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Mathematics

Crossword - 1 (Numbers)

ACROSS

1 Commutative group.

3 Natural numbers and zero.

8 Any number that can be expressed as the quotient or fraction p/q of two integers, a numerator p and a non-zero denominator q.

9 A recurring decimal.

10 A decimal that ends.

11 Other than prime number.

12 Any rational or irrational number.

DOWN

2 Positive or negative whole number.

4 A number that cannot be expressed as a ratio between two integers and is not an imaginary number.

5 Whole numbers except 0.

6 The natural number which have exactly two factors.

7 A number between zero and 1 and is expressed as one number over another number.

Crossword - 2 (Polynomials)

ACROSS

3 Liable to change.
5 A second degree polynomial.
7 An expression occupying 3 terms.
8 (Of an algebraic expression) consisting of one term.
9 A quantity that does not vary.
10 Process of writing an algebraic expression as a product of two or more algebraic expressions.
11 Expression of many terms.

DOWN

1 The highest power of the variable in a polynomial of one variable.
2 An expression containing two terms.
4 A polynomial expression, involving only the second and fourth powers of a variable, as $x^4 + 3x^2 + 2$.
6 A mathematical function that is the sum of a number of terms.
8 It means "singular".

Crossword - 3 (Arithemetic)

ACROSS

1 The initial size of a loan.
3 Interest paid on the principal alone.
6 It is represented by hundredth.
8 The normal price of the thing without a discount.
10 The money given on a sale to the person selling.

DOWN

2 Interest calculated on both the principal and the accrued interest.
4 The price for which it is sold.
5 Interest amount is based interest rate and
6 A financial gain.
7 Deduction from the usual cost.
9 Cost that produces no benefit.

Crossword - 4 (Mensuration)

ACROSS

3 A 3-D shape.
5 Egyptian tomb structure.
7 A symmetrical three-dimensional solid shape contained by six equal squares.
8 A three-dimensional shape.
9 The shape of 10 circular discs placed vertically without any deviation.
10 A solid geometric figure whose two ends are similar, equal, and parallel rectilinear figures, and whose sides are parallelograms.

DOWN

1 Number of diagonals in cube.
2 A perfectly round geometrical object in three-dimensional space.
4 A straight line joining two opposite corners of a square, rectangle, or other straight-sided shape.
5 The continuous line forming the boundary of a closed geometrical figure.
6 The extent or measurement of a surface or piece of land.
7 A rectangular parallelepiped.

Crossword - 5 (Geometry)

ACROSS

1 Shape in chess board.

5 A four-sided plane rectilinear figure with opposite sides parallel.

9 Area of rhombus is equal to ____ of product of diagonals.

10 A parallelogram with four right angles.

12 A parallelogram with four equal sides.

DOWN

2 A four sided figure.

3 Lines of symmetry for a rhombus.

4 Like a northeast-to-southwest line.

6 A quadrilateral with only one pair of sides parallel.

7 Symmetric lines about a circle.

8 Proportion; beauty of form.

11 Lines of symmetry of a square.

Computers

Crossword - 1 (Review of Computer Basics)

ACROSS

1 It refers to a combination of a monitor and a keyboard that are connected to a server or a mainframe in network.

3 It is made up of large number of cells.

6 Device intended to store data when it's not in use.

8 These are temporary storage areas for instructions or data.

10 These are commonly used to cool a computer.

11 It is also known as silico sapiens.

12 It uses a radio frequency, which allows transmission even through walls and other objects.

DOWN

2 It is a pointed device, like a ball pen, which is mainly used with palmtop computers and mobile phones.

4 Modulator-demodulator.

5 It is a piece of software or a hardware device that prevents unauthorized access to computers on a local network.

7 This is a commonly used output device.

9 The word that is often used to describe a socket outside your PC where you can plug in a cable.

Crossword - 2 (Internet)

ACROSS

2 Internet explorer falls under.

7 Server on internet is known as

8 It is a way of communicating on the internet by means of exchanging text messages.

9 Most of us use it every day whether to search for information to find friends and even to buy groceries.

10 Symbols that we can use to express an emotion in a message.

11 These are short forms of words that are commonly used when we send regular emails.

DOWN

1 A set of conventional rules to be followed for appropriate behaviour on the internet.

2 A newsgroup where people broadcast their ideas.

3 Any knowledge item that can be expressed in numbers or words.

4 Free of cost repair of software bug available in internet.

5 It is a part of a website that allows for group discussion.

6 It is a social networking site that connects users to friends, family, co-workers, groups and business.

Crossword - 3 (Flash)

ACROSS

4 A tool that helps us to zoom in or zoom out at any time.

7 The function that helps us to create many copies of an object, without making a flash file too big.

9 This deals with the rotation and movement of the object from one point to other point in specific frame.

11 This component helps us to make changes to our content quickly.

12 Selection tool used for selecting single or many objects by forming a free-form line around them.

DOWN

1 A transparent sheet like a glass canvas.

2 Selection tool used to select individual or multiple objects.

3 In Flash, we can create this so that it can be resized without losing their quality.

5 The copies of an object in Flash.

6 It involves rotating objects.

8 In this part of the Flash workspace, we place the graphic content and create an animation.

10 Tool that helps to move the stage to change the view when the stage is magnified, without changing the degree of magnification.

Crossword - 4 (HTML)

ACROSS

2 Tags used for linking HTML document, either externally or internally.

3 The software that can read & render HTML.

6 In computer HTML is used to create.

8 It arrange text in a linear and structured form.

9 The tags which are required for every HTML page you create is

11 HTML tags are used to describe documents.

DOWN

1 HTML program can be read and rendered by

2 The extra bits of information that appear inside tags.

4 It is a tag in HTML to display text with scrolling effect.

5 The body tag is usually used after which tag.

7 Which section is used for text and tags that are shown directly on your web page.

10 All HTML documents will be basically in this form.

Crossword - 5 (Microsoft Access)

ACROSS

4 It contains multiple tabs, each with several groups of commands.

5 A set of fields.

7 Text editor that is the part of windows operating system.

9 These are used to display, enter, or update data in the tables.

12 In MS Access, all tables, queries, forms, and reports are known as

14 The fields with this data type can store files.

DOWN

1 A single piece of information.

2 The task of arranging data in order.

3 The basic elements of a form or a report.

6 An organized collection of data and records.

8 What enables you to view data from a table based on specific criterion.

10 This is used to store data in the form of short messages & notes.

11 A collection of records.

13 Data type allows alpha numeric characters and special symbols.

Reasoning

01. *Which group of alphabets completes the matching pair ?*

PRLN isto XZTV as JLFH isto ?

(A) RTNP (B) NPRT

(C) NRPT (D) NTRP

Answer: **(A)**

Explanation:

Similarly,

Hence, option (A) is the correct answer.

02. *What comes next in the series below ?*

(A) (B) (C) (D)

Answer: **(D)**

Explanation: In one step, the left arm and left leg stretch out and in the next step, the initial posture is restored. The process is repeated with the other arm and leg.

03. Identify the mirror image of

(A) (B) (C) (D)

Answer: **(B)**

Explanation:

04. Vishnu went 15 km to the West from his house, then turned left and walked 20 km. He then turned East and walked 25 km and finally turning left covered 20 km. How far is he now from his house ?

(A) 15 km (B) 20 km

(C) 25 km (D) 10 km

Answer: **(D)**

Explanation: Points A and E show the starting and end position respectively of Vishnu. It is clear that E is 10 km away from A. Hence option (D) is the correct answer.

05. Select the correct alternative which would most closely resemble the paper when unfolded.

(A) (B) (C) (D)

Answer: **(C)**

Explanation: When the figure is opened at one fold and then at second fold, the figure obatined will resemble with figure (C) among the alternatives.

06. Count the number of cubes in the given figure.

(A) 25 (B) 30 (C) 32 (D) 34

Answer: **(B)**

Explanation: In the figure, there are, 2 columns containing 5 cubes, 3 columns containing 3 cubes each, 2 columns containing 4 cube each, 1 column containing 2 cubes and 1 column containing 1 cube.

$\therefore$ Total number of cubes

$= (2 \times 5) + (3 \times 3) + (2 \times 4) + (1 \times 2) + (1 \times 1)$

$= 10 + 9 + 8 + 2 + 1 = 30$

Questions Based on Reasoning Examples

01. 73 isto 52 as 57 isto ?

(A) 9 (B) 37 (C) 27 (D) 19

02. KeaC isto CaeK as XgmF isto ?

(A) GmcF (B) FmgX (C) EgmX (D) EmgF

03. What comes next in the series below ?

(A) (B) (C) (D)

04. Find the mirror image of following number.

9876

(A) (B)

(C) (D)

05. Identify the mirror image of ***.***

(A) (B) (C) (D)

06. A man is facing South. He turns 135° in the anti clockwise direction and then 180° in the clockwise direction. Which direction is he facing now ?

(A) North-East (B) North-West

(C) South-East (D) South-West

07. ***A person walks 10 metres in front and 10 metres to the right. Then every time turning to his left, he walks 5, 15 and 15 metres respectively. How far is he now from his starting point ?***

(A) 15 m (B) 5 m

(C) 10 m (D) 20 m

08. ***Find the figure which most closely resembles the unfolded piece of paper.***

(A) (B) (C) (D)

09. ***If the total number of dots on the opposite of a cubical block is always 7, then find the figure which is correct.***

(A) (B) (C) (D)

10. ***When number 1 is on the top, what number will be at the bottom ?***

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

English

Crossword (IDIOMS)

ACROSS

1 Little by little.
4 Chow down.
5 Hit the hay.
8 In no time.
12 Blue moon.
13 Give and take.
14 By the way.

DOWN

2 Few & far between.
3 Above all.
6 An eye wash.
7 Bated breath.
8 It figures.
9 Hard and fast.
10 Mumbo Jumbo.
11 A steal.

Make a list of difficult words, write their spelling, meaning, synonym and antonym in the table provided.

Spelling	*Meaning*	*Synonym*	*Antonym*

PREVIOUS QUESTION PAPER - 1

Select the correct option to answer every question given below.

Q.Paper - 1 **Mental Ability**

01 ***Product of 4x + y + z and x + y – z will have _____.***

(A) 5 terms (B) 6 terms

(C) 3 terms (D) 8 terms

02 ***If the difference between C.I and S.I on any sum at 5% per annum for 2 years is ₹ 25, find the sum.***

(A) ₹ 5000 (B) ₹ 12000

(C) ₹ 10000 (D) ₹ 8000

03 ***If $2^{2^x} = 16^{2^{3x}}$, then find the value of x.***

(A) –1 (B) 0 (C) 1 (D) none

04 ***In the product (2 – x) (5 – 3x) (1 – 7x), what is the coefficient of x^2 ?***

(A) 24 (B) 21 (C) 80 (D) –81

05 ***Identify the multiplicative inverse of 0.3.***

(A) – 0.3 (B) $\frac{11}{3}$ (C) $3\frac{1}{3}$ (D) 3

06 ***How many sides does a regular polygon have if each of its interior angles is 165° ?***

(A) 20 (B) 16 (C) 24 (D) 18

07 ***A single discount equivalent to the discount series 20%, 10% and 15% is***

(A) 30% (B) 45% (C) 36.6% (D) 38.8%

08 ***The least possible value of A, for which 90 × A is a perfect cube is***

(A) 600 (B) 500 (C) 300 (D) 200

09 ***There are as many square metres in the area of an equilateral triangle as there are metres in its perimeter. Find its side.***

(A) 8 m (B) $4\sqrt{3}$ m

(C) $2\sqrt{6}$ m (D) 6 m

10 ***The pie chart shows the pets kept by the people of a locality. What percentage of people like cat ?***

(A) 33% (B) $12\frac{1}{2}$% (C) 125% (D) $33\frac{1}{3}$%

11 ***What sum of money will amount to ₹ 416 in 1 year 4 months at 3% p.a. simple interest ?***

(A) ₹ 415 (B) ₹ 410 (C) ₹ 420 (D) ₹ 400

12 ***Identify one of the factors of $x^2 + y^2 + 2xy - z^2$.***

(A) $(x - y + z)$ (B) $(x + y - z)$

(C) $(-x + y + z)$ (D) $(-x + y - z)$

13 ***If 6449 soldiers were asked to stand in rows to form a perfect square, it was found that 49 soldiers were left out. What was the number of soldiers in each row ?***

(A) 40 (B) 60 (C) 64 (D) 80

14 ***A man buys postage stamps of denominations 25 paise and 50 paise in the ratio 1 : 3. He buys 28 stamps in all. So he has bought stamps of worth,***

(A) ₹ 10 (B) ₹ 12.25

(C) ₹ 14 (D) ₹ 14.50

15 ***Which of the following statements is true ?***

(A) $\frac{16}{21} \div \left(\frac{-4}{9} \div \frac{8}{9}\right) = \left(\frac{16}{24} \div \frac{-4}{5}\right) \div \frac{8}{9}$

(B) $\left(\frac{9}{20} - \frac{17}{40}\right) \div \frac{10}{3} = \left(\frac{9}{20} \div \frac{10}{3}\right) - \left(\frac{17}{40} \div \frac{10}{3}\right)$

(C) $\frac{13}{14} \div 0 = 0$

(D) $\frac{-15}{22} \div \frac{22}{-15} = 1$

Space for Rough Work

Q.Paper - 1 Reasoning

16 ***What comes next in the series below ?***

(A) (B) (C) (D)

17 ***I am facing south. I turn right and walk 20 m, then turn right and walk 10 m, then turn left and walk 10 m and then turning right walk 20 m. Finally turn right again and walk 60 m. In which direction am I from the starting point ?***

(A) North (B) North-west

(C) East (D) North-east

18 ***What is the sum total of the spots on all the hidden faces of these three regular dice ?***

(A) 21 (B) 28 (C) 40 (D) 20

19 ***Which figure within the following group is an odd one out ?***

(A) (B) (C) (D)

20 ***Identify the matching pair ?***

(A)

(B)

(C)

(D)

21 ***Which word comes last, when the four words are placed in alphabetical order ?***

(A) Actuate (B) Accumulate

(C) Acquit (D) Achieve

22 ***Choose the code letters that describe the shape in the box on the right most.***

(A) F Z (B) E Z (C) F Y (D) G X

23 ***Which number replaces the question mark ?***

(A) 25 (B) 47 (C) 19 (D) 17

24 ***Choose the option that will complete the sequence.***

(A) (B) (C) (D)

25 ***Identify the mirror image.***

(A) (B) (C) (D)

26 ***Choose the odd one among the given options.***

(A) EFGIK (B) CDFIM

(C) BCEHL (D) ABDGK

27 ***Identify the missing square.***

(A) (B) (C) (D)

28 ***The following two shapes are drawn on transparencies. Which shape is formed when the two transparencies overlap ?***

(A) (B) (C) (D)

29 ***Count the number of triangles.***

(A) 7 (B) 9 (C) 10 (D) 12

30 ***Which option cannot be formed by using the two blocks?***

(A)

(B)

(C)

(D)

Q.Paper - 1 Computers

31 ***Which of the following codes display a less than symbol while loaded in browser ?***

(A) < (B) > (C) © (D)

32 ***How many types of screen modes can be used in QBASIC?***

(A) 12 (B) 15 (C) 10 (D) 11

33 ***A _____ is a set of rules which computers use to communicate with each other across a network ?***

(A) network (B) programme (C) address (D) protocol

34 ***Backup, virus scanner and disk defragmenter etc., are all examples of***

(A) packages. (B) languages.

(C) system software. (D) utility.

35 ***For smoother animation in Flash 8, changes in _____ is more appropriate.***

(A) frame rate (B) key frame

(C) mask (D) layer

36 ***The term 'computer virus' coined by whom ?***

(A) Bob Frank (B) Jane Eyrn

(C) Andy partington (D) Fred cohen

37 ***Which attribute is used to control the length of <hr> horizontal line in HTML 5 ?***

(A) length=value (B) width=value

(C) height=value (D) none of above

38 ***Which data type of Ms-Access 2007 can store upto 65,536 characters ?***

(A) Data (B) Text (C) Memo (D) Number

39 ***Which of the following computer buses carries information between the CPU and the other parts of the computer ?***

(A) Data bus (B) Address bus

(C) Control bus (D) None of these

40 ***How many colour modes are there in Photoshop CS2 ?***

(A) Five (B) Eight (C) Three (D) Six

41 ***Which numbering is given to magenta colour in QBASIC ?***

(A) 9 (B) 13 (C) 6 (D) 12

42 ***Which of the following HTML code is correct to align following paragraph to the right of available space on browser window ?***

(A) <p text-align=”right”>

(B) <p style=“text-align:right;”>

(C) <p style=” align:right”>

(D) both (A) and (C)

43 ***Graphics created in flash are considered _____.***

(A) Raster graphics (B) Vector graphics

(C) Bit maps (D) None of these

44 ***_____ bar contains a set of tools to provide controls in the form.***

(A) Status (B) Tool (C) Menu (D) Progress

45 ***The software that removes viruses from disk is known as _____.***

(A) virus killer (B) remover

(C) anti virus (D) destroyer

Q.Paper - 1 **English**

46 ***Select correct option, that's a synonym to 'baffle'.***

(A) cattle (B) waffle

(C) confound (D) calf

47 ***Which option replaces the <u>underlined</u> correctly ?***

Dr. Rohini's smile in itself is <u>a remedy for all diseases</u>.

(A) a plutocracy (B) an effeminacy

(C) an ecstacy (D) a panacea

48 ***Select correct option to make the second pair similar in manner like the first one.***

In : Out To :

(A) For (B) Fro

(C) Front (D) Towards

49 ***Fill the blanks with the correct option (articles).***

He hadn't _____ any money to you; _____ he ?

(A) offer, had (B) given, hadn't

(C) borrowed, did (D) offered, had

50 ***Select option showing the part of sentence with error.***

<u>one of my</u> <u>friend took</u> <u>edges to be</u> <u>a board member ?</u>

P Q R S

(A) R (B) R, S

(C) P, Q, R, S (D) Q, S

PREVIOUS QUESTION PAPER - 2

Select the correct option to answer every question given below.

Q.Paper - 2 **Mental Ability**

01 ***Neeta's volvo bus takes 50 boys to a field trip. Some of them take ₹ 20 tickets while the rest take ₹ 45 tickets. If the total cost of tickets purchased is ₹ 2000, how many boys took the tickets of ₹ 20 each ?***

(A) 7 (B) 10 (C) 12 (D) 15

02 ***Find the product of $(x^2 + 3x + 5)$ and $(x^2 - 1)$.***

(A) $x^4 + 3x^3 - 4x^2 - 3x - 5$ (B) $x^4 + 3x^2 + 4x^2 - 3x - 5$

(C) $x^4 + 3x^3 + 4x^2 + 3x - 5$ (D) $x + 3x^3 - 4x^2 - 3x + 5$

03 ***The square of which numbers below will contain the first nine natural numbers ?***

(A) 1 1 1 1 1 1 1 (B) 1 1 1 1 1 1 1 1

(C) 1 1 1 1 1 1 1 1 1 (D) 1 1 1 1 1 1 1 1 1 1

04 ***A quadrilateral that is not a parallelogram but has exactly two equal opposite angles is:***

(A) a rhombus. (B) a trapezium.

(C) a square. (D) a kite.

05 ***Which of the following is a pythagorean triplet ?***

(A) 16, 18, 20 (B) 1, 2, 3

(C) 30, 40, 50 (D) 50, 51, 52

06 ***Which of the following set of numbers is closed under subtraction ?***

(A) Fractions (B) Negative integers

(C) Natural numbers (D) Rational numbers

07 ***Rajesh bought an arm chair for ₹ 2200 and sold it for ₹ 2420. Find his profit percent.***

(A) 5% (B) 10%

(C) 12% (D) 15%

08 ***Find the absolute value of $|4 - x|+|x - 4|$, if $0 < x < 4$.***

(A) 0 (B) 2x

(C) 8 (D) 2 (4 – x)

09 ***The distance between two stations is 340 km. Two trains start simultaneously from these stations on parallel tracks to cross each other. The speed of one of them is greater than that of the other by 5 kmph. If the distance between the two trains after 2 hours of their start is 30 km, then find the speed of each train.***

(A) 75 kmph, 80 kmph (B) 60 kmph, 65 kmph

(C) 80 kmph, 85 kmph (D) 70 kmph, 75 kmph

10 ***If $\left(\sqrt{3}\right)^5 \times 9^2 = 3^n \times 3\sqrt{3}$, then what is the value of n ?***

(A) 3 (B) 5 (C) 7 (D) 8

11 ***A dishonest dealer claims to sell his goods at cost price but he uses a weight of 800 grams in place of the standard 1 kg weight. What is his gain percent ?***

(A) $11\frac{1}{9}\%$ (B) 10% (C) 12% (D) 25%

12 ***Find the largest number among the following.***

(A) $3^{2^{2^2}}$ (B) $\left\{3^2 \times 3^2\right\}^2$

(C) $3^2 \times 3^2 \times 3^2$ (D) 3222

13 ***The sides of a triangle are 5,12 and 13 units. A rectangle of length 10 units is constructed equal in area to the area of the triangle. Find the perimeter of that rectangle.***

(A) 30 units *(B) 26 units*

(C) 13 units *(D) 15 units*

14 ***An amount of ₹ x at compound interest at 20% per annum for 3 years becomes y. What is y : x ?***

(A) 3 : 1 *(B) 36 : 25*

(C) 216 : 125 *(D) 125 : 216*

15 ***If V is the volume of a cuboid of dimensions a, b and c; and s is the its surface area, then*** $\frac{2}{s}\left(\frac{1}{a}+\frac{1}{b}+\frac{1}{c}\right)$ ***is equal to***

(A) $\frac{1}{V}$ *(B)* V^2 *(C)* V *(D)* V^3

Space for Rough Work

Q.Paper - 2 Reasoning

16 ***Identify the code for the last figure.***

GW *?* *RX* *RY*

(A) XY (B) GX (C) GY (D) YG

17 ***Certain faces were made on a tent in an order. Find the face which will continue the sequence.***

(A) *(B)* *(C)* *(D)*

18 ***If × stands for 'addition', ÷ stands for 'subtraction', + stands for 'multiplication' and – stands for 'division', then 20 × 8 ÷ 8 - 4 + 2 = ?***

(A) 80 (B) 25 (C) 24 (D) 5

19 ***Choose the matching figure.***

(A) *(B)* *(C)* *(D)*

20 ***25 people are standing in a row at a form collection centre. Roy is 19th from the counter. Three people ahead of Roy walk away without depositing their form. Find the position of Roy.***

(A) 11th (B) 13th (C) 15th (D) 16th

21 ***Choose the odd letter group.***

HGF , XWV , NML , OPQ , UTS

(A) HGF (B) XWV (C) NML (D) OPQ

22 ***The given figures consist of numbers and letters. Find the missing letter in it.***

(A) N (B) M (C) O (D) L

23 ***A is B's sister. C is B's mother. D is C's father. E is D's mother. Then, how is A related to D ?***

(A) Grandmother (B) Grandfather

(C) Daughter (D) Grand daughter

24 ***Count the number of lines in the figure given below.***

(A) 10 (B) 13 (C) 11 (D) 8

25 ***Identify the mirror image of the given word.***

SHARE

(A) ƧHAR∃ *(B)* ∃RAHƧ

(C) SHARE *(D)* ∃RAHƧ

26 ***Identify the part which is not hidden in the given figure.***

(A) *(B)* *(C)* *(D)*

27 ***If the alphabets were written in the reverse order, which will be the fifth letter to the left of the ninth letter from the right ?***

(A) P (B) N (C) D (D) M

28 ***A paper is folded and finally cut in a particular manner. How does the shape look, when unfolded ?***

(X) ***(Y)*** ***(Z)***

(A) *(B)* *(C)* *(D)*

29 ***Choose the odd number.***

27 , 125 , 343 , 729 , 1321

(A) 27 (B) 125 (C) 343 (D) 1321

30 ***The given shape is used to make one of the following designs. Which design contains the given shape ?***

(A) *(B)* *(C)* *(D)*

Space for Rough Work

Q.Paper - 2 **Computers**

31 ***_____ is a type of RAM that does not need to be refreshed.***

(A) NVM (B) DRAM

(C) SRAM (D) DIMM

32 ***Different components and the motherboard of a PC unit are linked together by sets of parallel electrical***

(A) conductors. (B) buses.

(C) connectors. (D) consecutives.

33 ***The term "computer virus" is coined by***

(A) Bob frank (B) Jane Eyrn

(C) Andy partington (D) Fredrick Cohen

34 ***The virus that spread in application software is called as _____.***

(A) boot virus (B) macro virus

(C) file virus (D) anti virus

35 ***Repetition of block of statements, a certain number of times is called as _____.***

(A) loop (B) program

(C) expression (D) statement

36 ***Which of the following screen is used only for text mode?***

(A) screen 10 (B) screen 1

(C) screen 11 (D) screen 0

37 ***When information is passed from one computer system to another, the IP protocol breaks it up into pieces called***

(A) addresses. (B) networking.

(C) protocol. (D) packets.

38 ***_____ refer to companies that provide information about several companies on a single website.***

(A) Business - to - business *(B) Consumer to consumer*

(C) Digital middlemen *(D) Business to consumer*

39 ***Which computer network is made of an interconnection of two or more local area networks ?***

(A) PAN *(B) CAN* *(C) MAN* *(D) WAN*

40 ***<HR>, <BR> are called as***

(A) container tags *(B) empty tags*

(C) nesting tags *(D) attributes*

41 ***Which option can be used to set custom timings for slides in a presentation ?***

(A) Slider timings *(B) Slider timer*

(C) Rehearsal *(D) Slide show setup*

42 ***_____ is a collection of related tables with data***

(A) Database *(B) Query*

(C) Values *(D) Fields*

43 ***What is the name of the language you use to write a webpage?***

(A) HTTP *(B) FTP* *(C) HTML* *(D) TCP*

44 ***Which facility in MS-word provides counting of words and characters ?***

(A) Char Count *(B) Word count*

(C) Spell check *(D) None of these*

45 ***Scroll lock key on the keyboard is classified as _____.***

(A) an action key *(B) special key*

(C) function key *(D) numeric key*

Q.Paper - 2 **English**

46 ***Select option, that's a synonym to 'indisposed'.***

(A) preserved *(B) unspoiled*

(C) maintained *(D) unwell*

47 ***Which option describes the <u>underlined</u> correctly ?***

She didin't eat during her <u>fast</u>, but spoke <u>fast</u>.

(A) adjective, adjective *(B) adjective, verb*

(C) noun, adverb *(D) noun, adjective*

48 ***Select correct option to make the second pair similar in manner to the first one.***

Feline : Cat ***Bovine :***

(A) Bird *(B) Boar*

(C) Buck *(D) Cow*

49 ***Fill the blanks with the correct option.***

He couldn't become a singer, as he had everything _____ a good voice.

(A) not *(B) but*

(C) expect *(D) and*

50 ***Fill the blanks with the correct option.***

If his father _____ have _____ around, he wouldn't _____ dared to _____ that.

(A) will, been, have, done *(B) none, gone, has, asked*

(C) may, come, had, do *(D) would, been, have, do*

Solutions

MATHEMATICS

Crossword - 1 (Numbers)

Across: (1) Abelian group (3) Whole (8) Rational (9) Repeating (10) Terminating (11) Composite; (12) Real.

Down: (2) Integer (4) Irrational (5) Natural (6) Prime (7) Fraction

Crossword - 2 (Polynomials)

Across: (1) Principal (3) Simple interest (6) Percent (8) Marked price (10) Commission

Down: (2) Compound interest (4) Selling price (5) Time period (6) Profit (7) Discount (9) Loss

Crossword - 3 (Arithemetic)

Across: (3) Profit (4) Time period (7) Loss (9) Discount (10) Marked price (11) Loss (12) Commissions

Down: (1) Compound Interest (2) Simple interest (5) Selling price (6) Principal (8) Spread

Crossword - 4 (Mensuration)

Across: (2) Solid shape (5) Pyramid (7) Cube (8) Solid (9) Cylinder (10) Prism.

Down: (1) Four (2) Four (4) Diagonal (5) Perimeter (6) Area (7) Cuboid.

Crossword - 5 (Geometry)

Across: (1) Square (5) Parallelogram (9) Half (10) Rectangle (12) Rhombus.

Down: (2) Quadrilateral (3) Two (4) Diagonal (6) Trapezium (7) Infinite (8) Symmetry (11) Four

COMPUTERS

Crossword - 1 (Review of Computer Basics)

Across: (1) Console (3) Memory (6) Drive (8) Registers (10) Fans (11) Computer (12) Bluetooth

Down: (2) Stylus (4) Modem (5) Firewall (7) Printer (9) Port.

Crossword - 2 (Internet)

Across: (1) Browser (7) Hose (8) Chat (9) Internet (10) Emoticons (11) Acronyms.

Down: (1) Netiquette (2) Blog (3) Information (4) Patch (5) Forums (6) Facebook.

Crossword - 3 (Flash)

Across: (4) Manifier (7) Symbols (9) Tweening (11) Panels (12) Lasso.

Down: (1) Layer (2) Arrow (3) Graphics (5) Instances (6) Skewing (8) Stage (10) Hand.

Crossword - 4 (HTML)

Across: (2) Anchor (3) Browser (6) Webpage (8) Lists (9) Document (11) Content.

Down: (1) Web browser (2) Attributes (4) Marquee (5) Head (7) Body (10) Text.

Crossword - 5 (Microsoft Access)

Across: (4) Ribbon (5) Record (7) Notepad (9) Forms (12) Objects (14) Attachment.

Down: (1) Field (2) Sorting (3) Controls (6) Database (8) Query (10) Memo (11) Table (13) Text

English

Crossword : (IDIOMS)

Across: (1) Gradually (4) Eat (5) Sleep (8) Rapidly (12) Occurance (13) Compromise (14) Incidentally.

Down: (2) Unusual (3) Mainly (6) Pretence (7) Expectancy (8) Reasonable (9) Certain (10) Nonsense (11) Bargain.

Questions Based on Reasoning Examples

1. (A)	2. (B)	3. (D)	4. (C)	5. (D)
6. (D)	7. (B)	8. (B)	9. (B)	10. (B)

Solutions for Previous Question Paper - 1

Mental Ability

1. **(A)** $(4x + y + z)(x + y - z)$

$= 4x^2 + 4xy - 4xz + xy + y^2 - yz + xz + yz - z^2$

$= 4x^2 + y^2 - z^2 + 5xy - 3xz$

5 terms.

2. **(C)** Difference $= P\left(\frac{R}{100}\right)^2$

$25 = P\left(\frac{5}{100}\right)^2$

$\Rightarrow P =$ ₹ 10,000

3. **(A)** $2^{2^x} = 16^{2^{3x}}$

$2^{2^x} = 2^{2^{3x+2}}$

$\Rightarrow 3x + 2 = x$ or $x = -1$

4. **(C)** $(2 - x)(5 - 3x)(1 - 7x)$

$(10 - 6x - 5x + 3x^2)(1 - 7x)$

Coefficient of $x^2 = 77 + 3 = 80$

5. **(C)** $0.3 = \frac{3}{10}$

Multiplicative inverse of $\frac{3}{10}$ is $\frac{10}{3} = 3\frac{1}{3}$.

6. **(C)** Each external angle = 180 – 165 = 15°

Sum of all triangles = 360

No. of sides $= \frac{360}{15} = 24$

7. **(D)**

$$\left[100 - \left(100 \times \frac{80}{100} \times \frac{90}{100} \times \frac{85}{100}\right)\right]\%$$

$$= \left[100 - \left(\frac{2 \times 9 \times 17}{5}\right)\right] = 38.8\%$$

8. **(C)** $90 \times 300 = 27000 = (30)^3$

9. **(B)** Its perimeter = 3a m and

Area $= \frac{\sqrt{3}}{4} a^2$ sq. m

$\frac{\sqrt{3}}{4} a^2 = 3a$ or $\frac{\sqrt{3}}{4} a = 3$

$\Rightarrow a = 4\sqrt{3}\,m$

10. **(B)** Among the given options (C) is ruled out others 33% & above must be for an obtuse angle. Hence only possible option is (B).

11. **(D)** $416 = P\left(1 + \frac{3 \times 16}{100 \times 12}\right)$

$416 = P\left(1 + \frac{4}{100}\right)$

$\Rightarrow P =$ ₹ 400

12. **(B)** $x^2 + y^2 + 2xy - z^2$

$(x + y)^2 - z^2$

$(x + y + z)(x + y - z)$

13. **(D)** $6449 - 49 = 6400$

$\sqrt{6400} = 80$

14. **(B)** 21 – 50 p coins

7 – 25 p coins

total 28 coins costing $0.25 \times 7 + 21 \times 0.50 =$ ₹ 12.25

15. **(B)** $0 \div$ (any number except 0) = 0

Reasoning

16. **(B)** *Elements inter change starting with 1st rows. i.e., then 2nd row next along columns 1st and then 2nd column.*

17. **(D)** *North-east*

18. **(C)** *2 + 1 + 4 + 3 = 10*

5 + 6 + 4 + 1 = 16

5 + 6 + 3 = 14

10 + 16 + 14 = 40

19. **(C)** *Option (C) is not similar.*

20. **(A)** *Following changes take place.*

- *Right bottom shape is moved to left top.*
- *Left top move to the centre with enlarged size.*
- *Centre shape moves to the right bottom with diminished size.*

21. **(A)** *First two letters being same, compare third letter in each. We can find that actuate will be the fourth word.*

22. **(A)** *E is the code for*

F is the code for

G is the code for

is the code for X

2 *is the code for Y*

3 *is the code for Z*

Hence code for the given shape is FZ

23. **(D)** *(8 × 3) + 6 = 30*

(7 × 4) + 21 = 49

32 – 15 = 17

24. **(A)** *Following changes take place*

- *Shades of right top and left bottom interchange or every alternate triangle and square shaded.*
- *A circle is added each time alternately at right bottom and left top.*

25. **(A)**

26. **(A)**

27. **(B)**

28. **(D)**

29. **(B)** *3 × 3 = 9 Triangles.*

30. **(C)** *Option (C) cannot be made with the two blocks.*

Computers

31. **(A)** 32. **(C)** 33. **(D)**
34. **(D)** 35. **(A)** 36. **(D)**
37. **(B)** 38. **(C)** 39. **(A)**
40. **(B)** 41. **(C)** 42. **(B)**
43. **(B)** 44. **(C)** 45. **(C)**

English

46. **(C)** 47. **(D)** 48. **(B)**
49. **(D)** 50. **(C)**

Solutions for Previous Question Paper - 2

Mental Ability

1. **(B)** Let the number of boys who take ₹ 20 ticket will be 'x'.

∴ No. of boys who take ₹ 45 ticket each = (50 – x).

From the data,

$20x + (50 - x) \times 45 = 2000$

$\Rightarrow 20x + 2250 - 45x = 2000$

$\Rightarrow -25x = 2000 - 2250$

$\Rightarrow -25x = -250$

$\Rightarrow 25x = 250$

$\Rightarrow x = 10$

∴ Answer is option (B).

2. **(B)** $(x^2 + 3x + 5)(x^2 - 1)$

$x^4 - x^2 + 3x^3 - 3x + 5x^2 - 5$

$x^4 + 3x^3 + 4x^2 - 3x - 5$

3. **(C)** $1^2 = 1$

$11^2 = 121$

$111^2 = 12321$

$(111111111)^2$

$= 12345678987654321$

4. **(D)** Rhombus and square are parallelograms. So option (A) and (C) are not correct.

In trapezium, opposite angles are not equal so option (B) is also not correct.

Kite is not a parallelogram but opposite angles are equal.

∴ Answer is option (D).

5. **(C)** $30^2 + 40^2 = 900 + 1600$

$= 2500 = 50^2$

Option (C) is correct answer.

6. **(D)** Option (A), (B), (C) are not satisfying the given conditions in all the cases.

While rational numbers are closed under subtraction. Subtraction of any two rational numbers always give rational numbers

∴ Answer is option (D).

7. **(B)** S.P – C.P = profit

2420 – 2200 = 220

So, on ₹ 100, the profit is

$$\frac{220 \times 100}{2200} = 10$$

Profit is 10%

8. **(D)** $|4 - x| + |x - 4|$ $(0 < x < 4)$

$\Rightarrow (4 - x) + (-(x - 4))$

$= 4 - x - x + 4$

$= 8 - 2x = 2(4 - x)$

9. **(A)** *Let speed of first train = x km/h.*

$\Rightarrow$ *Speed of second train*

= (x + 5) km/h.

Distance travelled in 2 hours by first train = 2x km.

Distance travelled in 2 hours by second train = 2(x + 5) km.

From the data, 2x + 2x + 10 + 30 = 340

$\Rightarrow$ $4x + 40 = 340$

$\Rightarrow$ $4x = 300$

$$\Rightarrow x = \frac{300}{4} = 75 \text{ km / h.}$$

$\therefore$ *Speed of first train = 75 km/h.*

Speed of second train

= (75 + 5) km/h.

= 80 km/h.

10. **(B)** *Given,* $(3^{1/2})^5 \times (3^2)^2 = 3^n \times 3 \times 3^{1/2}$

$$\Rightarrow 3^{\frac{5}{2}} \times 3^4 = 3^{n+1+1/2}$$

$$\Rightarrow 3^{\frac{5}{2}+4} = 3^{n+\frac{3}{2}}$$

$$\Rightarrow 3^{\frac{13}{2}} = 3^{n+\frac{3}{2}}$$

$$\Rightarrow n + \frac{3}{2} = \frac{13}{2}$$

$$\Rightarrow n = \frac{13}{2} - \frac{3}{2} = \frac{10}{2}$$

$\Rightarrow$ $n = 5.$

11. **(D)** *Let the C.P. = ₹ 100 per kg*

= ₹ 100 per 1000 grams.

= ₹ 1 per 10 grams.

The shopkeeper uses 800 grams weight as a1 kg wieght. So his gain = cost of 200 grams = ₹ 20.

$\therefore$ *His gain%*

$$= \frac{20}{80} \times 100 = 25\%.$$

12. **(A)** $3^{2^{2^2}} = 3^{2^4} = 3^{16}$

$$\left\{(3^2)^2\right\}^2 = \left(3^4\right)^2 = 3^8 = 6561$$

$$3^2 \times 3^2 \times 3^2 = 3^6 = 729$$

$\therefore$ $3^{16} > 3^8 > 3222 > 3^6$

13. **(B)** *By Pythagoras theorem, we can say that given triangle is a right angled trianlge with 12 as height and 5 as base.*

Area of the triangle

$$= \frac{1}{2} \times 12 \times 5$$

= 30 sq units

Area of rectangle = l × b = 30 sq units

Now,breadth

$$= \frac{30}{\text{length}} = \frac{30}{10} = 3 \text{ units}$$

$\therefore$ *Perimeter*

= 2 × (10 + 3) units = 26 units.

14. ***(C)*** *P = ₹ x*

r = 20% p.a.

n = 3 years.

$$\therefore y = x\left(1 + \frac{20}{100}\right)^3$$

$$\Rightarrow y = x\left(\frac{6}{5}\right)^3 \Rightarrow \frac{y}{x} = \frac{216}{125}$$

15. **(A)** $V = abc;\ S = 2(ab + bc + ca)$

$$\frac{2}{S}\left(\frac{1}{a}+\frac{1}{b}+\frac{1}{c}\right)$$

$$= \frac{2}{2(ab+bc+ca)} \times \frac{(ab+bc+ca)}{(abc)}$$

$$= \frac{1}{abc} = \frac{1}{V}$$

Reasoning

16. **(B)** *Code for* *is GX.*

17. **(D)**

18. **(C)** $20 + 8 - 8 \div 4 \times 2$

$= 20 + 8 - 2 \times 2$

$= 20 + 8 - 4 = 24$

19. **(D)**

20. **(D)** $19 - 3 = 16^{th}$

21. **(D)** *OPQ is not in order at the other options.*

22. **(B)** $5 + 3 + 2 + 1 = 11$:

11th *letter is K*

$3 + 4 + 2 + 1 = 10$:

10th *letter is J*

$5 + 4 + 3 + 1 = 13$:

13th *letter is M*

23. **(D)** *A is the grand daughter to D.*

24. **(C)** *There are 11 lines.*

25. **(D)** SHARE

26. **(B)** *Option (B) is not hidden in the figure.*

27. **(B)**

28. **(D)**

29. **(D)** $3^3, 5^3, 7^3, 9^3, 11^3$

$11^3 = 1331$ *and not* 1321.

30. **(B)** *X is contained in option (B) design.*

Computers

31.	**(C)**	32.	**(B)**	33.	**(D)**
34.	**(A)**	35.	**(A)**	36.	**(D)**
37.	**(D)**	38.	**(C)**	39.	**(B)**
40.	**(B)**	41.	**(C)**	42.	**(A)**
43.	**(C)**	44.	**(B)**	45.	**(A)**

English

46.	**(D)**	47.	**(C)**	48.	**(D)**
49.	**(B)**	50.	**(D)**		