Reasoning Ability

Directions (Q. 151–155) *In a certain code the symbol for* 0 *(zero) is* • *and that for* 1 *is* ★. *There are no other symbols for numbers and all numbers greater than* 1 *are written using these two symbols only, the value of the symbol for* 1 *doubling itself everytime it shifts one place to the left. Thus*

0 is written •
1 is written ★
2 is written ★ •
3 is written ★★
4 is written ★ • • and so on

151. If ★★★ is multiplied by ★★, the product will be
(1) ★ • ★ • ★ (2) ★★ • • ★
(3) ★ • • ★★ (4) • ★★★★
(5) ★• • •★

152. Which of the following will represent 20% of 45 in that code ?
(1) ★★★★ (2) ★★★
(3) ★• • ★ (4) ★★ • ★
(5) ★★★ •

153. Which of the following stands for 7 in that code ?
(1) ★★★★★★★ (2) ★ • ★ • ★ • ★
(3) ★★ • (4) ★ • • ★
(5) ★★★

154. If ★★ • is added to ★ • ★★, the sum will be
(1) ★★★★★ (2) ★ • • • ★
(3) ★★ • • ★ (4) ★ • • ★★
(5) ★★★ • ★

155. Which of the following numbers is written as ★ • ★ • in that code ?
(1) 8080 (2) 202
(3) 42 (4) 10
(5) 9

156. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?
(1) Jasmine (2) Rose
(3) Dahlia (4) Marigold
(5) Lotus

157. 'Jackal' is related to 'Carnivorous' in the same way as 'Goat' is related to
(1) Omnivorous (2) Carnivorous
(3) Herbivorous (4) Multivorous
(5) None of these

158. If blue is called red, red is called green, green is called black and black is called white, what is the colour of grass ?
(1) red (2) black
(3) white (4) green
(5) None of these

159. In a certain code RAID is written as % # ★ $, RIPE is written as % ★ @ ©. How is DEAR written in that code ?
(1) @©#% (2) $@#%
(3) @$#% (4) $©#%
(5) None of these

160. 'Radish' is related to 'Root' in the same way as 'Brinjal' is related to
(1) Fruit (2) Stem
(3) Flower (4) Root
(5) None of these

Directions (Q. 161–165) *Each of the questions below consists of a question and two statements numbered* I *and* II *are given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and*

Give answer (1) if the data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question.
Give answer (2) if the data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
Give answer (3) if the data either in Statement I alone or in Statement II alone are sufficient to answer the question.
Give answer (4) if the data even in both the Statements I and II are not sufficient to answer the question.
Give answer (5) if the data in both the Statements I and II together are necessary to answer the question.

161. How many children are there in the group ?
I. Sangita has scored more marks than 12 children in the group.
II. Reena has scored less than Sangita.

162. What is the value of 36$4★8 ?
I. P$Q means divide P by Q.
II. A★B means multiply A by B.

163. What is Samir's rank from the top in the class of 30 students ?
I. Sudhir, who is four ranks above Samir, is fifteenth in rank from the bottom.
II. Samir is three ranks below Neeta who is eighteenth from the bottom.

164. Who among L, N, F, G and Q was the first to reach the college ?
I. F reached before L and G but not before Q who was not the first to reach.
II. N reached before F and G and L reached after F.

165. In the code language what is the code for 'fat' ?
I. In the code language 'she is fat' is written as 'he ra ca'.
II. In the same code language 'fat boy' is written as 'ra ka'.

Directions (Q. 166–170) *Below in each question are given two statements* (A) *and* (B). *These statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements.*

Mark answer (1) if statement (A) is the cause and statement (B) is its effect
Mark answer (2) if statement (B) is the cause and statement (A) is its effect.
Mark answer (3) if both the statements (A) and (B) are independent causes.
Mark answer (4) if both the statements (A) and (B) are effects of independent causes.
Mark answer (5) if both the statements (A) and (B) are effects of some common cause.

166. A. Large number of primary schools in the villages in the district are closed down this year.
B. Severe draught situation gripped the state resulting into acute shortage of drinking water.

167. A. Govt. has imposed a strict ban on use of plastics all over the state.
B. All the small scale units producing plastic products are on the verge of closure.

168. A. Police had launched a crackdown on all the criminal activities in the locality last month.
B. There has been a significant decline in the cases of criminal activities in the locality.

169. A. Large number of devotees visited the shrine on Saturday.
B. Every Saturday special prayers are offered.

170. A. The Village Panchayats in the state are empowered by the Govt. to settle cases of land disputes in the villages.
B. There has been significant reduction in the number of criminal cases in the district court.

Directions (Q. 171–175) *Study the following information carefully and answer the questions given below.*

Digits in the numbers are to be coded as follows :

Digit	:	3	5	7	2	4	6	1	8	9
Code	:	F	K	R	L	D	T	G	H	B

Following conditions are to be applied :

(i) If the first digit is even and the last digit is odd, both are to be coded as X.

(ii) If the first digit is odd and the last digit is even, both are to be coded as A.

(iii) If the first digit as well as the last digit is even, both are to be coded as the code for last digit.

(iv) If the first digit as well as the last digit is odd, both are to be coded as the code for the first digit.

Applying above conditions you have to find out the correct code for the number in each question and indicate your answer accordingly. If none of the codes is correct, (5) *ie.* None of these is your answer.

171. 364289
(1) BTDLHB (2) FTDLHB
(3) FTDLHF (4) BTDLHF
(5) None of these

172. 521437
(1) KLGDFK (2) RLGDFR
(3) KLGDFR (4) KLDGFK
(5) None of these

173. 392648
(1) ALBTDA (2) XBLTDA
(3) XBLTDX (4) ABLTDA
(5) None of these

174. 279654
(1) LRBTKD (2) LRBTKL
(3) DRBTKL (4) DRTBKD
(5) None of these

175. 725638
(1) ALKTFH (2) ALKTFA
(3) XLKTFX (4) XLKTFH
(5) None of these

Directions (Q. 176–183) *In the following questions the symbols @, #, $, % and & are used with different meanings as follows :*

'P @ Q' means 'P is neither smaller than nor equal to Q'.
'P # Q' means 'P is not greater than Q'.
'P $ Q' means 'P is not smaller than Q'.
'P % Q' means 'P is neither greater than nor smaller than Q'.
'P & Q' means 'P is neither greater than nor equal to Q'.

In each of the following questions assuming the given statements to be true, find out which of the two conclusions I and II given below them is/are definitely true.

Give answer (1) if only conclusion I is true.
Give answer (2) if only conclusion II is true.
Give answer (3) if either conclusion I or conclusion II is true.
Give answer (4) if neither conclusion I nor conclusion II is true.
Give answer (5) it both conclusions I and II are true.

176. **Statements** G # H, H $ K, K @ M
Conclusions I. M # G
II. G & M

177. **Statements** F $ D, H # M, M % D
Conclusions I. F $ H
II. F @ H

178. **Statements** R & M, M # L, L $ Q
Conclusions I. M % Q
II. M @ Q

179. **Statements** F # R, Q $ R, Q & M
Conclusions I. F # Q
II. R & M

180. **Statements** D & T, R # T, R $ M
Conclusions I. M & T
II. M % T

181. **Statements** E % H, H $ M, M # Q
Conclusions I. H $ Q
II. E $ M

182. **Statements** S # A, S @ T, L & T
Conclusions I. L & A
II. S @ L

183. **Statements** G $ J, J @ K, K % N
Conclusions I. G @ N
II. G % N

Directions (Q. 184–190) *These questions are based on the following arrangement of numerals, symbols and letters.*

W T D I 5 M K % L $ 3 7 F E B # 1 G H A © @ J U V 2 4

184. How many such symbols are there in the above arrangement each of which is immediately followed by a numeral and also immediately preceded by a letter ?
(1) None (2) Two
(3) Three (4) One
(5) None of these

185. If KL : $7, then B1 : ?
(1) GA (2) H©
(3) GH (4) ©J
(5) None of these

186. If all the vowels are dropped from the arrangement, which element will be fifth to the right of the thirteenth element from the right ?
(1) H (2) G (3) A
(4) 1 (5) None of these

187. If the first ten elements in the arrangement are reversed, which element will be third to the left of eleventh element from the left ?
(1) D (2) % (3) K
(4) I (5) None of these

188. Four of the following five are alike in a certain way on the besis of their position in the above arrangement and so form a group. Which is the one that does not belong to the group ?
(1) D5W (2) L3K
(3) E#7 (4) H©G
(5) U2@

189. How many such vowels are there in the above arrangement which are immediately preceded as well as immediately followed by a consonant ?
(1) None (2) One
(3) Two (4) Three
(5) None of these

190. Which element is exactly midway between the eighth element from the left and the tenth element from the right ?
(1) E (2) 7
(3) B (4) #
(5) None of these

Directions (Q. 191–195) *Given an input, a coding machine generates pass-codes for six batches every day as follows :*

Input : the shopkeeper offered discount to customers.
Pass-code for
Batch I : customer the shopkeeper offered discount to
Batch II : customer discount the shopkeeper offered to
Batch III : customer discount offered the shopkeeper to and so on until the arrangement is completed. After the arrangement is completed the next batch gets the same code as that for Batch I.

Duration of each batch is 1 hour. There is a break of one hour after the fourth batch. Sixth batch is the last batch.
Now answer the following questions :

191. If the pass-code for the second batch is "do lean window out of not", what will be the pass-code for the fourth batch ?
(1) do lean of not out window
(2) do lean of out not window
(3) do lean not out window of
(4) do lean not of window out
(5) None of the above

192. If the input is
"please do not delay the matter",
what will be the pass-code for third batch ?
(1) do please not delay the matter
(2) delay do matter please not the
(3) delay do matter not please the
(4) delay do matter not the please
(5) None of the above

193. If the pass-code for third batch is "brisk every for morning go walk", what will definitely be the input ?
(1) morning brisk go walk for every
(2) morning go brisk walk for every
(3) morning go walk brisk for every
(4) Cannot be determined
(5) None of the above

194. If the pass-code for the second batch is "children for not is good watching television", what will be the pass-code for the fifth batch ?
(1) children for good not is watching television
(2) children for good is not watching television
(3) children good for is not television watching
(4) Cannot be determined
(5) None of the above

195. If the input is "necessary arrangements have already been made", how many batches are required to complete the arrangement ?
(1) Three (2) Four
(3) Five (4) Six
(5) None of these

Directions (Q. 196–205) *Study the following information carefully and answer the questions given below.*

An organization wants to recruit System Analysts. The following conditions apply.
The candidate must
(i) be an engineering graduate in Computer/IT with at least 60% marks.
(ii) have working experience in the field of Computer at least for 2 years after acquiring the requisite qualification.
(iii) have completed minimum 25 years and maximum 30 years of age as on 1.12.2005.
(iv) be willing to sign a bond for ₹ 50000.
(v) have secured minimum 55% marks in selection test.

However, if a candidate fulfils all other conditions **except :**
(a) at (i) above, but is an Electronics Engineer with 65% or more marks the case is to be referred to the General Manager (GM)-IT.
(b) at (iv) above, but has an experience of at least 5 years as a Software Manager, the case is to be referred to the VP.

In each question below, detailed information of candidate is given. You have to carefully study the information provided in each case and take one of the following courses of actions based on the information and the conditions given above. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 01.12.2005. You have to indicate your decision by marking answers to each question as follows :
Mark answer (1) if the case is to be referred to VP.
Mark answer (2) if the case is to be referred to GM.
Mark answer (3) if the data provided is not sufficient to take a decision.
Mark answer (4) if the candidate is to be selected.
Mark answer (5) if the candidate is not to be selected.

196. Ms. Suneeta is an IT Engineer with 60% marks at graduation as well as in selection test. She is working as a Software Engineer for last 3 years after completing engineering degree and has completed 27 years of age. She is willing to sign the bond of ₹ 50000.

197. Rakesh Rao is a Computer Engineer Graduate and thereafter is working as a Software Manager for past 6 years. He has secured 72% marks at graduation and 67% marks in selection test. His date of birth is 5th December 1976. He is not willing to sign the bond for ₹ 50000.

198. Ramkumar is an engineering graduate in Computers with 78% marks passed out in 1999 at the age of 23 years. Since then he is working as a Software Manager in an engineering firm. He doesn't want to sign the bond for ₹ 50000. He has cleared the selection test with 72% marks.

199. Nishant is an Electronics Engineer passed out in June 2002 at the age of 22 years. Since then he is working as a Programmer in a software company. He has passed the selection test with 66% marks and is willing to sign the bond.

200. Kalyani is an Engineer with 72% marks in Telecommunication. She has just completed 27 years of age. She has cleared the selection test with 59% marks. She is willing to sign the bond.

201. Sangita is an IT Engineer and is working as an EDP Officer in a bank for past 5 years. She has completed 28 years of age and is willing to sign the bond of ₹ 50000. She has obtained 65% marks in the selection test.

202. Abhijit is a Computer Engineer with 65% marks passed out in 2001 at the age of 22 years. Since then he is working as a Software Engineer in a private firm. He is willing to sign the bond for the required amount. He has secured 63% marks in selection test.

203. Giridhar is working as a Software Engineer in a reputed company for past 4 years after completing Computer Engineering with 68% marks. He has cleared the selection test with 75% marks and is willing to sign the bond. His date of birth is 17th December, 1978.

204. Nikita has just completed 26 years of age. She has passed IT Engineering Examination in 2002 with 66% marks and is working as a Sr. Programmer since then. She has no problem in signing the bond of ₹ 50000 . She has secured 53% marks in selection test.

205. Mr. Rajan is working as a Programmer for the last 6 years in an engineering firm after passing Engineering Examination. He has passed Electronics Engineering with 76% marks. His date of birth is 16.05.78. He has cleared the selection test with 62% marks and is willing to sign the bond for ₹ 50000.

Directions (Q. 206–210) *Study the following information to answer these questions.*

Seven Professors A, B, C, D, E, F and G are engaged in evaluation of answer papers in three different subjects English, Mathematics and History. At least two persons evaluate the papers in each subject. Each of the evaluators stay in different buildings P, Q, R, S, T, V and W not necessarily in the same order.

A evaluates English papers only with E and stays in building R. D stays in building W and does not evaluate Maths papers. The one who stays in building V evaluates History papers. B and C do not evaluate the papers in the same subject. Those who evaluate English papers do not stay in building Q. F stays in building P but does not evaluate History papers. G evaluates same papers as F. C stays in building T.

206. Who stays in building V ?
(1) E (2) F
(3) G (4) B
(5) None of these

207. Which of the following combinations of subject, person and building is **definitely** correct ?
(1) Maths-F-Q (2) Maths-G-Q
(3) History-D-T (4) History-E-S
(5) None of these

208. Which of the following groups of persons evaluate the Mathematics paper ?
(1) CF (2) EFG
(3) CFG (4) FG
(5) None of these

209. Papers in which subject are evaluated by D ?
(1) History (2) Maths
(3) English (4) English or Mathematics
(5) History or Mathematics

210. E stays in which building ?
(1) P (2) Q
(3) T (4) Cannot be determined
(5) None of these

Directions (Q. 211–215) *In each question given below, use the following notations :*

'A] B' means 'Add A to B', 'A|B' means 'Subtract B from A', 'A $ B' means 'Multiply A by B', and 'A @ B' means 'Divide A by B'.

211. Profit percentage is computed by using the following method. Cost Price (C) is subtracted from the Sale Price (S) and the difference is multiplied by 100 and the product is then divided by Cost Price (C). Which of the following expressions indicates the profit percentage ?
(1) (C | S) $ 100 @ C (2) (S | C) $ 100 @ C
(3) (S | C) @ 100 @ C (4) C | S $ 100] C
(5) None of these

212. IQ is worked out by dividing mental age (MA) of a person by his chronological age (CA) and the quotient so obtained is multiplied by 100. Which of the following expressions indicates the IQ of a person ?
(1) MA $ 100 @ CA (2) MA $ CA @ 100
(3) CA $ MA] 100 (4) MA $ CA | 100
(5) None of these

213. The percentage increase in production in a particular year over that of its previous year is computed by dividing the difference between production of the two years (P1 and P2) by the production in the previous year (P1), and multiplying the quotient so obtained by 100. Which of the following expressions indicate the percentage increase in production in the particular year over its previous year ?
(1) P2 | P1 @ 100 $ P1 (2) P1 | P2 $ P1 @ 100
(3) (P2 | P1) @ P1 @ 100 (4) P2 | P1 $ P1 @ 100
(5) None of these

214. The average salary of the Managers is computed by the following method.
(i) The average salary (A) is multiplied by the Grand Number (GN)
(ii) The average salary of other employees (AE) is multiplied by number of employees (N).
(iii) (ii) is subtracted from (i), and

(iv) the difference so obtained is divided by the number of Managers (NM)

Which of the following expressions indicates the average salary of the Managers ?

(1) A $ GN | (AE $ N @ NM)
(2) A $ GN] (AE $ N @ NM)
(3) GN | AE @ N @ NM
(4) (GN $ A | AE $ N) @ NM
(5) None of the above

215. For earthquake relief fund, each employee of a company had contributed an amount equal to the total number of employees (N) in the company. To this amount was added the contribution made by 10 Directors, each of whom had paid ₹ 100 more than what each employee had paid. Which of the following expressions indicate the total contribution made by the company ?

(1) N] N $ 10 @ (N] 100)
(2) N $ N] 10 $ (100] N)
(3) N $ N @ 10 S (N | 100)
(4) N $ N] 10 $ (100 $ N)
(5) None of the above

Directions (Q. 216–218) *Study the following information carefully to answer these questions.*

Seven executives A, B, C, D, E, F and G from a company have to visit seven different places Ahmedabad, Kolkata, Delhi, Chennai, Hyderabad, Bengaluru and Jaipur to market their newly launched product. The order of persons and cities may not be necessarily the same. Each one flies by a different airline Spicejet, Kingfisher, Sahara, Jet, Air Deccan, Indian Airlines, Air India, not necessarily in the same order.

C goes to Kolkata but not by Sahara or Jet Airlines. D flies by Air India to Bengaluru. The one who goes to Jaipur does not travel by Air Deccan or Sahara. E travels by Air Deccan. A does not go to Ahmedabad. F travels to Hyderabad by Spicejet. B goes to Chennai by Kingfisher. E does not go to Ahmedabad. G does not go to Jaipur.

216. Who travels by Sahara Airlines ?

(1) A (2) C
(3) G (4) Cannot be determined
(5) None of these

217. Who goes to Jaipur ?

(1) A (2) E
(3) G (4) D
(5) None of these

218. The one who travels by Air Deccan, visits which place ?

(1) Ahmedabad (2) Delhi
(3) Chennai (4) Bengaluru
(5) None of these

Directions (Q. 219–225) *Study the following information carefully and answer the given questions.*

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input : day case 20 13 now for 49 56
Step I : 13 day case 20 now for 49 56
Step II : 13 now day case 20 for 49 56
Step III : 13 now 20 day case for 49 56
Step IV : 13 now 20 for day case 49 56
Step V : 13 now 20 for 49 day case 56
Step VI : 13 now 20 for 49 day 56 case and Step VI is the last step

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

219. Input : yes 21 far 32 17 12 wide goal

Which of the following will be step V of the above input ?

(1) 12 yes 21 wide 32 far 17 goal
(2) 12 yes 21 wide far 32 17 goal
(3) 12 yes 21 far 32 17 wide goal
(4) There will be no such step
(5) None of the above

220. Step IV of an input is : 17 hotel 29 father 83 76 door eye. Which of the following will be Step VII ?

(1) 17 hotel 29 father 76 door 83 age
(2) 17 hotel 29 father 76 age 83 door
(3) 17 hotel 29 father 76 83 door age
(4) There will be no such step
(5) None of the above

221. Step III of an input is : 25 win 32 85 73 tax break home. How many more steps will be required to complete the rearrangement ?

(1) Five (2) Four
(3) Six (4) Seven
(5) None of these

222. Step III of an input is : 37 yellow 42 61 53 violet green red. How many more steps will be required to complete the rearrangement ?

(1) 3 (2) 4
(3) 5 (4) 6
(5) None of these

223. Input : can you go there 22 36 13 46

How many steps will be required to complete the rearrangement ?

(1) 7 (2) 8
(3) 6 (4) 5
(5) None of these

224. Input : 42 36 go and come back 20 15

Which of the following steps will be the last but one ?

(1) IV (2) V
(3) VII (4) VIII
(5) None of these

225. Step II of an input is : 39 sure 72 63 height over 42 lamp. Which of the following is definitely the input ?

(1) height 39 sure 72 63 over 42 lamp
(2) 72 63 39 sure height over 42 lamp
(3) 63 39 sure 72 height over 42 lamp
(4) Cannot be determined
(5) None of the above