

Week1_OLT2(LR)_CSE_Immersion_2025

Directions (Q1 to Q3): A is mother of D who is father of G. B is grandfather of E and husband of A. D who has only two children is brother of C. A has two children both of same gender. J is aunt of H who is sister of G.

Q1. What is the relation between J and D?

- A) J is sister of D B) J is mother of D C) J is aunt of D
 D) Cannot be determined E) None of these

[Level-2; Accenture, Wipro, Infosys]

Answer: E

Explanation: H is sister of G and G is child of D. so H and G children of D. J is aunt of H. so J can be wife of D's brother C or J can be sister of D's wife. In both cases J will be sister in law of D.

Q2. What is the relation between C and E?

- A) C is brother of E B) C is father of E C) C is uncle of E
 D) Cannot be determined E) None of these

[Level-2; Accenture, Wipro, Infosys]

Answer: B

Explanation: B and A are husband wife, who have 2 children of same sex. A is mother of D who is father of G. this means both children are males. D is brother of C, so C and D both are sons of A and B. D also has two children – G and H. if B is grandfather of E, Then C must be father of E.

Q3. At least how many male members can be predicted by the given relations?

- A) 2 B) 3 C) 4
 D) 5 E) None of these

[Level-2; Accenture, Wipro, Infosys]

Answer: B

Explanation: B, C, and D are certainly males H and J are females. Gender of E and G not known

Q4. M is to the East of D, F is to the South of D and K is to the West of F. M is in which direction with respect to K?

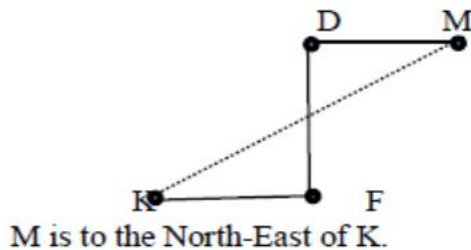
- (a) South-West (b) North-West (c) North-East (d) South-East

[Level-1; Accenture, Wipro, Chetu]

Answer: C

Solution:

(c)



Q5. After 4 pm on a sunny day when Ramesh was returning from his school, he saw his uncle coming in the opposite direction. His uncle talked to him for some time. Ramesh saw that the shadow of his uncle was to his right side. Which direction was his uncle facing during their talk?

- (a) North (b) South (c) East (d) Data inadequate

[Level-1; Accenture, Wipro, Chetu]

Answer: B

Solution:

After 4 pm the shadow will be towards East. Now, East is to the right of Ramesh. So Ramesh faces North. And his uncle, who is opposite him, faces South.

Q6. Fifteen children are standing in a row facing north. Ravi is to the immediate left of Prabha and is eighth from the left end. Arjun is second from the right end. Which of the following statements is not true?

- (a) Prabha is 7th from right end.
- (b) There are four children between Prabha and Arjun.
- (c) There are five children between Ravi and Arjun.
- (d) Arjun is 13th from the left end.

[Level-1; Accenture, Wipro, infosys]

Answer: (d)

Solution:

8th; 9th; 14th

Ravi; Prabha; Arjun

Q7. There are seven persons up on a ladder, A, B, C, D, E, F and - G (not in that order). A is further up than E but is lower than C. B is in the middle. G is between A and B. E is between B and F. If F is between E and D, the person on the bottom step of the ladder will be

- (a) B
- (b) F
- (c) D
- (d) F

[Level-2; Accenture, Wipro, infosys]

Answer: C

Solution:

TOP →	C
	A
	G
Middle →	B
	E
	F
Bottom →	D

D is at the bottom step of the ladder.

Q8. If the word 'TABLECLOTH' is coded as 'XEMRANRIXT', how can 'HOTEL' be coded?

- (a) RIXAT
- (b) TIXAR
- (c) TAXIR
- (d) RAXIT

[Level-1; Topic-Coding-Decoding; Accenture, Wipro, Infosys, Chetu]

Answer: B

Solution:

(b) As,

T A B L E C L O T H
 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
 X E M R A N R I X T
 Similarly, H O T E L
 ↓ ↓ ↓ ↓ ↓
 T I X A R

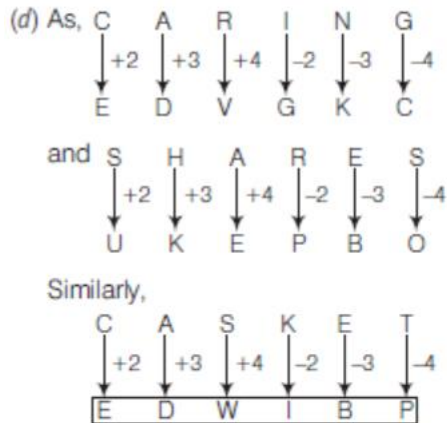
Q9. If 'CARING' is coded as 'EDVGKC', and SHARES is coded as 'UKEPBO', how will CASKET be coded as in the same code?

- (a) EDXIBP (b) EDWIAP
(c) EDWPAI (d) EDWIBP

[Level-2; Topic-Coding-Decoding; Accenture, Wipro, Infosys, Chetu]

Answer: D

Solution:



Q10. What is the angle between the hour hand and the minute hand at 2:45 AM?

- a) 227.5° b) 127.5° c) 172.5° d) 272.5°

[Level-1; Topic-Clock; Accenture, Wipro, TCS]

Answer: C

Q11. What is the angle between the hour hand and the minute hand at 3:20 AM?

- a) 40° b) 20° c) 330° d) 320°

[Level-1; Topic-Clock; Accenture, Wipro, TCS]

Answer: B

Solution:

$$\text{Angle} = \theta = \left| \frac{60 \times \text{hour} - 11 \times \text{minute}}{2} \right|^\circ$$

$$\text{And another angle} = (360 - \theta)^\circ$$

$$\therefore \theta = \left| \frac{60 \times 3 - 11 \times 20}{2} \right|^\circ$$

$$= \left| \frac{180 - 220}{2} \right|^\circ$$

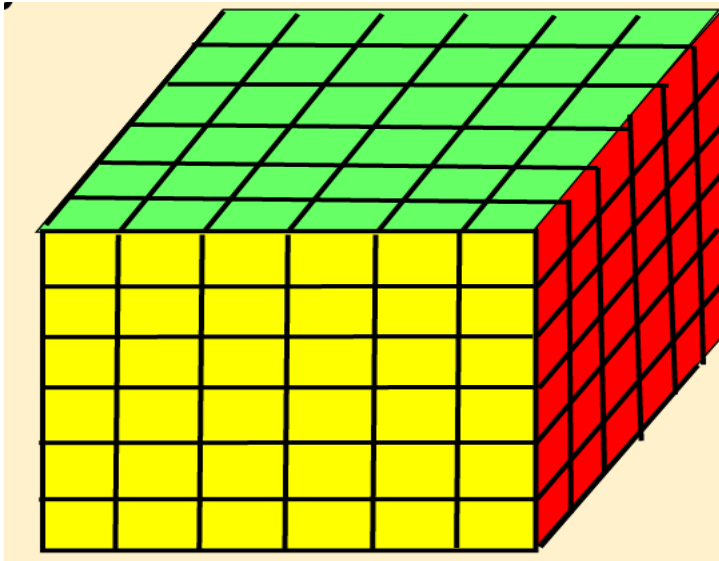
$$= \frac{40}{2}^\circ$$

$$= 20^\circ$$

$$\text{And another angle} = (360 - \theta)^\circ = (360 - 20)^\circ = 340^\circ$$

Directions(Q12 to Q13)

All the opposite faces of a big cube are coloured with yellow, red and green colours. After that is cut in to 216 identical small cubes.



Q12. How many small cubes are there where one face is green and other one is either yellow or red?

- A. 16 B. 48 C. 32 D. 64

[Level-2; Topic-Cube; Wipro, Accenture, Cognizant]

Answer: C

Solution:

$n = 6/1 = 6$ No. of small cubes = $n^3 = 216$ so, $n = 6$ two face painted cube = $(n-2)12 = (6-2)12 = 48$
 face is green and yellow or red = $48 \times 2/3 = 32$

Q13. How many small cubes are there whose no faces are coloured?

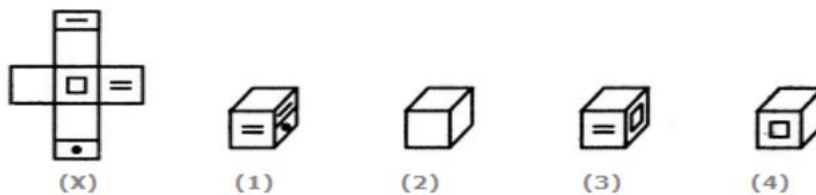
- A. 128 B. 32 C. 36 D. 64

[Level-2; Topic-Cube; Wipro, Accenture, Cognizant]

Answer: D

$n = 6/1 = 6$ No. of small cubes = $n^3 = 216$ so, $n = 6$ No face painted cube = $(n-2)^3 = (6-2)^3 = 64$

Q14. Choose the box that is similar to the box formed from the given sheet of paper (X).



A. 1 only

B. 1 and 3 only

C. 1, 3 and 4 only


D. 1, 2, 3 and 4

[Level-1; Topic-Dice; Wipro, Accenture, Capgemini]

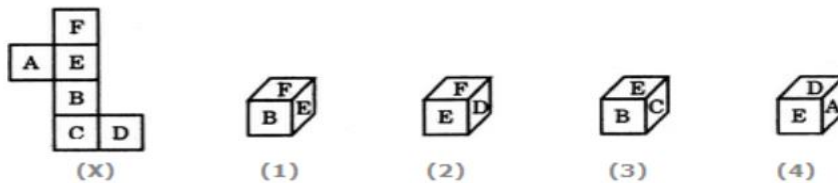
Answer: C

Solution:

When the sheet in fig. (X) is folded, then one of the faces of the cube formed will be of the

form  and this face will lie opposite the face bearing a square. Also, one of the blank faces lies opposite another blank face and the third blank face lies opposite the face bearing an '=' sign. Clearly, all the three blank faces cannot appear adjacent to each other. So, the cube shown in fig. (2) which has all the three blank faces adjacent to each other cannot be formed. Hence, only the cubes shown in figures A, C and D can be formed.

Q15. Choose the box that is similar to the box formed from the given sheet of paper (X).



- A. 1 only
 - B. 2 only
 - C. 1 and 3 only
 - D. 1, 2, 3 and 4 only
- [Level-1; Topic-Dice; Wipro, Accenture, Capgemini]**

Answer: B

Solution: The fig. (X) is similar to the Form III. So, when the sheet in fig. (X) is folded to form a cube, then 'F' appears opposite 'B', 'E' appears opposite 'C' and 'A' appears opposite 'D'. Therefore, the cube in fig. (1) which shows 'F' adjacent to 'B' the cube in fig. (3) which shows 'E' adjacent to 'C' and the cube in fig. (4) which shows 'A' adjacent to 'D' cannot be formed. Hence, only the cube in fig.(2) can be formed.