

(General Awareness)

Q.1 Minimum Support Price (MSP) is recommended by ____.

1. The Food Safety and Standards Authority of India
2. The Farmers' Welfare Society
3. The Commission for Agricultural Costs and Prices
4. The Commission for Weights and Measures

Correct Answer : The Commission for Agricultural Costs and Prices

Q.2 The Indian Passport was ranked _____ in the 'Global Passport Index Report 2019'.

1. 67th
2. 65th
3. 56th
4. 77th

Correct Answer : 67th

Q.3 _____ is the oldest golf course outside the United Kingdom.

1. Royal Calcutta Golf Club, Kolkata
2. Royal Springs Golf Course, Srinagar
3. Tollygunge Golf Club, Kolkata
4. Classic Golf Resort, New Delhi

Correct Answer : Royal Calcutta Golf Club, Kolkata

Q.4 Ricket' is a disease associated with the deficiency of _____.

1. Vitamin A
2. Vitamin C
3. Vitamin D
4. Vitamin B

Correct Answer : Vitamin D

Q.5 Who amongst the following succeeded the Mughal throne in the year 1556?

1. Shah Jahan
2. Sher Shah Suri
3. Akbar
4. Jehangir

Correct Answer : Akbar

Q.6 What is India's rank in 2019 World Happiness Report?

1. 160th
2. 150th
3. 140th
4. 130th

Correct Answer : 140th

Q.7 Which of the following is NOT a vocal form of Hindustani classical music?

1. Tarana
2. Pakhawaj
3. Dhamar
4. Drupad

Correct Answer : Pakhawaj

Q.8 The Pradhan Mantri Shram Yogi Mandhan Yojana was launched by ____ .

1. Narendra Modi
2. Smriti Zubin Irani
3. Arun Jaitley
4. Ram Nath Kovind

Correct Answer : Narendra Modi

Q.9 The highest railway station in India is located in the state of ____ .

1. Sikkim
2. Jammu & Kashmir
3. West Bengal
4. Uttar Pradesh

Correct Answer : West Bengal

Q.10 During photosynthesis, green plants use energy from sunlight to synthesise ____ from carbon dioxide and water.

1. sucrose
2. fructose
3. galactose
4. glucose

Correct Answer : glucose

Q.11 Varkala, Chowara, Chavakkad and Nattika are beaches in the state of ____ .

1. Tamil Nadu
2. Karnataka

3. Maharashtra
4. Kerala

Correct Answer : Kerala

Q.12 _____ is the largest river island in the world.

1. Majuli
2. Munroe
3. Bahvani
4. Umananda

Correct Answer : Majuli

Q.13 Who was the first woman judge of the Delhi High Court?

1. Ruma Pal
2. Leila Seth
3. Anna Chandi
4. Sujata Manohar

Correct Answer : Leila Seth

Q.14 The _____ was a group of seven Members of Parliament from the United Kingdom, constituted to suggest constitutional reforms for British India.

1. Hunter Commission
2. Fraser Commission
3. Simon Commission
4. Sargent Commission

Correct Answer : Simon Commission

Q.15 Which of the following is NOT a symptom of Wilson's disease?

1. Problems with speech, swallowing or physical coordination
2. Fluid build-up in the legs or abdomen
3. Night blindness
4. Uncontrolled movements or muscle stiffness

Correct Answer : Night blindness

Q.16 The Khajuraho Temples are located in the state of _____.

1. Andhra Pradesh
2. Uttar Pradesh
3. Madhya Pradesh
4. Uttarakhand

Correct Answer : Madhya Pradesh

Q.17 Bariatric surgery makes changes to a person's _____.

- | | |
|---------------------|----------|
| 1. digestive system | 2. heart |
| 3. nasal passage | 4. lungs |

Correct Answer : digestive system

Q.18 Which of the following acid found in Apple?

- | | |
|----------------|-------------------|
| 1. Malic Acid | 2. Formic Acid |
| 3. Nitric Acid | 4. Sulphuric Acid |

Correct Answer : Malic Acid

Q.19 Article _____ of the Constitution of India gives the Election Commission the power to supervise elections to the Parliament and state legislatures.

- | | |
|--------|--------|
| 1. 314 | 2. 341 |
| 3. 324 | 4. 342 |

Correct Answer : 324

Q.20 The Banking Regulation Act was passed in India in _____.

- | | |
|---------|---------|
| 1. 1949 | 2. 1965 |
| 3. 1951 | 4. 1974 |

Correct Answer : 1949

Q.21 Which one of the following was NOT a condition laid down in the Gandhi-Irwin Pact?

1. Removal of salt tax; allowing to produce, trade and sell legally
2. Participation in the Round Table Conference by the Indian National Congress
3. Withdrawal of tax on khadi production
4. The Indian National Congress should stop the civil disobedience movement

Correct Answer : Withdrawal of tax on khadi production

Q.22 _____ is the oldest member of the 16th Lok Sabha.

- | | |
|--------------------|------------------------|
| 1. Ram Jethmalani | 2. Murli Manohar Joshi |
| 3. Farooq Abdullah | 4. Lal Krishna Advani |

Correct Answer : Lal Krishna Advani

Q.23 _____ was the first and only Muslim woman to ever sit on the throne of Delhi.

1. Fatima Al Fihri
2. Razia Begum
3. Shajarat Al Durr
4. Gevher Sultan

Correct Answer : Razia Begum

Q.24 The National Board for Micro, Small and Medium Enterprises meets once every _____ months in a year.

- | | |
|------|--------|
| 1. 9 | 2. 3.6 |
| 3. 6 | 4. 2 |

Correct Answer : 3.6

Q.25 Who became the first Indian golfer to win on the 'Ladies European Tour' in 2016?

- | | |
|----------------|--------------------|
| 1. Aditi Ashok | 2. Diksha Dagar |
| 3. Vani Kapoor | 4. Gursimar Badwal |

Correct Answer : Aditi Ashok

(English Comprehension)

Q.1 Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select No improvement. We had never seen so strong blizzard. The wind speed was 130 km per hour .

1. such a strong blizzard
2. such strong a blizzard
3. no improvement
4. so strong the blizzard

Correct Answer : such a strong blizzard

Comprehension:

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. Canada is three times the size of India (1)_____ its population is only about 26 million. The average (2)_____ of population is less than three persons per square kilometer (3)_____ Canada. The distribution of population is highly (4)_____. Nearly 80 per cent of the people (5)_____ in a narrow belt less than 300 kilometer wide along the southern border. The rest of the country has a very sparse population due to excessive cold.

Q.2 Select the most appropriate option for blank No. 1.

1. so
2. but
3. until
4. because

Correct Answer : but

Comprehension:

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. Canada is three times the size of India (1)_____ its population is only about 26 million. The average (2)_____ of population is less than three persons per square kilometer (3)_____ Canada. The distribution of population is highly (4)_____. Nearly 80 per cent of the people (5)_____ in a narrow belt less than 300 kilometer wide along the southern border. The rest of the country has a very sparse population due to excessive cold.

Q.3 Select the most appropriate option for blank No. 2.

1. density
2. frequency

3. consistency

4. quantity

Correct Answer : density

Comprehension:

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. Canada is three times the size of India (1)_____ its population is only about 26 million. The average (2)_____ of population is less than three persons per square kilometer (3)_____ Canada. The distribution of population is highly (4)_____. Nearly 80 per cent of the people (5)_____ in a narrow belt less than 300 kilometer wide along the southern border. The rest of the country has a very sparse population due to excessive cold.

Q.4 Select the most appropriate option for blank No. 3.

1. into

2. on

3. in

4. at

Correct Answer : in

Comprehension:

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. Canada is three times the size of India (1)_____ its population is only about 26 million. The average (2)_____ of population is less than three persons per square kilometer (3)_____ Canada. The distribution of population is highly (4)_____. Nearly 80 per cent of the people (5)_____ in a narrow belt less than 300 kilometer wide along the southern border. The rest of the country has a very sparse population due to excessive cold.

Q.5 Select the most appropriate option for blank No. 4.

1. differing

2. infrequent

3. uneven

4. rough

Correct Answer : uneven

Comprehension:

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. Canada is three times the size of India (1)_____

its population is only about 26 million. The average (2)_____ of population is less than three persons per square kilometer (3)_____ Canada. The distribution of population is highly (4)_____. Nearly 80 per cent of the people (5)_____ in a narrow belt less than 300 kilometer wide along the southern border. The rest of the country has a very sparse population due to excessive cold.

Q.6 Select the most appropriate option for blank No. 5.

1. live
2. remain
3. survive
4. subsist

Correct Answer : live

Q.7 Select the word which methes same as the group of words given. A person appointed by two parties to resolve a dispute

1. valuer
2. broker
3. arbitrator
4. auditor

Correct Answer : arbitrator

Q.8 Select the most appropriate meaning of the given idiom. out of the woods

- | | |
|-------------------------|---------------------|
| 1. no longer in trouble | 2. no longer famous |
| 3. no longer in sight | 4. no longer young |

Correct Answer : no longer in trouble

Q.9 Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select No improvement. They didn't see you, is it?

- | | |
|-------------------|--------------|
| 1. wasn't it | 2. did they |
| 3. no improvement | 4. have they |

Correct Answer : did they

Q.10 Select the antonym of the given word.

COMIC

- | | |
|------------|-----------|
| 1. amusing | 2. absurd |
| 3. awkward | 4. tragic |

Correct Answer : tragic

Q.11 Select the synonym of the given word.

DRAG

- | | |
|---------|---------|
| 1. rest | 2. rush |
| 3. push | 4. pull |

Correct Answer : pull

Q.12 Given below are four jumbled sentences. Select the option that gives their correct order.

- A. It is one of the highly developed countries of the world.
 B. It stretches from the Atlantic Ocean in the east to the Pacific Ocean in the west.
 C. The USA consists of 50 states including Alaska and Hawaii.
 D. The United States of America (USA) is the 4th largest country in the world.

1. CBDA
2. ADCB
3. CBAD
4. DBCA

Correct Answer : DBCA

Q.13 In the sentence identify the segment which contains the grammatical error. We will rest for sometime when we will reach the top.

- | | |
|-----------------|------------------|
| 1. We will rest | 2. when we will |
| 3. for sometime | 4. reach the top |

Correct Answer : when we will

Q.14 In the sentence identify the segment which contains the grammatical error. The river Yamuna has many non-native species like goldfish that is affecting its ecosystem.

1. has many non-native species
2. that is affecting
3. its eco-system
4. The river Yamuna

Correct Answer : that is affecting

Q.15 Select the synonym of the given word.

ENGULF

- | | |
|-------------|-------------|
| 1. entangle | 2. envelop |
| 3. enshrine | 4. encroach |

Correct Answer : envelop

Q.16 Select the antonym of the given word.

GATHER

- | | |
|-------------|-------------|
| 1. disperse | 2. distract |
| 3. dispute | 4. display |

Correct Answer : disperse

Q.17 Select the wrongly spelt word.

- | | |
|-----------|-------------|
| 1. hasty | 2. hasitate |
| 3. hazard | 4. hazy |

Correct Answer : hasitate

Q.18 Select the correct passive form of the given sentence. Show these visitors the butterfly farm.

1. These visitors should be showed the butterfly farm.
2. You must show these visitors the butterfly farm.
3. Let these visitors be shown the butterfly farm.
4. Let these visitors be showing the butterfly farm.

Correct Answer : Let these visitors be shown the butterfly farm.

Q.19 Given below are four jumbled sentences. Select the option that gives their correct order.

- A. What was supposed to be a holiday of a lifetime turned into a dangerous experience for 1,300 passengers on a cruise ship off the coast of Norway.
- B. The Norwegian Government decided to evacuate the passengers with the help of helicopters.
- C. The ship broke down in rough seas and high-speed winds caused it to rock heavily from side to side.
- D. From the first 371 evacuated passengers, 17 had to be taken to hospital.

1. CBDA
2. ACBD
3. ABCD
4. CABD

Correct Answer : ACBD

Q.20 Select the most appropriate meaning of the given idiom. butterflies in the stomach

- | | |
|------------------|------------------|
| 1. being angry | 2. being hungry |
| 3. being excited | 4. being nervous |

Correct Answer : being nervous

Q.21 Select the most appropriate word to fill in the blank.

The National war memorial is _____ to our Armed Forces.

- | | |
|--------------|--------------|
| 1. dedicated | 2. devoted |
| 3. honoured | 4. inscribed |

Correct Answer : dedicated

Q.22 Select the word which methe same as the group of words given. a family of young animals

- | | |
|--------------|-----------|
| 1. nest | 2. brood |
| 3. offspring | 4. clutch |

Correct Answer : brood

Q.23 Select the wrongly spelt word.

- | | |
|----------------|----------------|
| 1. reminascent | 2. remembrance |
|----------------|----------------|

3. remnant

4. remittance

Correct Answer : remembrance

Q.24 Select the most appropriate word to fill in the blank.

A painting competition was held in the colony and Kavya was _____ winner in the age group 3-5 years.

1. publicized

2. supposed

3. declared

4. described

Correct Answer : declared

Q.25 Select the correct active form of the given sentence. The injured were being removed to the hospital by the police.

1. The police removed the injured to the hospital.

2. The police has been removing the injured to the hospital.

3. The police was removing the injured to the hospital.

4. The injured was removing the police to the hospital.

Correct Answer : The police was removing the injured to the hospital.

(Reasoning)

Q 1. Choose the set of numbers that is similar to the following set.

(6, 9, 18)

(A) (14, 21, 42)

(B) (8, 14, 24)

(C) (10, 15, 35)

(D) (18, 27, 56)

Ans.A

Q 2. Two rotated positions of a dice are given below. Which number will be at the top if the number 1 is on the bottom of the dice?

(A) 3

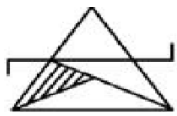
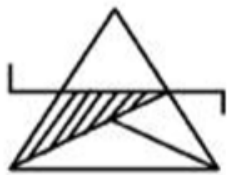
(B) 6

(C) 2

(D) 5

Ans.A

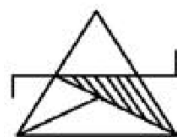
Q 3. Identify the mirror image of the following figure when the mirror is placed to the right of figure.



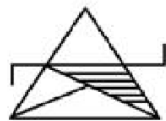
(A)



(B)



(C)



(D)

Ans.C

Q 4. Three of the following four words are alike in a certain way and one is different. Pick the odd word out.

(A) Cessation

(B) Valediction

(C) Closure

(D) Intermission

Ans.D

Q 5. Select the option that is related to the third term in the same way as the second term is related to the first term.

LAMP: PALM :: MALE: ____

- (A) ELAM (B) LAME
(C) MEAL (D) EAML

Ans.D

Q 6. What will be the value of the following equation if '÷' means 'addition', '+' means 'subtraction', '-' means 'multiplication' and '×' means 'division'?

$$72 \times 9 - 3 \div 8 = ?$$

- (A) 25 (B) 40
(C) 35 (D) 30

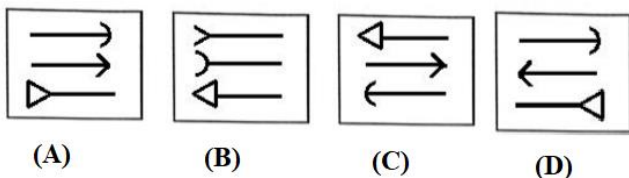
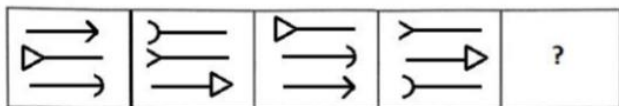
Ans.D

Q 7. In a code language, SEDATIVE is coded as ATDESEVI. How would PERSONAL be coded in that manner?

- (A) OSREPLAN (B) SOREPLAN
(C) SOERPANL (D) SOPERLAN

Ans.B

Q 8. Select the figure that will come next in the following figure series.



Ans.A

Q 9. Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.

- (A) GKRV (B) JNPS
(C) DGKL (D) BFMQ

Ans.C

Q 10. Arrange the following words in a logical and meaningful order.

1. Cloud
2. Rainbow

3. Devastation
4. Rain
5. Low pressure
6. Flood

- (A) 1, 5, 4, 2, 6, 3
 (B) 5, 1, 2, 4, 6, 3
 (C) 5, 4, 1, 2, 3, 6
 (D) 5, 1, 4, 2, 6, 3

Ans.D

Q 11. Select the word-pair in which the two words are related in the same way as the two word-pair.

Author: Book

- (A) Spider: Web
 (B) Doctor: Medicine
 (C) Mother: Son
 (D) Reptile :Crawl

Ans.A

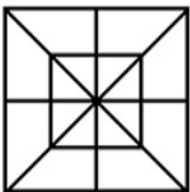
Q 12. A letter series is given below in which some letter are missing. Select the option that gives the letters that can fill these blanks in that order.

a_ca_bab_ad_abc_db

- (A) bddac
 (B) bdcab
 (C) bdcba
 (D) bcdba

Ans.C

Q 13. How many triangles are there in the following figure?



- (A) 28
 (B) 24
 (C) 36
 (D) 32

Ans.D

Q 14. Two statements are followed by three conclusions numbered I, II and III. Assuming the statements to be true, even if they do not conform to real-world knowledge, decide which of the conclusion(s) logically follows from the statements.

Statements:

All ponds are pools

Some wells are ponds

Conclusions;

I. Some ponds are not wells.

II. Some wells are pools

III. All pools are wells.

(A) None of the conclusions follow

(B) Only conclusion I follow

(C) Only Conclusion III follows

(D) Only Conclusion II follows

Ans.D

Q15. Find the next number in the given series.

3, 13, 31, ? , 91

(A) 48

(B) 69

(C) 57

(D) 63

Ans.C

Q 16. Select the number pair in which the two numbers are related in the same way as the two numbers of the pair given below.

35:6

(a) 85:9

(b) 64:8

(c) 26:5

(d) 120:11

Ans.D

Q 17. Select the option that is related to the third letter –cluster in the same way as the second letter-cluster is related to the first letter-cluster.

CDAF: XWZU:: DEFC:?

(A) WVXU

(B) WVUX

(C) XWYV

(D) VWXU

Ans.B

Q 18. 'Room' is related to 'Ceiling' in the same way as 'Mouth' is related to:

(A) Throat

(B) Lip

(C) Palate

(D) Teeth

Ans.C

Q 19. Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.

(A) EFST

(B) GHTV

(C) CDQR

(D) ABOP

Ans.B

Q 20. Three of the following four word pairs are alike in a certain way and one is different. Pick the odd word out.

(A) Garden: Ladle

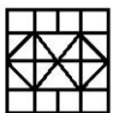
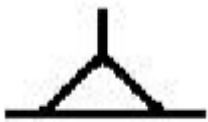
(B) Study Room: Table Lamp

(C) Kitchen: Frying pan

(D) Bathroom: Shower

Ans.A

Q 21. Select the figure in which the given figure is embedded.



(A)



(B)



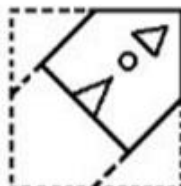
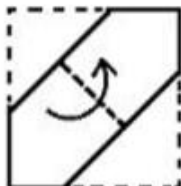
(C)

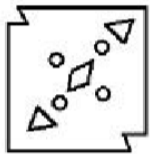


(D)

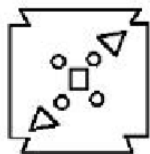
Ans.B

Q 22. A square paper is folded and cut as shown below. How will it appear when unfolded?

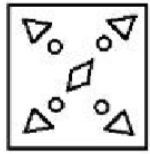




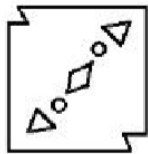
(A)



(B)



(C)



(D)

Ans.D

Q 23. Select the term that will come in the place of?

7, 11, 19, 31, ? 67

(A) 43

(B) 47

(C) 51

(D) 45

Ans.B

Q 24. In a code language if VERY is written as UDQX, then in the same language how will you write the word URGENT?

(A) TQFDMS

(B) MSQTFD

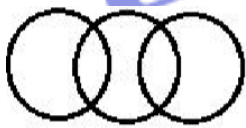
(C) QFDTMS

(D) TMSQFD

Ans.A

Q 25. Choose the Venn diagram that best illustrates the relationship among the following classes:

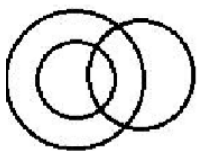
Women, Entrepreneurs, Engineers



(A)



(B)



(C)



(D)

Ans.D

(Mathematics)

Q 1. The tables shows the production of different types of cars(in thousands)

Year	2013	2014	2015	2016	2017
Cars					
A	48	47	50	61	64
B	47	55	58	54	66
C	52	58	62	66	72
D	60	53	56	65	66
E	43	47	54	64	62

The total production of type B cars in 2015 and types C cars in 2013 is what percent more that the total production of type E cars in 2013 and 2014?

- (A) 24.8 cm (B) 25.6 cm
(C) 23.4 cm (D) 22.2 cm

Ans.D

Q 2. If $(1 + \tan^2 \theta) + (1 + (\tan^2 \theta)^{-1}) = k$, then $\sqrt{k} = ?$

- (A) $\sin \theta \cos \theta$
(B) $\operatorname{cosec} \theta \sec \theta$
(C) $\operatorname{cosec} \theta \cos \theta$
(D) $\sin \theta \sec \theta$

Q.3

The value of $\frac{1}{\sin \theta} - \frac{\cot^2 \theta}{1 + \operatorname{cosec} \theta}$ is:

- (A) 0 (B) 1
(C) 2 (D) -1

Ans.B

Q 4. If a 10-digit number $2094x843y2$ is divisible by 88, then the value of $(5x - 7y)$ for the largest possible value of x , is:

- (A) 5 (B) 6
(C) 2 (D) 3

Ans.A

Q.5 If $3\sqrt{3}x^2 - 2\sqrt{2}y^3 = (\sqrt{3}x - \sqrt{2}y)(Ax^2 + By^2 + Cxy)$, then the value of $(A \times B) \div C$ is:

- (A) $\sqrt{6}$ (B) $6\sqrt{6}$
 (C) $6\sqrt{3}$ (D) $\sqrt{3}$

Ans.A

Q 6. In a circle with centre O and radius 10 cm, PQ and Rs are two parallel chords of lengths x cm and 12 cm, respectively, and both the chords are on the opposite side of O. If the distance between PQ and RS is 14 cm, the value of x is:

- (A) 15 (B) 16
 (C) 18 (D) 20

Ans.B

Q 7. The area of a triangle ABC is one unit. DE is a straight line parallel to BC, joining the points D and E on AB and AC respectively such that $AD:DB=1:6$. The ratio of the area of the triangles ADE and ABC is:

- (A) 1:6 (B) 1:36
 (C) 1:7 (D) 1:49

Ans.D

Q 8. The table shows the production of different types of cars in thousands

Year \ Cars	2013	2014	2015	2016	2017
A	48	47	50	61	64
B	47	55	58	54	66
C	52	58	62	66	72
D	60	53	56	65	66
E	43	47	54	64	62

The ratio of the total production of type A cars in 2017 and type D cars in 2015 to the total production of type B and type E cars in 2013 is:

- (A) 4:3 (B) 3:4
 (C) 8:7 (D) 7:8

Ans.A

Q 9. The table shows the production of different types of cars in thousands

Year \ Cars	2013	2014	2015	2016	2017
A	48	47	50	61	64
B	47	55	58	54	66
C	52	58	62	66	72
D	60	53	56	65	66
E	43	47	54	64	62

If the data related to the production of type D cars is represented by a pie-chart, then the central angle of the sector representing the production of the cars in 2016 will be;

- (A) 79.2° (B) 78°
 (C) 72° (D) 67.2°

Ans.b

Q 10. A train travelling at 44 km/h crosses a man walking with a speed of 8 km/h, in the same direction, in 15 seconds. If the train crosses a woman coming from the opposite direction in 10 seconds, then what is the speed in km/h of the woman?

- (A) 10.5 (B) 8.5
 (C) 9 (D) 10

Ans.D

Q 11. Sudha saves 15% of her income. If her expenditure increases by 20% and saving increase by 60%, then by what percent has her income increased?

- (A) 24 (B) 30
 (C) 26 (D) 35

Ans.C

Q 12. A person borrowed a certain sum at 10% p.a. for three years, interest being compounded annually. At the end of two years, he repaid a sum of Rs 6,634 and at the end of third years, he cleared off the debt by paying Rs 13,200. What was the sum borrowed by him?

- (A) 15,600 (B) 16,500
 (C) 16,400 (D) 15,400

Ans.D

Q 13. Some fruit are bought at a rate of 11 for Rs 100 and an equal number at a rate of 9 for Rs 100. If all the fruits are sold at a rate of 10 for Rs 100, then what is the gain or loss percent in the entire transaction?

- (A) Loss, 5% (B) Gain 5%

(C) Gain 1%

(D) Loss 1%

Ans.D

Q.14 The value of $16 \div 4 \text{ of } 4 \times [3 \div 4 \text{ of } (4 \times 3 \div (3 + 3))] \div (2 \div 4 \text{ of } 8)$ is:

(A) 48

(B) 6

(C) 9

(D) 16

Ans.B

Q 15. The table shows the production of different types of cars in thousands

Year \ Cars	2013	2014	2015	2016	2017
A	48	47	50	61	64
B	47	55	58	54	66
C	52	58	62	66	72
D	60	53	56	65	66
E	43	47	54	64	62

The total production of type B cars during 2013 to 2016 is approximately what percent less than the total production of cars in 2017?

(A) 40%

(B) 35%

(C) 38%

(D) 32%

Ans.B

Q 16. PQRS is a cyclic quadrilateral .If angle P is three times the angle R and angle S is five times the angle Q, then the sum of the angle Q and R is:

(A) 70° (B) 65° (C) 72° (D) 75°

Ans.D

Q 17. If $a + \frac{1}{a} = 3$, then $(a^4 + \frac{1}{a^4})$ is equal to:

(A) 81

(B) 77

(C) 47

(D) 27

Ans.C

Q 18. The average of eleven numbers is 54. The average of the first four number is 48 and that of the next four numbers is 25% more than the average of the first four. The ninth number is 8 greater than

the 11th number and the tenth number is 4 greater than the 11th number. What is the average of the 9th and the 10th numbers?

- (A) 56 (B) 54
(C) 54.4 (D) 52.6

Ans.A

Q 19. If $(a + b + c = 2)$, $a^2 + b^2 + c^2 = 26$, then the value of $a^3 + b^3 + c^3 - 3abc$ is:

- (A) 69 (B) 71
(C) 78 (D) 74

Ans.D

Q 20. In triangle ABC, D is a point on AC such that AB=BD=DC. If $\angle BAD=70^\circ$, then the measure of $\angle B$ is:

- (A) 70° (B) 80°
(C) 75° (D) 82°

Ans.C

Q 21. In a triangle ACE, B and D are the points on side AC and CE, respectively, such that $BD \parallel AE$ and $AE = \frac{8}{3}BD$. What is the ratio of the area of triangle BDC to that of triangle AEC?

- (A) 9:16 (B) 9:64
(C) 3:8 (D) 8:11

Ans.B

Q 22. $\left(\frac{1}{1+\sin^2\theta} + \frac{1}{1+\operatorname{cosec}^2\theta}\right) =$

- (A) $\sin^2\theta$ (B) 1
(C) $\operatorname{cosec}^2\theta$ (D) 2

Ans.B

Q 23. To do a certain work, the ratio of the efficiencies of A, B and C is 7:5:6. Working together, they can complete the same work in 35 days. B and C work together for 21 days. The remaining work will be completed by A alone in:

- (A) 60 days (B) 57 days
(C) 50 days (D) 54 days

Ans.B

Q.24 If $\frac{\cos\theta}{1-\sin\theta} + \frac{\cos\theta}{1+\sin\theta} = 4$, $0^\circ < \theta < 90^\circ$, then the value of $(\tan \theta + \operatorname{cosec} \theta)$ is:

(A) $\frac{4\sqrt{3}}{3}$

(B) $\frac{5\sqrt{3}}{3}$

(C) $\frac{5\sqrt{2}}{3}$

(D) $\frac{5\sqrt{2}}{2}$

Ans.B

Q 25. The radii of three concentric circle are in the ratio of 4:5:7. What is the ratio of the area between two inner circles to that between the two outer circles?

(A) 4:5

(B) 4:7

(C) 5:9

(D) 3:8

Ans.D

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