

NMIMS (NMAT) PAPER

SECTION – C

INTELLIGENCE AND LOGICAL REASONING

Directions for questions 101 – 104: In each question given below is a statement of 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/are implicit in the statement.

- (A) if assumption I is implicit, (B) if assumption II is implicit,
(C) if neither I nor II is implicit, and (D) if both I and II are implicit,

101. **Statement** : Of all the newspapers published in Mumbai, readership of the "Times" is the largest in the Metropolis.
Assumptions : (I) Times is not popular in monfussil areas
(II) Times has the popular feature of cartoons on burning social and political issues.
102. **Statement** : If any time you have financial difficulty, come to me; I will help you out.
Assumptions : (I) You have financial difficulties
(II) I promise to provide you financial help
103. **Statement** : The entire north India, including Delhi and the neighbouring states remained 'Powerless' the whole day of 19th December 97 as the northern grid supplying electricity to the seven states collapsed yet again.
Assumptions : (I) The northern grid had collapsed earlier
(II) The grid system of providing electricity to a group of states is an ineffective type of power supply system
104. **Statement** : Among all the articles, the prices of personal computers show the highest decline from June 1997 to December 1997.
Assumptions : (I) Comparative prices of all the articles in June and December 1997 were available in January 1998.
(II) Prices of personal computers were higher in the first six months than in the last six months of 1997

Directions for questions 105 – 107: In each question below are given two statements followed by two conclusions – I and II. You have to take the given Statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows, from the two statements, disregarding commonly known facts.

Given answer :

- (A) if only conclusion I follows (B) if only conclusion II follows
(C) if either I or II follows (D) if neither I nor II follows

105. **Statements** : Some nurses are nuns. Maya is a nun.
Conclusions : I. Some nuns are nurses II. Some nurses are not nuns.

106. **Statements** : All apples are oranges Some oranges are papayas
Conclusions : I. Some apples are papayas II. Some papayas are apples
107. **Statements** : On Dec. 15, there was a big cyclone near Vaizag on the east coast of India.
On 16th December, the local police gave a statement that a band of fishermen who went fishing on the high seas on Dec. 15 was missing
Conclusions : I. The entire band of fishermen must have been drowned in the high seas
II. Some of the fishermen from that band may survive
108. What would be the serial number of the word **MOTHER** in a dictionary consisting of words formed by letters in MOTHER arranged in an alphabetical order?
(A) 307 (B) 308 (C) 309 (D) 312

Directions for questions 109 – 110: In the following questions, two statements are followed by two inferences.

Mark your answer as:-

- A. If only inference I follows B. If only inference II follows
C. If both of them follow D. If neither of them follows

109. All Peter are Piper. Some Pickle are Piper
I. Some Peter are Pickle
II. Some Pickle are Peter
110. All boats are ships. Some ships are jinxed vessels
I. Some boats could be jinxed vessels
II. Some jinxed vessels could be ships but not boats

Directions for questions 111 – 115: In a language, words are made with only three letters A, B and C. The words follow a fixed sequence.

- (1) If X is a viable word sequence ending with A then a B can be added at the end.
(2) If CX is a viable word sequence then so is CXX.
(3) If there are three A's i.e. AAA then the trio can be replaced by a single B.
(4) If there are two B's i.e. BB then the pair can be dropped altogether.

It is known that CA is a viable word.

Example: To obtain CBAAB from CA, the minimum number of steps is:

Step 1: CA

Step 2: CAA

Step 3: CAAAA

Step 4: CBA

Step 5: CBAB

Step 6: CBABBAB

Step 7: CBAAB

In one step only one operation can be carried out.

111. What is the minimum number of steps required to obtain CBBAA from CA?
 (A) 5 (B) 6 (C) 7 (D) 8
112. What is the minimum number of steps required to obtain CBBBA from CA?
 (A) 8 (B) 9 (C) 10 (D) 11
113. What is the minimum number of steps required to obtain BC from CA?
 (A) 3 (B) 5 (C) 6 (D) not possible
114. Starting from CBAB, what is the minimum number of steps required to obtain CBBAB
 (A) 4 (B) 5 (C) 6 (D) 7
115. How many steps are required to get CABAB from CA?
 (A) 3 (B) 4 (C) 5 (D) 6

Directions for questions 116 – 119: Answer the questions on the basis of information given below.

Six nurses Agnes, Bethy, Chandrika, Divya, Evita and Faria are working for Marium hospital, which requires three nurses per day. The availability of various nurses on various days of the week is as follows.

- (1) Agnes and Bethy will not work together and both of them will not be available on Mondays and Thursdays.
 - (2) Chandrika is a dedicated nurse and works 7 days a week.
 - (3) Divya is married and will not be available on weekends.
 - (4) Evita and Faria will always work together, if possible and one of them will have her off on Monday and the other on Wednesday.
 - (5) Any triplet can not be repeated on two consecutive days.
116. Who will be working on any Monday?
 (A) Chandrika, Divya, Evita (B) Chandrika, Evita and Fana
 (C) Chandrika, Divya, Faria (D) Either 'a' or 'c'
117. If Agnes, Chandrika and Diya work on Friday then who will be working on Saturday?
 (A) Agnes, Chandrika, Evita (B) Bethy, Divya, Faria
 (C) Chandrika, Evita, Faria (D) Agnes, Divya, Evita
118. If Evita is ill, who will be working on Thursday?
 (A) Chandrika, Divya, Faria (B) Chandrika, Divya, Bethy
 (C) Divya, Faria, Agnes (D) Chandrika, Bethy. Faria
119. If Chandrika decides to take off on Wednesday, then who essentially works on Wednesday?
 (A) Divya (B) Evita (C) Faria (D) Both (B) & (C)

Directions for questions 120 – 124: Answer the questions on the basis of information giver below.

Six persons A, B, C, D, E and F are photographer, engineer, lawyer, housewife, waiter and journalist, not necessarily in that order. There are two married couples in the group who stay together

- (1) A is married and his wife is a housewife.
- (2) B, the lawyer is married to the photographer sister of A.

- (3) D is the brother of C, who is not the housewife.
 (4) E, the journalist has taken a vow of never getting married.
 (5) The waiter is engaged to his girlfriend.

120. Who is the wife of B?
 (A) E (B) F (C) D (D) C
121. Who is the wife of A?
 (A) C (B) D (C) E (D) F
122. Who is the engineer?
 (A) D (B) C (C) A (D) F
123. Who is the waiter?
 (A) F (B) C (C) E (D) D
124. Which four people stay together?
 (A) A, B, C, F (B) B, C, D, E (C) A, C, D, E (D) C, D, E, F

Directions for questions 125 – 128: From the data about a race given below, find the sequence of the participants and answer the following questions.

Archana, Bhavana, Chitra, Dolly, Esha, Farhein, Gauri, Hema and Iva participated in a 100-m race.

Gauri finishes the race immediately after Chitra, who finishes before Bhavana. Bhavana touches the finishing line just when Iva was about to do so. In the order of rank there is one girl between Dolly and Farhein, & Farhein was not the last person to finish the race. Esha finishes the race before Archana can.

125. If Chitra stood 2nd in the race who came last?
 (A) Archana (B) Iva (C) Hema (D) any of these
126. If Dolly stood 3rd in the race who stood in 6th position?
 (A) Archana (B) Iva (C) Hema (D) indeterminable
127. If Iva didn't finish last, Bhavana finishes immediately after (refer to Q 133)?
 (A) Dolly (B) Farhein (C) Hema (D) either (A) or (B)
128. Who was the last girl to finish the race if Esha ranked 3rd & Farhein 4th?
 (A) Iva (B) Archana (C) Hema (D) either (A) or (B)

Directions for questions 129 – 133:

From a group of six boys M, N, O, P, Q, R and five girls G, H, I, J, K, a team of six to be selected. Some of the criteria of selection are as follows :

- M and I go together
- O cannot be placed with N
- I cannot go with J
- N goes with H
- P and Q have to be together

K and R go together

Unless otherwise stated, these criteria are applicable to all the following questions

129. If the team consists of two girls and I is one of them, the other members are :
 (A) H N O P Q (B) K O P Q R (C) K R M N P (D) G M R P Q
130. If both K and P are members of the team and three boys in all are included in the team, the members of the team other than K and P are :
 (A) G J R M (B) H I R Q (C) O I R Q (D) I J R Q
131. If the team has four boys including O and R, the members of the team other than O and R are :
 (A) G J M P (B) G J P Q (C) H I P Q (D) G K P Q
132. If the team has three girls including J and K, the members of the team other than J and K are :
 (A) M O R G (B) N H O R (C) M N O G (D) G H N R
133. If four members are boys, which one of the following cannot constitute the team?
 (A) H J M N P Q (B) G J M O P Q (C) J K M N O R (D) J K M P Q R
134. A man pointing to a photograph says, "The lady in the photograph is my nephew's maternal grandmother. How is the lady in the photograph related to his sister who has no other sister?
 (A) mother (B) mother-in-law (C) cousin (D) sister-in-law
135. If CONCEPT is written as 'u n m u l q r' and FRIEND is written as 'y s g l m t', how is PREDICT written in that code ?
 (A) q s l t g u r (B) q g m n l t r (C) s l m g t u r (D) u s y g m n l
136. If BELIEF is written as 'a f k k d i', how is SELDOM written in that code?
 (A) r d k c n l (B) t f k e n p (C) r f k e n n (D) r f k f n p
137. If 'CONTRIBUTE' is written as 'E T B U I R N T O C'. Which letter will be in the sixth place when counted from the left if "POPULARISE" is written in that order?
 (A) R (B) i (C) A (D) L
138. If "COAT" is coded as "ABMNYZRS", then "REST" will be coded as _____.
 (A) PQCDQRRS (B) PQRSCDQR (C) PQQRCDS (D) PQQRRSCD
139. If "CHEATING" is coded as "TEACHING", then "CIRCULAR" will be coded as _____.
 (A) UCRICLAR (B) UCIRCLAR (C) UKIRCLAR (D) UCRICLAR
140. If "CARTOON" IS CODED AS 4286335, Then "ARCOT" will be coded as _____.
 (A) 28346 (B) 28643 (C) 28436 (D) 28364

Direction for questions 141 – 144: Consider the given statement and choose:

- (A) if only assumption X is implicit; (B) if only assumption Y is implicit;
(C) if both X and Y are implicit; and (D) if neither X nor Y is implicit.

141. Statement: Man is born free.
Assumptions: X. Freedom is the birthright of man. Y. All humans have human rights.
142. Statement: Laugh and the world will laugh at you.
Assumption: X. People generally laugh. Y. Laughter symbolises happiness.
143. Statement: There is no need to open a school here.
Assumptions: X. Children in this area do not study.
Y. There are already many schools in this area.
144. Statement: Owing to stress and fast pace of life your digestive system is attacked.
Assumptions: X. There is stress in life. Y. Digestive system has no defence.

Direction for questions 145 – 148: In each of the following questions two statements are followed by two possible inferences. Assume the statements to be true, even if they appear opposed to common sense or observation.

- Choose:** (A) for your answer if only inference I follows;
(B) for your answer if only inference II follows;
(C) for your answer if both I and II follow; and
(D) for your answer if neither I nor II follows.

145. All cats are dogs. Some dogs are rats.
(I) Some rats are dogs. (II) Some dogs are rats.
146. Some books are hooks. No book is a screw.
(I) Some screws are not hooks. (II) Some hooks are not screws.
147. No flower is a plant. No plant is a tree.
(I) No tree is a flower. (II) No flower is a tree.
148. All horses are donkeys. All donkeys are monkeys.
(I) All horses are monkeys. (II) All monkeys are horses.

Direction for questions 149 – 150: For each of the following questions mark the appropriate choice.

149. Amit can set questions for MBA exams because he has experience to set questions for Bank exams. This statement is based on the assumption that
(A) The questions of Bank exams are harder than that of MBA exams.
(B) Both exams are conducted by the same board.
(C) Those who can set questions for Bank exams can set questions for MBA exams also.
(D) Number of papers asked in both exams are same.

150. My TV has an electronic child lock with an optional pass-word and cannot be opened in my absence. It therefore follows.
- (A) My TV has been misused before this lock facilities.
 - (B) Electronic child lock with a provision to alter the password is an effective security device.
 - (C) Children used to watch vulgar shows in the absence of their guardians.
 - (D) All TVs without this special facility can be easily opened.

ANSWERS

SECTION – C

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|----------|----------|----------|----------|----------|----------|----------|----------|
| 101. (C) | 102. (B) | 103. (A) | 104. (D) | 105. (D) | 106. (A) | 107. (A) | 108. (C) |
| 109. (D) | 110. (C) | 111. (B) | 112. (B) | 113. (D) | 114. (C) | 115. (A) | 116. (D) |
| 117. (C) | 118. (A) | 119. (D) | 120. (D) | 121. (D) | 122. (C) | 123. (D) | 124. (A) |
| 125. (D) | 126. (D) | 127. (D) | 128. (D) | 129. (B) | 130. (C) | 131. (D) | 132. (A) |
| 133. (C) | 134. (A) | 135. (A) | 136. (D) | 137. (D) | 138. (A) | 139. (D) | 140. (C) |
| 141. (D) | 142. (D) | 143. (D) | 144. (A) | 145. (C) | 146. (D) | 147. (D) | 148. (A) |
| 149. (C) | 150. (B) | | | | | | |