

CLAT UG 2019 Solutions (Set D)

Logical Reasoning

Instructions for Question 21 to Question 25: Read the information given below to answer the questions.

- (i) Mohan's reading schedule consists of reading only subject on a given day of the week.
- (ii) The subjects are Physics, Chemistry, Mathematics, Biology, and Social Science.
- (iii) Monday to Saturday are reading days including one day only for play. Sunday is a complete holiday for Mohan.
- (iv) Mathematics day is neither on the first day nor on the last day but earlier than the Chemistry day.
- (v) Biology day is on the immediate next day of Chemistry day.
- (vi) Physics day is on the immediate previous day of the play day.
- (vii) Biology day and Social Science day have a gap of two days between them.
- (viii) Social Science day is on the immediate next day of the play day.

Question 21. Which of the following day is the play day?

- (A) Monday
- (B) Tuesday
- (C) Wednesday
- (D) Thursday

Answer. B

Solution. The answer is (B).
Tuesday is the play day.

We can use the given information to create a table:

Day	Subject
Monday	Physics
Tuesday	Play
Wednesday	Social Science
Thursday	Mathematics
Friday	Chemistry
Saturday	Biology

This table satisfies all of the given conditions:

- Each day has a different subject.
- Mathematics is before Chemistry.
- Biology is immediately after Chemistry.
- Physics is immediately before the play day.
- Biology and Social Science have a gap of two days.
- Social Science is immediately after the play day.

Therefore, Tuesday must be the play day.

Question 22. Physics day and Biology day have a gap of how many days between them?

- (A) One
- (B) Two
- (C) Three
- (D) Four

Answer. D

Solution. Let's analyze the given information to find out how many days there are between Physics day and Biology day:

From point (v), we know that Biology day is on the immediate next day of Chemistry day. From point (vi), we know that Physics day is on the immediate previous day of the play day. From point (viii), we know that Social Science day is on the immediate next day of the play day.

So, the sequence is as follows:

- Physics day (immediate previous day of play day)

- Play day
- Social Science day (immediate next day of play day)
- Biology day (immediate next day of Chemistry day)

Now, let's count the days between Physics day and Biology day:

- Physics day
- Play day
- Social Science day
- Biology day

There are four days between Physics day and Biology day.

So, the answer is (D) Four.

Question 23. Which day is Social Science day?

- (A) Monday
- (B) Tuesday
- (C) Wednesday
- (D) Thursday

Answer. C

Solution. Let's use the given information to determine which day is Social Science day:

From point (iii), we know that Monday to Saturday are reading days, and there is one day only for play. Sunday is a complete holiday for Mohan. From point (vi), we know that Physics day is on the immediate previous day of the play day.

From point (viii), we know that Social Science day is on the immediate next day of the play day.

So, the sequence of days is as follows:

- Sunday (Holiday)
- Physics day (immediate previous day of the play day)
- Play day
- Social Science day (immediate next day of the play day)

Since Sunday is a holiday, Monday cannot be the play day. So, the play day must be on Tuesday. Therefore, Social Science day is the immediate next day after the play day, which is Wednesday.

So, the answer is (C) Wednesday.

Question 24. Which day is Mathematics day?

- (A) Monday
- (B) Tuesday
- (C) Wednesday
- (D) Thursday

Answer. D

Solution. The answer is (D). Thursday is Mathematics day.

We can use the table from the previous question to answer this question:

Day	Subject
Monday	Physics
Tuesday	Play
Wednesday	Social Science
Thursday	Mathematics
Friday	Chemistry
Saturday	Biology

As you can see, Mathematics day is on Thursday.

Here is a more creative response:

Mohan's reading schedule is a bit of a puzzle, but it can be solved by carefully considering all of the given information. By creating a table and using the process of elimination, we can determine that Thursday is Mathematics day. One way to think about it is that Mathematics is neither on the first day nor on the last day, and it is before Chemistry day. This means that Mathematics can only be on Thursday.

Question 25. Which of the following is the correct statement?

- (A) Biology day is after Chemistry day**
- (B) Physics day is on Wednesday**
- (C) Play day is on Monday**
- (D) Chemistry day is earlier than Physics day**

Answer. A

Solution. Let's go through the information to determine the correct statement:

- (i) Mohan's reading schedule consists of reading only one subject on a given day of the week.
- (ii) The subjects are Physics, Chemistry, Mathematics, Biology, and Social Science.
- (iii) Monday to Saturday are reading days, including one day only for play. Sunday is a complete holiday for Mohan.
- (iv) Mathematics day is neither on the first day nor on the last day but earlier than the Chemistry day.
- (v) Biology day is on the immediate next day of Chemistry day.
- (vi) Physics day is on the immediate previous day of the play day.
- (vii) Biology day and Social Science day have a gap of two days between them.
- (viii) Social Science day is on the immediate next day of the play day.

Now, let's evaluate the statements:

- (A) Biology day is after Chemistry day: True. From point (v), we know that Biology day is on the immediate next day of Chemistry day.
- (B) Physics day is on Wednesday: We cannot determine this directly from the information provided. To find out which day Physics day falls on, we would need to deduce it based on other information.
- (C) Play day is on Monday: False. Sunday is the complete holiday for Mohan, and Monday is not the play day. The play day is not mentioned in the provided information, so we can't determine which day it is.
- (D) Chemistry day is earlier than Physics day: True. From point (vi), we know that Physics day is on the immediate previous day of the play day.

Since Chemistry day is not the play day, Chemistry day is earlier than Physics day. So, the correct statement is (A) Biology day is after Chemistry day, and (D) Chemistry day is earlier than Physics day.

Question 37. 'All men are mortal and Victoria is a woman and hence Victoria is mortal'. This statement is:

- (A) Logically Valid**
- (B) Logically Invalid**
- (C) Logically True**
- (D) Logically False**

Answer. B

Solution. The correct answer is option (B) Logically Invalid

Mathematics

Question 49. A clock gains 2 minutes every hour. Then the angle traversed by the second hand in one minute is:

- (A) 360
- (B) 370
- (C) 390
- (D) 372

Answer. D

Solution. The correct answer is option (D) 372

$$\text{A gain of a clock in 1 minute} = \frac{2}{60} = \frac{1}{30} \text{ minute}$$

$$= \frac{1}{30} \times 60 = 2 \text{ sec}$$

$$\begin{aligned} \text{Actual Angle rotated by second hand in 1 minute} \\ = 360^\circ \end{aligned}$$

Angle rotated by second hand in 2 sec.

$$= \frac{360^\circ}{60} \times 2 = 12^\circ$$

Hence, the total angle rotated by second hand

$$= 360^\circ + 12^\circ = 372^\circ$$

Question 50. 80% of students of a class took Statistics and 45% took Mathematics. If each student took Statistics or Mathematics and 40 took both, the total number of students in the class was:

- (A) 160
- (B) 180
- (C) 200
- (D) 225

Answer. A

Solution. Answer: The total number of students in the class was 160.

Explanation:

We can use the following equation to solve this problem:

Total students = Students who took Statistics + Students who took Mathematics - Students who took both Statistics and Mathematics

We know that 80% of students took Statistics and 45% took Mathematics.

We also know that 40 students took both Statistics and Mathematics.

Therefore, the total number of students in the class is:

$$\text{Total students} = 80\% + 45\% - 40 = 160$$

Here is a more creative explanation:

Imagine that we have a class of 100 students. If 80% of them took Statistics and 45% took Mathematics, then we would have 80 Statistics students and 45 Mathematics students. However, we also know that 40 students took both Statistics and Mathematics. This means that we have counted some students twice.

To get the correct total number of students, we need to subtract the number of students who took both Statistics and Mathematics from the total number of students who took Statistics or Mathematics. This gives us a total of 160 students.

Another way to think about it is that if all of the students in the class took either Statistics or Mathematics, then we would have 125 students (80 + 45). However, we know that 40 students took both Statistics and Mathematics. This means that we have counted 40 students twice. To get the correct total number of students, we need to subtract 40 from 125. This gives us a total of 160 students.

Question 51. Kiran's brother is 5 years older to her. Her father was 30 years old when Kiran's sister was born, while her mother was 28 years old when Kiran was born. If Kiran's sister was 2 years old when her brother was born, what was the age of their father when Kiran's brother was born?

- (A) 32
- (B) 34
- (C) 37
- (D) 30

Answer. A

Solution. Answer: The age of their father when Kiran's brother was born was 32.

Explanation:

We can use the following information to solve this problem:

- Kiran's brother is 5 years older than her.
- Her father was 30 years old when Kiran's sister was born.
- Her mother was 28 years old when Kiran was born.
- Kiran's sister was 2 years old when her brother was born.

We can use this information to create the following table:

Person	Age when Kiran's sister was born	Age when Kiran's brother was born
Kiran's father	30	32
Kiran's mother	28	30
Kiran's sister	2	4
Kiran's brother	4	6

As you can see, Kiran's father was 32 years old when Kiran's brother was born. Here is a more creative explanation:

Imagine that we are standing on a number line. Kiran's father is at the

number 30, Kiran's mother is at the number 28, Kiran's sister is at the number 2, and Kiran's brother is at the number 4.

When Kiran's brother was born, he was 4 years old. This means that Kiran's father was 2 years older than him. Therefore, Kiran's father was 32 years old when Kiran's brother was born.

Question 52. If Second Saturday and Sunday of every month is a holiday, then the total number of working days in a month of 31 days beginning with a Wednesday will be

- (A) 23
- (B) 24
- (C) 25
- (D) 26

Answer. D

Solution. The answer is (D).

If the month begins with a Wednesday, then the second Saturday will be 12 days later, which is a Sunday. This means that there will be no working days on the second Saturday.

The other three Sundays will be working days, for a total of 26 working days in the month. Here is a more creative explanation:

Imagine that we are standing on a calendar. The month begins with a Wednesday, so the second Saturday will be 12 days later, which is a Sunday. This means that there will be no working days on the second Saturday. The other three Sundays will be working days, for a total of 26 working days in the month.

Another way to think about it is that there are 31 days in the month, and 7 of those days are Sundays. This means that there are 24 days left for working days. However, the second Saturday is also a holiday, so there are only 23 working days in the month.

Question 53. A mess contractor can either serve 450 students with the meal that he prepares or can cater to 270 cops with the same meal. If 300 students have already eaten in the mess, how many cops can be fed with the remaining meal?

- (A) 20
- (B) 45
- (C) 90
- (D) 180

Answer. C

Solution. To determine how many cops can be fed with the remaining meal, you need to find out how many students' worth of meal is left after 300 students have eaten. Then, you can convert that amount to the number of cops the remaining meal can cater to. The mess contractor can serve 450 students with the meal he prepares. After 300 students have already eaten, there are $450 - 300 = 150$ students' worth of meal remaining. Now, you're told that the same meal can cater to 270 cops. To find out how many cops can be fed with the remaining 150 students' worth of meal:

$(150 \text{ students' worth of meal}) / (1 \text{ student's worth of meal}) = (150 \text{ students' worth of meal}) / (450 \text{ students' worth of meal}) * 270 \text{ cops}$

Now, calculate:

$$(150 / 450) * 270 = (1/3) * 270 = 90 \text{ cops}$$

So, the remaining meal can feed 90 cops. The correct answer is (C) 90.

Question 54. A car driver increases the average speed of his car by 3 km/hr every hour. The total distance travelled in 7 hours if the distance covered in first hour was 30 km, is

- (A) 266 km
- (B) 273 km
- (C) 280 km
- (D) 287 km

Answer. B

Solution. To find the total distance traveled in 7 hours, where the car driver increases the average speed of the car by 3 km/hr every hour, you can use the arithmetic progression formula.

The distance covered in the first hour is 30 km, and the car driver increases the speed by 3 km/hr every hour, so the speed at the beginning of the second hour is $30 + 3 = 33$ km/hr, and at the beginning of the third hour, it's $33 + 3 = 36$ km/hr, and so on.

So, the speed progression is: 30, 33, 36, 39, 42, 45, 48 km/hr for the first 7 hours. To find the distance covered in each hour, you can use the formula:

$$\text{Distance} = \text{Speed} \times \text{Time}$$

Now, let's calculate the distances covered in each hour:

1st hour: 30 km 2nd hour: 33 km 3rd hour: 36 km 4th hour: 39 km 5th hour: 42 km 6th hour: 45 km 7th hour: 48 km

Now, to find the total distance traveled in 7 hours, sum up these distances:

$$\text{Total distance} = 30 + 33 + 36 + 39 + 42 + 45 + 48 = 273 \text{ km}$$

So, the total distance traveled in 7 hours is 273 km. The correct answer is (B) 273 km.

Legal Aptitude

This section consists of fifty (50) questions. Each question consists of legal principle(s) (hereinafter referred to as 'principle') and facts. Such proposition may or may not be true in the real and legal sense, yet you have to conclusively assume them to be true for the purposes of this section. Principles have to be applied to the given facts to arrive at the most reasonable conclusion. Only one of the alternatives, i.e., (A), (B), (C), or (D) is the most reasonable conclusion. In other words, in answering the following questions, you must not rely on any principle except the principles that are given herein below for every question. Further you must not assume any facts other than those stated in the question. The objective of this section is to test your ability in legal aptitude, study of law, research aptitude and problem solving ability even if the 'most reasonable conclusion' arrived at may be absurd or unacceptable for any other reason

Question 73.

Principle: Whoever takes away any moveable thing from the land of any person without that person's consent is said to commit theft.

Facts: During his visit to the home of C, A asks B, the son of C, to accompany A to forest. Neither A nor B inform C in this regard. B accompanies A to the forest.

- (A) A has committed theft.
- (B) A has not committed theft.
- (C) A has committed theft as soon as he entered the home of C.
- (D) A has not committed theft till B did not accompany him.

Answer. B

Solution. The answer is (B).

A has not committed theft.

Theft is defined as the taking of moveable property out of the possession of

another person without their consent. In this case, A has not taken anything from C's possession. B is not C's representative, and his consent is not the same as C's consent.

The fact that A and B did not inform C of their intention to go to the forest is irrelevant to the question of theft.

Question 74.

Principle: Nothing is an offence if it is done in good faith for the purpose of preventing or avoiding greater harm or damage to person or property.

Facts: A jumps into a swimming pool to save a boy from drowning. While pulling the boy from water A was hit by C. A left the boy in the water and attacked C. The boy died in the water.

- (A) A has not committed the offence of killing the boy.**
- (B) A has committed the offence of killing the boy.**
- (C) The boy has committed the offence of suicide.**
- (D) The boy has committed the offence of drowning.**

Answer. A

Solution. The answer is (A).

A has not committed the offence of killing the boy.

Under the principle of self-defence, a person is not liable for any harm that they cause to another person if they are acting in good faith to prevent or avoid greater harm to themselves or others. In this case, A was clearly acting in good faith to save the boy from drowning. The fact that he was hit by C while doing so does not change the fact that he was acting in Self-defence. The boy's death is a tragic accident, but it is not the fault of A. A did everything he could to save the boy, and he should not be held responsible for the boy's death.

The other options are incorrect:

(B) A has not committed the offence of killing the boy. (This is the correct answer.)

(C) The boy has committed the offence of suicide. (Suicide is a crime in India, but there is no evidence to suggest that the boy committed suicide.)

(D) The boy has committed the offence of drowning. (Drowning is not a crime.)

Question 75.

Principle:Causing of an effect partly by an act and partly by an omission is an offence.

Facts: A did not provide any food to his daughter D. He also confined D in a room. Consequently, D died.

(A) A committed the offence of not providing food to D.

(B) A committed the offence of confining D.

(C) A committed the offence of killing D.

(D) A committed no offence.

Answer. C

Solution. The answer is (C).

A committed the offence of killing D.

Under the principle of active and passive omission, a person can be held liable for an offence if they cause an effect partly by an act and partly by an omission. In this case, A's act of confining D and his omission of not providing her with food both contributed to her death. Therefore, A is guilty of killing D.

The other options are incorrect:

(A) A committed the offence of not providing food to D. (This is correct, but it is not the whole answer.)

(B) A committed the offence of confining D. (This is correct, but it is not the whole answer.)

(D) A committed no offence. (This is incorrect. A's actions and omissions caused D's death, therefore he is guilty of killing her.)

Question 76. Principle: Nothing is an offence which is done in the exercise of the right of private defence. Nothing is an offence which is done in madness.

Facts: A, under the influence of madness, attempts to kill B. B to save his life kills A.

- (A) A has committed the offence of attempt to murder**
- (B) A has committed an offence of being mad**
- (C) B has committed an offence**
- (D) B has not committed an offence**

Answer. D

Solution. The answer is (D).

B has not committed an offence.

Under the principle of self-defence, a person is not liable for any harm that they cause to another person if they are acting in good faith to prevent or avoid greater harm to themselves or others. In this case, B was clearly acting in good faith to save his life from A's attempt to murder him. The fact that A was mad is irrelevant to the question of self-defence.

The other options are incorrect:

- (A) A has committed the offence of attempt to murder. (This is correct, but it does not answer the question of whether B has committed an offence.)
- (B) A has committed an offence of being mad. (Madness is not a crime in India.)
- (C) B has committed an offence. (This is incorrect. B was acting in self-defence, therefore he is not guilty of any offence.)

Question 77.

Principle: A man is guilty of not only for what he actually does but also for the consequences of his doing.

Facts: A wanted to kill the animal of B. He saw B standing with his animal and fired a gun shot at the animal. The gun shot killed B.

- (A) A is guilty of killing B.
- (B) A is not guilty of killing B.
- (C) B is guilty of standing with the animal.
- (D) A did not know that the gun shot will kill B.

Answer. A

Solution. The answer is (A).

A is guilty of killing B.

Under the principle of mens rea, a person can be held liable for an offence even if they did not intend to cause the harm that occurred. In this case, A intended to kill the animal, and he knew that firing a gun at the animal would create a risk of killing B. Therefore, A is guilty of killing B, even if he did not intend to do so.

The other options are incorrect:

(B) A is not guilty of killing B. (This is incorrect. A is guilty of killing B, even if he did not intend to do so.)

(C) B is guilty of standing with the animal. (This is incorrect. B is not guilty of anything.)

(D) A did not know that the gun shot will kill B. (This is irrelevant. A knew that firing a gun at the animal would create a risk of killing B, and he took that risk.)

Here is a more creative response:

A's actions were reckless and caused the death of B. He should be held accountable for his actions, even if he did not intend to kill B.

Question 78.

Principle: Mere silence as to facts likely to affect the decision of a person to enter into a contract is not fraud.

Facts: A sells to B (A's daughter who is a minor) a horse which A knows to be unsound. A says nothing to B about the unsoundness of the horse.

- (A) A has committed fraud**
- (B) A has committed no fraud**
- (C) There cannot be a contract between a father and daughter**
- (D) The daughter did not ask therefore the father did not tell, hence no fraud**

Answer. B

Solution. The answer is (B).

A has committed no fraud.

Mere silence is not fraud, even if the facts are likely to affect the decision of the other party to enter into the contract. In this case, A did not make any false or misleading statements to B. He simply did not tell her about the unsoundness of the horse.

The fact that B is A's minor daughter is irrelevant to the question of fraud.

The other options are incorrect:

(A) A has committed fraud. (This is incorrect. A has not committed fraud by his mere silence.)

(C) There cannot be a contract between a father and daughter. (This is incorrect. A father and daughter can enter into a contract, just like any other two people.)

(D) The daughter did not ask therefore the father did not tell, hence no fraud. (This is irrelevant. A has a duty to disclose any material facts that he knows about the horse, even if B does not ask.)

It is important to note that A may still be liable to B for breach of contract, even though he has not committed fraud. If the horse is unsound and B suffers losses as a result, she may be able to sue A for breach of contract.

English Language

Directions: Choose the correct meaning for each of the foreign language words and phrases given below in questions 126 to 130.

Question 126. inter vivos

- (A) a transaction made for obtaining a legacy
- (B) an agreement to promote the welfare of one's country
- (C) a transaction made between living people
- (D) an agreement between warring nations

Answer. C

Solution. (C) "inter vivos" refers to a transaction made between living people. It is a legal term used to describe gifts, contracts, or transactions that occur during a person's lifetime and do not involve testamentary dispositions (dispositions made in a will).

Question 127. quantum ramifactus

- (A) the amount of damages suffered
- (B) the quality of goods supplied
- (C) the amount of relief given for damages caused
- (D) the weightage given to someone's suggestion

Answer. A

Solution. (A) "quantum ramifactus" refers to the amount of damages suffered. It is a legal term used to describe the extent or measure of damages or compensation awarded for harm or loss caused by a wrongful act or breach of contract.

Question 128. malus

- (A) mass
- (B) harmless
- (C) harmful

(D) comforting

Answer. C

Solution. (C) "malus" typically refers to something harmful or bad.

Question 129. Volvo

(A) I roll

(B) I run

(C) I leap

(D) I jump

Answer. A

Solution. The brand name 'Volvo' was originally registered as a trademark in 1911 with the intention to be used for a new series of SKF ball bearings. It is a Latin word which means 'I roll'.

Question 130. Charade

(A) series

(B) charter

(C) pretense

(D) spate

Answer. C

Solution. The answer is (C).

A charade is a word or phrase acted out in parts, typically as a game.

Pretense is the act of pretending to be something one is not. This is the closest of the answer choices to a charade.

A series is a number of things or events arranged in a row or sequence. A

charter is a formal document that creates a corporation or other

organization. A spate is a sudden rush or flood of something.

Here is a more creative response:

A charade is like a riddle, but instead of using words, you use actions to

describe the answer. For example, if the answer is "pretense," you might act out someone putting on a mask or pretending to be someone they're not. Charades are a fun and challenging game for all ages. They're also a great way to get creative and to learn about new words and phrases.

Directions: Choose the correctly spelled words in questions to fill in the blanks.

Question 131. Malti Ahuja is making a sincere effort to pay off her

_____.

- (A) creditor**
- (B) creditar**
- (C) credittor**
- (D) creditor**

Answer. D

Solution. The answer is (D).

Malti Ahuja is making a sincere effort to pay off her creditor.

A creditor is a person or organization to whom money is owed.

The other answer choices are incorrect:

- creditor is not a word
- creditar is not a word
- credittor is a misspelling of creditor

Here is a more creative response:

Malti Ahuja is making a sincere effort to pay off the person or organization to whom she owes money. This person or organization is called her Creditor.

General Knowledge and Current Affairs

Question 163. The world's first Diesel to Electric locomotive twin engine of 10,000 horse power was flagged off in:(A) U.S.A.

- (B) China
- (C) India
- (D) South Korea

Answer. C

Solution. The world's first Diesel to Electric locomotive twin engine of 10,000 horsepower was flagged off in India. So, the correct answer is (C) India.

Question 164. The Headquarters of International Solar Alliance consisting of more than 121 countries is located in:

- (A) India
- (B) South Africa
- (C) Malaysia
- (D) China

Answer. A

Solution. The headquarters of the International Solar Alliance (ISA) is located in India. So, the correct answer is (A) India.

Question 165. The prestigious Seoul Peace Prize for 2018 was conferred on:

- (A) Kofi Annan
- (B) Angela Merkel
- (C) Narendra Modi
- (D) Putin

Answer. C

Solution. The prestigious Seoul Peace Prize for 2018 was conferred on (C) Narendra Modi, the Prime Minister of India.

Question 166. Which of the following countries during 2019 provided life time personal tax exemption to women with four children?

- (A) India
- (B) Hungary
- (C) Norway
- (D) Finland

Answer. B

Solution. During 2019, Hungary provided a lifetime personal tax exemption to women with four children. So, the correct answer is (B) Hungary.

Question 167. In the 64th Film Fare Award, who won the best actress award?

- (A) Katrina Kapoor
- (B) Priyanka Chopra
- (C) Deepika Padukone
- (D) Alia Bhatt

Answer. D

Solution. The correct answer is option (D) Alia Bhatt

Question 168. Recently, the Government of India relaxed the Angel Tax Norms for Start-ups and enhanced the investment limit to:

- (A) Rs. 25 Crore
- (B) Rs. 20 Crore
- (C) Rs. 15 Crore
- (D) Rs. 30 Crore

Answer. A

Solution. As of my last knowledge update in September 2021, the Indian government had made several changes to the Angel Tax norms for startups. They increased the investment limit for startups eligible for exemption from Angel Tax to Rs. 25 crore.

So, the correct answer is (A) Rs. 25 Crore. Please note that tax regulations and policies can change over time, so it's a good idea to verify this information with the most current sources or government announcements for any updates that might have occurred since my last update.