RBI Assistant Mains 2020 | Reasoning — Memory Based (English)

Q.1 How many persons sit to the right of N?

Study the following information carefully and answer the given questions.

Twenty-two persons sit in a row facing north. Four persons sit between A and K. Two persons sit between K and Z. Z sits 4th from one of the extreme ends. The number of persons sitting to the left of D is the same as the number of persons sitting to the right of the one who sits immediately left of Z. Five persons sit between J and K. N sits 4th to the right of J but does not sit next to K. Three persons sit between D and N. W is the only neighbour of Y. Eleven persons sit between Y and A.

A. Eight
B. Twelve
C. Seven
D. Five
E. Ten

Answer: A

Sol: Arrangement (L→R): Y W … D … J … N A … K … Z → 8 persons to right of N.

Q.2 How many persons sit between D and the one who sits immediately left of A?

A. Six
B. More than Six
C. None
D. Four
E. None of these

Answer: A

Sol: From the arrangement, 6 persons sit between D and the person immediately left of A.

Q.3 If X sits exactly between K and Z, who sits 8th to the left of X?

A. D
B. N
C. J
D. A
E. None of these

Answer: B

Sol: X occupies the midpoint of K–Z; 8 places to X's left lands on N.

Q.4 Four of the following five are alike in a certain way and form a group. Find the one that does NOT belong?

A. W
B. Z
C. Y
D. J
E. D

Answer: C

Sol: W, Z, J, D are at specific fixed positions; Y sits at an extreme-adjacent seat — the odd one.

Q.5 If Y and N interchange their positions, who sits 4th to the left of Y?

A. D
B. W
C. N
D. J
E. None of these

Answer: A

Sol: After swapping, Y moves to N's position; 4th to the left of new Y is D.

Q.6 Who among the following was born just before E? Statement I: E was born in the month having an odd number of days. Three persons were born between E and A. The number of persons born before A equals those born after D. Three persons were born between D and C. Statement II: More than two persons were born between B and C. Two persons were born between E and B. One person was born between A and C. A was born before B. Each question has two statements. Decide whether the data are sufficient.

A. If statement I alone is sufficient
B. If statement II alone is sufficient
C. If either statement alone is sufficient
D. If both together are NOT sufficient
E. If both together are necessary

Answer: B

Sol: Only from II: order is C, A, F, E, B, D → F was born just before E.

Q.7 Six persons sit in a row facing north. Who sits 4th from the left? Statement I: Two persons sit between B and E. F sits 3rd to the right of B. E sits 3rd to the left of C. Both A and E are not immediate neighbours. Statement II: Four persons sit between B and E. G sits immediately right of B. E does not sit at any extreme end. Three persons sit between A and F. Each question has two statements. Decide whether the data are sufficient.

A. If statement I alone is sufficient
B. If statement II alone is sufficient
C. If either statement alone is sufficient
D. If both together are NOT sufficient
E. If both together are necessary

Answer: D

Sol: Combining both statements still yields two possible arrangements; answer cannot be determined.

Q.8 In a certain code language, what does "pq" stand for? Statement I: "vision goal target" → "pq rs tu" and "medal honour goal award" → "pq vw xy zz". Statement II: "the target award in" → "vw ab rs xy" and "goal medal vision" → "zz pq rs". Each question has two statements. Decide whether the data are sufficient.

A. If statement I alone is sufficient
B. If statement II alone is sufficient
C. If either statement alone is sufficient
D. If both together are NOT sufficient
E. If both together are necessary

Answer: C

Sol: From I: "goal" = "pq" (common word–code pair). Same conclusion from II alone.

Q.9 Twelve persons sit in two parallel rows of 6 each. Row 1 (A–F) faces south; Row 2 (L–Q) faces north. Who faces M? Statement I: A sits 3rd left of one who faces Q. B faces N and is an immediate neighbour of A. C does not sit at any extreme end. L faces the one sitting 2nd left of C. Statement II: M sits 4th left of L. One person sits between D and F. N faces the one sitting 3rd left of D. Each question has two statements. Decide whether the data are sufficient.

A. If statement I alone is sufficient
B. If statement II alone is sufficient
C. If either statement alone is sufficient
D. If both together are NOT sufficient
E. If both together are necessary

Answer: D

Sol: Even combining both statements, the arrangement is not uniquely determined.

Q.10 What is the direction of point V with respect to point B?

Study the following information carefully and answer the given questions.

Point B is 12 m west of point A. Point C is exactly between point A and point S. Point V is 12 m east of point C. Point U is 8 m south of point V and east of point S. Point T is 20 m west of point C. S is south of A.

A. North-east
B. South
C. South-east
D. North-west
E. None of these

Answer: C

Sol: Plotting: B(0,0); A(12,0); C(6,0); S(6,–9); V(18,0); U(18,–8). V is south-east of B.

Q.11 Four of the following five pairs are alike in a certain way. Find the odd one out.

A. T–S
B. B–C
C. A–U
D. V–B
E. A–V

Answer: D

Sol: T–S, B–C, A–U, A–V all have one point directly north/south/east/west of the other; V–B are diagonal.

Q.12 If point X is south of point B and east of point T, what is the shortest distance between point X and point V?

A. 12 m
B. 20 m
C. 28 m
D. 34 m
E. None of these

Answer: C

Sol: X is at T's east & B's south → X(–8, –8); V(18,0). Distance = $\sqrt{((26)^2+(8)^2)} \approx 27.2 \approx$ 28 m (nearest option).

Q.13 What is the position of B with respect to the one who sits immediately right of F?

Study the following information carefully and answer the given questions.

Ten persons sit around a circular table. Six of them face outside and four face inside. E sits 3rd to the left of F and both face opposite directions. One person sits between H and E. G sits 2nd to the right of B and both face the same direction. F sits immediately left of M. Four persons sit between H and M and they face opposite directions. R is neither an immediate neighbour of E nor M. G sits immediately left of R. J is not an immediate neighbour of R.

A. 3rd to the left
B. 4th to the right
C. 5th to the right
D. 3rd to the right
E. Both (A) and (C)

Answer: E

Sol: From the arrangement, B is 3rd to the left AND 5th to the right of the person immediately right of F.

Q.14 Which of the following statements is true? I. E does not sit opposite to R. II. Three persons sit between B and M, counted to the left of B. III. F and G are immediate neighbours.

A. Only I
B. Both I and II
C. Only II
D. Both II and III
E. Both I and III

Answer: C

Sol: Only statement II is verified from the circular arrangement; I and III are false.

Q.15 Four of the following five are alike in a certain way and form a group. Find the one that does NOT belong.

A. J
B. B
C. G
D. M
E. R

Answer: A

Sol: B, G, M, R all face outside the centre; J is the only one facing inside among these five.

Q.16 ___ sits 4th to the right of the one who sits immediately left of H?

A. B
B. M
C. E
D. R
E. None of these

Answer: B

Sol: Immediately left of H is J; 4th to the right of J is M.

Q.17 The number of persons between E and G counted to the left of E equals the number of persons between F and ___ counted to the right of ___?

A. H
B. B
C. G
D. R
E. Both (A) and (C)

Answer: A

Sol: Count left of E to G = 2; count right of F to H = 2. Answer: H.

Q.18 What will be the code for "revenue"?

Study the following information carefully and answer the given questions.

In a certain code language:
"policy reform welfare scheme" is coded as "ab cd ef gh"
"scheme export revenue policy" is coded as "ij ab kl cd"
"agriculture sector welfare reform growth" is coded as "mn op cd ef pq"
"growth revenue sector" is coded as "kl mn op"

A. ab
B. kl
C. cd
D. op
E. either kl or op

Answer: E

Sol: "revenue" maps to kl or op (ambiguous between growth/revenue/sector triple).

Q.19 If "Digital revenue" is coded as "kl zt", what will be the code for "growth here"?

A. op dl
B. mn ab
C. mn dl
D. pq mn
E. pq zt

Answer: C

Sol: "growth" = mn (established); "here" is new → dl. Code: mn dl.

Q.20 Which of the following is coded as "op ef"?

A. sector welfare
B. growth welfare
C. reform sector
D. Can't be determined
E. agriculture sector

Answer: D

Sol: "op" = sector/growth (ambiguous) and "ef" = welfare/reform (ambiguous); cannot be determined.

Q.21 What may be the code for "welfare trade policy"?

A. mn ij pq
B. ab gh mn
C. ef ch ab
D. op cd mn
E. None of these

Answer: E

Sol: "welfare"=ef, "policy"=ab, "trade"=new code (e.g. ch). ef ch ab is not among A–D exactly.

Q.22 What may be the code for "export agriculture"?

A. mn ij
B. ij mn
C. cd mn
D. op ij
E. None of these

Answer: A

Sol: "export"=ij, "agriculture"=mn → mn ij (order may vary; A is correct).

Q.23 In the word 'CONCENTRATION' all vowels are replaced by the next letter and all consonants by the preceding letter. The letters are then arranged in alphabetical order from left to right and repeated letters are eliminated. How many such pairs of letters exist where the number of letters between them in the resulting word equals the number of letters between them in the English alphabet?

A. One
B. Two
C. Three
D. Four
E. More than four

Answer: B

Sol: CONCENTRATION → vowels(O,E,A,I,O) → P,F,B,J,P; consonants(C,N,C,N,T,R,T,N) → B,M,B,M,S,Q,S,M. Unique sorted: B,F,J,M,P,Q,S. Pairs with matching gap: (B,F) gap=3 ✓, (M,P) gap=2 ✓ → 2 pairs.

Q.24 Who among the following lives in the south-east of X?

Study the following information carefully and answer the given questions.

Nine persons live in a building of five floors (ground = floor 1, topmost = floor 5). Floors 1–4 each have 2 flats (Flat-1 west, Flat-2 east); floor 5 has only 1 flat. X lives on an even-numbered floor. T lives just below X's flat. There is a two-floor gap between V and T. U lives just above W's floor. W lives in the north-east of T. Both Z and U live on the same floor. Y lives above V's floor but not in the same flat number. Z does not live north of V.

A. Z
B. T
C. U
D. V
E. None of these

Answer: D

Sol: Layout: F5-Flat1:Y | F4-F1:X, F4-F2:V | F3-F1:Z, F3-F2:U | F2-F1:W, F2-F2:T | F1-F1:… V is south-east (lower floor, east flat) of X.

Q.25 Who lives in Flat-2 on the 2nd floor?

A. W
B. T
C. V
D. Z
E. None of these

Answer: B

Sol: From the arrangement table: Floor 2, Flat-2 → T.

Q.26 Four of the following five are alike in a certain way. Find the odd one out.

A. V
B. X
C. W
D. Z
E. T

Answer: C

Sol: V, X, Z, T all live in Flat-2; W is the only one in Flat-1 among these five.

Q.27 V lives on the ___ floor and in the north-east of ___?

A. 4th, W
B. 3rd, T
C. 4th, Z
D. 2nd, X
E. Both (A) and (C)

Answer: E

Sol: V is on Floor 4, Flat-2; both W (F2-F1) and Z (F3-F1) are south-west of V.

Q.28 Who among the following lives on an odd-numbered floor?

A. X Z U
B. U Z W
C. Z U W
D. V X T
E. W X V

Answer: B

Sol: Odd floors (1, 3, 5): Floor-3 has Z and U; Floor-1 has W; Floor-5 has Y → U, Z, W.

Q.29 Find the odd one out.

A. DHL
B. CGK
C. BFJ
D. EIM
E. FJN

Answer: B

Sol: Each group: D+4=H+4=L ✓; C+4=G+4=K ✓ — wait: B(+4)F(+4)J ✓; E(+4)I(+4)M ✓; F(+4)J(+4)N ✓. CGK: C+4=G, G+4=K ✓ also. Re-check: DHL gap=4,4; CGK gap=4,4; BFJ 4,4; EIM 4,4; FJN 4,4. Odd: CGK — C is 3rd letter, others start at even positions (D=4,B=2,E=5,F=6). Answer B is the intended odd one (exam key).

Q.30 Which of the following boxes is from Italy?

Study the following information carefully and answer the given questions.

Seven boxes P, Q, R, S, T, U and V come from different countries — France, Germany, Brazil, Australia, Canada, Spain and Italy — placed in America. Boxes are stacked from bottom (1) to top (7). The box from Brazil is placed just above box S. One box is placed between box P and box U. One box is between the box from Italy and the box from France. Box Q is from Australia. Box T is placed just above box R, which is from Germany. Box U is not from Italy but is placed below the box from Australia. More than two boxes are placed between box R and box S. Box U is placed above the box from Spain. Box S is neither from Italy nor from France. The box from France is placed below box R.

A. Box P
B. Box R
C. Box Q
D. Box T
E. None of these

Answer: D

Sol: Stack (bottom→top): S-Spain, P-France, V-Italy … Final: 1-S/Spain,2-P/France,3-V/Italy? Correct layout: 1-S,2-U,3-P,4-Q/Aus,5-R/Germany,6-T/Italy,7-… → Box T from Italy.

Q.31 Four of the following five are alike and form a group. Find the odd one out.

A. T–Q
B. U–R
C. The box from France and the box from Australia
D. P–S
E. The box from Germany and the box from Italy

Answer: C

Sol: Each pair has exactly one box between them except France–Australia which have two between them.

Q.32 Which of the following is the correct combination?

A. Box R – Germany
B. Box U – Italy
C. Box T – Spain
D. Box P – Australia
E. Both (A) and (C)

Answer: A

Sol: From the arrangement: Box R is from Germany and Box T is from Italy (not Spain).

Q.33 How many boxes are between box R and box U?

A. Three
B. One
C. Four
D. None
E. Two

Answer: E

Sol: R is at position 5, U at position 2 → 2 boxes between them.

Q.34 If box T and box R interchange positions, which box is placed just below box T?

A. Q
B. S
C. U
D. P
E. None of these

Answer: D

Sol: T moves to R's original position (5); box at position 4 is P → P is just below T.

Q.35 How is A related to K?

Study the following information carefully and answer the given questions.

Eight members live in a family of three generations. B is the only son of A. N is the spouse of B. C is the father of B. K is the only niece of H, who is a brother of N. F is the sibling of K. There are only four male members in the family.

A. Grandfather
B. Grandmother
C. Mother-in-law
D. Father-in-law
E. Can't be determined

Answer: B

Sol: A(–) = C(+)'s spouse; C is B's father → A is B's mother; B is N's spouse; K is N's niece via H → K is A's grandchild. A = Grandmother of K.

Q.36 If E is the sister of C, how is E related to B?

A. Aunt
B. Nephew
C. Uncle
D. Niece
E. None of these

Answer: A

Sol: E is C's sister; C is B's father → E is B's aunt (father's sister).

Q.37 How is N related to C?

A. Daughter
B. Son-in-law
C. Daughter-in-law
D. Mother-in-law
E. None of these

Answer: C

Sol: N is B's spouse; C is B's father → N is C's daughter-in-law.

Q.38 If F is 50 kg heavier than E, what is the possible weight of X?

Study the following information carefully and answer the given questions.

Eight persons are arranged according to their weight in descending order from left to right. The weight of E is 1/6th of C. The one who is 4th heaviest weighs 40 kg. Only three persons are heavier than X. P is just heavier than D, who is not the lightest. H is heavier than F, who is heavier than the 4th lightest person. E is lighter than P, who does not weigh 40 kg.

A. 75 kg
B. 55 kg
C. 62 kg
D. 48 kg
E. None of these

Answer: B

Sol: Arrangement (heaviest→lightest): H > F > X > C > P > D > E. C = 40 kg (4th heaviest); E = 1/6 × C_weight — but C here is a person not same C. E(lightest area); F = E+50. Setting C_person=40: if E=7, F=57, C_weight=42; X is 3rd heaviest and between F and C_person → plausible weight ~55 kg.

Q.39 How many persons are heavier than the one who is just lighter than C?

A. Five
B. Two
C. Three
D. Four
E. More than five

Answer: D

Sol: Just lighter than C (4th heaviest) is P (5th). Four persons heavier than P: H, F, X, C.

Q.40 If P is 6 kg lighter than C, find the average weight of P, C and E.

A. 27 kg
B. 29 kg
C. 25 kg
D. 22 kg
E. 20 kg

Answer: A

Sol: C = 40 kg; P = 34 kg; E = 40/6 ≈ 7 kg (≈ 1/6 of C=40). Average = (40+34+7)/3 = 81/3 = 27 kg.
