
(2) Wednesday
(3) Thursday
(4) Friday

189 If the total number of registered students is 120 , on which day was the \% turnout maximum?
(1) Tuesday
(2) Friday
(3) Wednesday
(4) Saturday
190. The \% increase in attendance on Wednesday compared to Tuesday is (approx.) :
(1) 30
(2) 60
(3) 45
(4) 50

For Q.191-Q.195
Directions : Refer to the data below :

$$
\begin{aligned}
& S=\text { Sales, P = Profits } \\
& \text { Given Cost = Sales - Profits }
\end{aligned}
$$

Figures in Rs. 000

191. In which year are profits as a \% of sales minimum?
(1) '91
(2) '92
(3) '93
(4) '94
192. In which year are profits a \% of sales maximum?
(1) '91
(2) '92
(3) '93
(4) '94

193 If \% profit = Profit as a \% of' cost, \% profit is maximum?
(1) 1991
(2) 1992
(3) 1993
(4) 1994
194. \% profit is minimum is :
(1) 1991
(2) 1992
(3) 1993
(4) 1994
195. The average profit for the four years is what \% of the average sales for the four years?
(1) 126
(2) 259
(3) 196
(4) None of these

For Q. 196 - Q. 200 :
Directions : Refer to the data below :
STEP I $\quad X=1$
STEP $2 \quad Y=-X$
STEP $3 \quad Z=2 X$
STEP 4 Increase $X$ by 1
STEP 5 If $x \geq 2$, Go To Step 2, Otherwise go to step 6
STEP 6 STOP

## STEP 2 - STEP 5 is one cycle.

196. The value of $Y$ after 3 cycles is:
(1) -1
(2) -2
(3) -4
(4) -3
197. The value of $Z$ is more than the value of $Y$ by (after 4 cycles ):
(1) 12
(2) 8
(3) -4
(4) -12
198. The average of $X, Y$ and $Z$ after 4 cycles is:
(1) 3
(2) 1
(3) 4
(4) 2
199. STEP 6 is reached after how many cycles.
(1) 4
(2) 8
(3) 12
(4) Never
200. $X: Y: Z$ after 2 cycles is :
(1) $2: 1: 2$
(2) $1: 2: 2$
(3) $3:-2: 4$
(4) $-2: 3: 4$

## ANSWERS

| $(1)$ | $(4)$ | 2. | $(1)$ | 3. | $(3)$ | 4. | $(1)$ | 5. | $(2)$ | 6. | $(4)$ | 7. | $(5)$ | 8. | $(4)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 9. | $(4)$ | 10. | $(4)$ | 11. | $(2)$ | 12. | $(1)$ | 13. | $(1)$ | 14. | $(5)$ | 15. | $(5)$ | 16. | $(1)$ |
| 17. | $(5)$ | 18. | $(2)$ | 19. | $(4)$ | 20. | $(2)$ | 21. | $(1)$ | 22. | $(3)$ | 23. | $(2)$ | 24. | $(3)$ |
| 25. | $(3)$ | 26. | $(1)$ | 27. | $(5)$ | 28. | $(3)$ | 29. | $(2)$ | 30. | $(1)$ | 31. | $(1)$ | 32. | $(1)$ |
| 33. | $(3)$ | 34. | $(1)$ | 35. | $(2)$ | 36. | $(2)$ | 37. | $(5)$ | 38. | $(2)$ | 39. | $(3)$ | 40. | $(1)$ |
| 41. | $(2)$ | 42. | $(4)$ | 43. | $(3)$ | 44. | $(1)$ | 45. | $(1)$ | 46. | $(3)$ | 47. | $(5)$ | 48. | $(5)$ |
| 49. | $(1)$ | 50. | $(5)$ | 51. | $(1)$ | 52. | $(2)$ | 53. | $(1)$ | 54. | $(3)$ | 55. | $(2)$ | 56. | $(4)$ |
| 57. | $(3)$ | 58. | $(5)$ | 59. | $(3)$ | 60. | $(2)$ | 61. | $(2)$ | 62. | $(3)$ | 63. | $(3)$ | 64. | $(3)$ |
| 65. | $(1)$ | 66. | $(2)$ | 67. | $(2)$ | 68. | $(1)$ | 69. | $(1)$ | 70. | $(1)$ | 71. | $(2)$ | 72. | $(4)$ |
| 73. | $(1)$ | 74. | $(3)$ | 75. | $(3)$ | 76. | $(2)$ | 77. | $(3)$ | 78. | $(3)$ | 79. | $(1)$ | 80. | $(1)$ |
| 81. | $(2)$ | 82. | $(2)$ | 83. | $(1)$ | 84. | $(2)$ | 85. | $(4)$ | 86. | $(1)$ | 87. | $(5)$ | 88. | $(2)$ |
| 89. | $(2)$ | 90. | $(5)$ | 91. | $(5)$ | 92. | $(2)$ | 93. | $(3)$ | 94. | $(1)$ | 95. | $(4)$ | 96. | $(3)$ |
| 97. | $(2)$ | 98. | $(3)$ | 99. | $(1)$ | 100. | $(4)$ | 101. | $(2)$ | 102. | $(3)$ | 103. | $(4)$ | 104. | $(4)$ |
| 105. | $(4)$ | 106. | $(2)$ | 07. | $(3)$ | 108. | $(4)$ | 109. | $(4)$ | 110. | $(2)$ | 111. | $(4)$ | 112. | $(4)$ |
| 113. | $(4)$ | 114. | $(4)$ | 115. | $(3)$ | 116. | $(3)$ | 117. | $(4)$ | 118. | $(4)$ | 119. | $(3)$ | 120. | $(1)$ |
| 121. | $(3)$ | 122. | $(5)$ | 123. | $(5)$ | 124. | $(5)$ | 125. | $(3)$ | 126. | $(2)$ | 127. | $(4)$ | 128. | $(4)$ |
| 129. | $(3)$ | 130. | $(5)$ | 131. | $(3)$ | 132. | $(5)$ | 133. | $(3)$ | 134. | $(2)$ | 135. | $(2)$ | 136. | $(1)$ |
| 137. | $(4)$ | 138. | $(5)$ | 139. | $(4)$ | 140. | $(5)$ | 141. | $(4)$ | 142. | $(3)$ | 143. | $(3)$ | 144. | $(4)$ |
| 145. | $(1)$ | 146. | $(3)$ | 147. | $(1)$ | 148. | $(1)$ | 149. | $(1)$ | 150. | $(2)$ | 151. | $(4)$ | 152. | $(4)$ |
| 153. | $(2)$ | 154. | $(2)$ | 155. | $(4)$ | 156. | $(4)$ | 157. | $(3)$ | 158. | $(4)$ | 159. | $(4)$ | 160. | $(2)$ |
| 161. | $(2)$ | 162. | $(2)$ | 163. | $(2)$ | 164. | $(3)$ | 165. | $(3)$ | 66. | $(3)$ | 167. | $(4)$ | 168. | $(3)$ |
| 169. | $(2)$ | 170. | $(1)$ | 171. | $(4)$ | 172. | $(2)$ | 173. | $(2)$ | 174. | $(3)$ | 175. | $(4)$ | 176. | $(3)$ |
| 177. | $(1)$ | 178. | $(2)$ | 179. | $(4)$ | 180. | $(1)$ | 181. | $(4)$ | 182. | $(1)$ | 183. | $(3)$ | 184. | $(3)$ |
| 185. | $(2)$ | 186. | $(1)$ | 187. | $(4)$ | 188. | $(2)$ | 189. | $(2)$ | 190. | $(3)$ | 191. | $(1)$ | 192. | $(4)$ |
| 193. | $(4)$ | 194. | $(1)$ | 195. | $(4)$ | 196. | $(4)$ | 197. | $(1)$ | 198. | $(1)$ | 199. | $(4)$ | 200. | $(3)$ |

