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MATHEMATICS

In Class VII, one day Maths teacher explaining the topic formation of algebraic expression and find the value of expression. He explained that Variables and numbers are used to construct terms. These terms along with a combination of operators constitute an algebraic expression. The algebraic expression has a value that depends on the values of the variables. He explained example, let $6p^2 - 3p + 5$ be an algebraic expression with variable p The value of the expression when p = 2 is, $6(2)^2 - 3(2) + 5 \Rightarrow 6(4) - 6 + 5 = 23$

On the basis of above information answer the question from **Q1 to Q5**

Q1 The value of expression 4x - 3 at x = 2 is

(a) -4(b) 5 (c) 4 (d) 2 EXPLANATION-put the value of x and solve Answer : B Q2. The value of expression $5n^2 + 5n - 2$ for n = -2 is (a) 13 **(b)** 3 (c) 8 (d) 12 Answer : C EXPLANATION-put the value of n and solve Q3. The value of expression $2a^2 + 2b^2 - ab$ for a = 2, b = 1 is 2 (c) 6 **(a)** (b) 8 (d) 10 EXPLANATION-put the value of a and b then solve Answer : B Q4. The value of x + 7 + 4(x - 5) for x = 2(a) –3 (d) 37 (b) 31 (c) 12

Answer : A EXPLANATION-put the value of x and solve

Q5.What is the statement for the expression 3mn + 5

- (a) 5 more than of product of m and n
- (b) number 5 added to product of number m and n
- (c) number 5 added to 3 times the product of m and n.
- (d) 5 more than 3 times the product of the numbers m and n

Answer : C EXPLANATION-convert into correct statement Q6.The constant term in the expression $1 + x^2 + x$ is

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(a) 1 (b) 2 (c) x (d) x^2
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Answer : A EXPLANATION-identify contant Q7.The expression for sum of numbers a and b subtracted from their product is

(a) a + b - ab (b) ab - a + b (c) ab - (a+b) (d) ab + a - b

Answer : C EXPLANATION- convert into equation Q8. The expression x + y - xy is

(a) Monomial (b) Binomial (c) Trinomial (d) Quadrinomial

Answer : C EXPLANATION-count number of terms

Q9. The expression for the statement: " y multiplied by 10 and then 7 added to product".

(a) 10 + y + 7 (b) 7y + 10 (c) 10y + 7 (d) 10y

Answer : C EXPLANATION-convert into equation

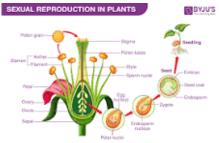
Q10.What must be subtracted from 2a + b to get 2a - b

(a) 2b (b) 4a (c) 0 (d) 4a+4b

Answer : A EXPLANATION-use subtraction

SCIENCE

The production of new individuals from their parents is known as reproduction. Most plants have roots, stems and leaves. These are called the vegetative parts of a plant. After a certain period of growth, most plants bear flowers. You may have seen the mango trees flowering in spring. It is these flowers that give rise to juicy mango fruit we enjoy in summer. We eat the fruits and usually discard the seeds. Seeds germinate and form new plants. Flowers perform the function of reproduction in plants. Flowers are the



reproductive parts.

There are several ways by which plants produce their offspring. These are categorized into two types: (i) asexual and (ii) sexual reproduction. In asexual reproduction plants can give rise to new plants without seeds, whereas in sexual reproduction, new plants are obtained from seeds

Q11.Why reproduction is so important for an organism.

(a)It helps in continuation of generation.

(b)it helps in survival of organisms.

(c)It promote the growth and development of organisms.

(d)All of the above.

ANSWER-(a)It helps in continuation of generation. EXPLAINATION- By the process of Reproduction species may maintain their existence. It also give opportunity for evolution

Q12.which of the statement is correct about asexual reproduction?

(a)It gives opportunity for evolution

(b)An individual consists of characters of single parent.

(c)It is character of advance organisms.

(d)it put more variation in generation.

ANSWER- (b)An individual consists of characters of single parent.

EXPLAINATION-Asexual reproduction is the mode of reproduction in which only one parent in involved.

Q13.Identify the part of plant which helps in sexual reproduction. (a)Root (b)Stem (c)Flower (d)Leaf



ANSWER-(C) FLOWER EXPLAINATION-The flower is the part of plant which helps in sexual reproduction. In side flower stamen is the male part while Pistil is the female part

Q14.Which of the following statement correctly explain unisexual flowers

(a)Unisexual flowers contain both pistil and stamen

(b)Example of unisexual flowers are corn, papaya, cucumber.

(c)It may be present in same plants or in different plants.

(d)All are correct.

ANSWER- (d)All are correct. EXPLANATION-Unisexual flowers contain either male part (stamen) or female part(pistil). It may present within same plant(corn) or different plant(papaya).

Q15.Ovary is the part of

(a)Pistil (b)Stamen (c)Zygote (d)No one

ANSWER-(a)Pistil EXPLANATION-pistil is the female reproductive part, contains stigma style and ovary.

Q16. Paheli and Boojho have to cover different distances to reach their school but they take the same time to reach the school. What can you say about their speed

(a)Both having same speed (b)They move unequal distance in equal interval of time. (c)They move equal distance in equal time interval. (d)They move unequal distance in unequal interval of time.

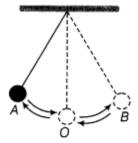
ANSWER-(b)They move unequal distance in equal interval of time. EXPLANATION-As Boojho and paheli reach school in same time after covering different distances.it mean one of them is faster than other.

Q17. Give the basic unit of speed.

(a) Meter/second (b) km / hours (c) km/second (d)Cm/second ANSWER- (a) Meter/second

EXPLANATION-Speed =Distance /Time

Q18..A simple pendulum is oscillating between two points A and B as shown in figure the Motion of the bob uniform or non-uniform?



(a)Uniform motion

(b)Non uniform motion

(c)Sometime uniform sometime non-uniform non-uniform

(d) Neither uniform or

ANSWER- (b)Non uniform motion

EXPLANATION-The motion of bob is non-uniform as it does not cover equal distance in equal intervals of time.

Q19. If you did not have a clock, how would you decide what time of the day is?

(a)By seeing length of shadow during morning noon and evening.

(b)By seeing flying birds in the sky.

(c)By the colour of sky (d)By all.

ANSWER- (a)By seeing length of shadow during morning noon and evening. EXPLAINATION-At noon, shadow formed by the sun is shorter than at evening and morning

Q20.Distance time graph of an object at rest is

(a)Uniform line

(b)Zigzag line

(c)A line parallel to X axis

(d) A line parallel to Y axis

ANSWER– (c)A line parallel to X axis

EXPLANATION-Diatace time graph of an object at rest is always parallel to time axis because changing time ,distance =may not changed.

SOCIAL SCIENCE

Q.21. How does the location of a market impact its accessibility and popularity?

A) It affects the prices of goods B) It determines the type of goods sold

C) It influences the number of buyers and sellers D) It regulates market timings

Answer: C) It influences the number of buyers and sellers

Explanation: The location of a market plays a crucial role in determining its accessibility to both buyers and sellers. Proximity to residential areas, transport hubs, and commercial centers can attract more participants and enhance market popularity.



Q22 .What aspect of the market scene from "Market Around Us" is depicted in the image above?

A) market during a festivalB) Vendors selling clothesC) Stalls selling fruits and vegetablesD) A crowded marketplace

Answer: C) Stalls selling fruits and vegetables

Explanation: The image shows a market scene with stalls specifically selling fruits and vegetables, which depict's exploration of different types of markets and their significance in everyday life, particularly in providing essential goods like fresh produce.

Story: In a coastal village, there was a fish market where fishermen would bring their catch every morning. One day, two fishermen, Raju and Ravi, both caught a large quantity of fresh prawns. They arrived at the market simultaneously, each hoping to fetch a good price for their catch.

Q23.

As Raju and Ravi set up their stalls, they noticed that the market was crowded with customers eager to buy fresh seafood. Raju decided to offer a discount on his prawns to attract more buyers. What is the likely impact of Raju's strategy on the market?

A) It will decrease the demand for prawns.

B) It will increase competition among vendors.

C) It will reduce the overall variety of seafood.

D) It will discourage customers from buying prawns.

Answer: B) It will increase competition among vendors.

Explanation: Raju's decision to offer a discount on his prawns increases competition among vendors in the market. By lowering his prices, Raju aims to attract more customers and sell his prawns quickly. This competitive strategy forces Ravi and other vendors to consider adjusting their prices or improving their offerings to remain competitive. Overall, increased competition can benefit consumers by offering them more choices and potentially better prices.

Q24. Which of the following best describes a shopping complex?

- A) A place where goods are sold once a week
- B) A large enclosed area with many different stores
- C) A mobile vendor selling goods on the street
- D) A website where goods are sold online

Answer: B) A large enclosed area with many different stores

EXPLAINATION: There are other markets in the urban area that have many shops, popularly called shopping complexes. These days, in many urban areas, you also have large multi-storied air-conditioned buildings with shops on different floors, known as malls.

Q 25. Assertion (A): The weekly markets are held so that people can get products at cheaper rates.

Reason (R): The people who set up weekly markets are helped by their own family members and therefore they charge less prices from their customers. Such People don't have any permanent buildings or any workers which cost them much expenditure.

A) A is correct and R is the correct explanation of A. B) A is correct but R is not the correct explanation of A.

C) A is correct but A contradicts R (.D) A is incorrect and A contradicts R.

ANSWER: A) A is correct and R is the correct explanation of A.

EXPLAINATION: Weekly markets do not have permanent shops. Traders set up shops for the day and then close them up in the evening. Many things in weekly markets are available at cheaper rates, because here is competition among the people who set up weekly markets are helped by their own family members and therefore they charge less prices from their customers. Such People don't have any permanent buildings or any workers which cost them much expenditure.

Q.26 What is a potential consequence of urbanization on water resources in subtropical regions?

- A) Increased groundwater recharge . B) Reduced surface water pollution.
- C) Higher demand for freshwater. D) Enhanced natural water filtration.

Answer: C) Higher demand for freshwater.

Explanation: Urbanization in subtropical regions often leads to increased population density and industrial activities, resulting in higher demand for freshwater resources. This can lead to water scarcity, over-extraction of groundwater, and competition for limited water supplies, impacting both urban and rural communities.

Q27 In a tropical rainforest region, a community relies on the forest for various resources such as timber, medicinal plants, and wild fruits. Recently, there has been an increase in illegal logging activities in the forest, leading to concerns about deforestation and its impacts.

What is the primary environmental consequence of illegal logging in the tropical rainforest region?

A) Increased biodiversity B) Soil erosion

C) Enhanced water retention resilience

D) Promotion of ecosystem

Answer: B) Soil erosion

Explanation: Illegal logging in tropical rainforests leads to significant environmental consequences, primarily soil erosion. When trees are removed without proper forest management practices, the protective canopy cover is lost, exposing the forest floor to heavy rainfall and sunlight. This exposure increases soil erosion, as rainfall washes away the topsoil, leading to nutrient depletion and degradation of fertile soils.

Q.28 What is the main occupation of the people living in Ganga-Brahmaputra basin?

(a) Fishing (b) Lumbering c) Mining (d) Agriculture

Answer: Agriculture

Explaination: The plain in this basin area provides the most suitable land for human habitation. The soil is fertile. Agriculture is the main occupation of the people where flat land is available to grow crops

- Q29 Why is deforestation harmful to the environment?
- A) It reduces air pollution .B) It decreases biodiversity.
- C) It promotes soil fertility. D) It enhances wildlife habitats.

Answer: B) It decreases biodiversity.

Explanation: Deforestation is harmful to the environment primarily because it leads to a decrease in biodiversity. Biodiversity refers to the variety of plant and animal species that inhabit an ecosystem. Forests are home to millions of species, from insects to mammals, and provide habitats for diverse flora and fauna.

Q 30. Why are mangrove forests important for coastal ecosystems?A) They reduce coastal erosion. B) They increase sea level rise.

C) They promote desertification. D) They enhance urbanization.

Answer: A) They reduce coastal erosion.

Explanation: Mangrove forests play a crucial role in coastal ecosystems by reducing coastal erosion. Their dense root systems stabilize coastal soils and protect shorelines from erosion caused by waves and storms. Mangroves also provide habitats for diverse marine species and contribute to nutrient cycling in coastal waters.

ENGLISH

31.According to the chapter 'The invention of Vita Wonk' Mr. Willy Wonka appears to be..

(A) a good scientist	(B) a good historian
(C)a person with crazy ideas	(D)a good botanist

Answer (c) a person with crazy ideas

Explanation ; Mr. Willy Wonka does a series of things to invent Vita Wonk which are strange and crazy in nature

32.In a way Mr. Willy Wonka is helping Charlie to develop...

(A) Scientific temperament only	(B) Imagination and curiosity
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(C) Crazy ideas (D) Seriousness for work

Answer (B)imagination and curiosity

Explanation: Charlie is an innocent boy who is keenly observing Mr. Wonka's way of doing certain things in the name of invention.

33."So once again I rolled up my sleeves and set to work "What does the phrase' rolled up my sleeves' mean?

(A) Ironed his shirt (B)Got ready

(C)Packed his bags

(D) Collected material

Answer (B)got ready

Explanation: When we roll up our sleeves it means to get ready.

34. In the poem 'Dad And The Cat And The Tree' dad seems to be the source of inspiration, how?

(A) Because of his optimism and positivity (B) Because of his repeated failures

(C) Because of his overconfidence (D) Because of his hyper active nature

Answer (A) Because of his optimism and positivity

Explanation ;He is always positive even if things are not working as per his wish.

35. The phrase 'smug as can be' means..

Нарру

(C) Satisfied, comfortable (D)Right

Answer (C)Satisfied, comfortable

Explanation ; it means comfortable or satisfied

Q36.Why did Chandni run away in the hills from Abbu Khan's Hut?

(A)She was thankless	(B)She was stubborn
(C)She was overconfident anything	(D)She loved freedom more than

Answer (D) She loved freedom more than anything else.

Explanation: She was a fearless hill goat who did not agree to Abbu Khan's offer of safe life with limited freedom.

Q37."Death in an open field is better than life in a small Hut" Chandni said to herself. What does this reflect about her personality?

(A)Her love for complete freedom	(B)Her selfishness
(C)Her rude behaviour	(D)Her carelessness

Answer (A) Her love for complete freedom

Explanation: The character of Chandani reflects her strong will power to get complete freedom

Q38.Choose the option which is the correct arrangement of the jumbled up words.

farmers/ shelter/ the/rock caves /rains/it/take/in /when /heavily .

(A)It takes shelter in the rock caves when rains heavily farmers.

(B)Take shelter farmers when it rains heavily in the rock caves.

C) farmers take shelter in the rock caves when it rains heavily.

(D)It rains heavily farmers take shelter in the rock caves when.

Answer (C)) farmers take shelter in the rock caves when it rains heavily.

Explanation ;Such kind of sentences are arranged into a meaningful sentence by following the structure Subject + Verb +Object or as the case may be.

Q39.Choose the correct combination of phrase/words to complete the dialogue.

Ritu : Will you be helping megetting out of this trouble ?

Rohan: I will have tothe matter, then only I will be able to guide you.

(A)In, look into

(B)to, look into

(C)for, look up

(D) from, look up

Answer (A) In, look into

Explanation : Grammatically suitable and correct expression

Q40.Choose the correct combination of phrase/words to complete the dialogue.

Abbu Khan: Why do youto go in the hills. It's dangerous.

Chandni: I know you are concerned......my wellbeing and safety.

for my life.

(A)Want, for	(B)Wants, for
C)wanted, to	(D)Wanted, of

Answer (A)want, for

Explanation : In simple present tense, with second person 'you', we use first form of the verb without 's' or 'es'. 'For' is a suitable preposition to complete the sentence correctly.