* गणित (Maths) *

नमस्कार दोस्तो, आज की हमारी यह PDF भारत का गणित (Maths) से संबंधित हैं, जिसमें हम आपको गणित (Maths) के 100 ऐसे महत्वपूर्ण Question and Answer बताने जा रहे हैं जो बार – बार प्रतियोगी परीक्षाओं में पूंछे जाते है! ये Question आपको SSC, RRB, Banking, PSC व अन्य सभी तरह की प्रतियोगी परीक्षाओं जिनमें कि गणित (Maths) पूंछा जाता है सभी में काम आयेंगें! तो आप इन्हें अच्छे से पढिये और याद कर लीजिये!

500 Most Important गणित (Maths) Questions for Competitive Exams

* Part :- 2 *

* गणित (Maths) Q-A *

सभी प्रकार की प्रतियोगी परीक्षा में गणित (Maths) से सम्बंधित प्रश्न अनिवार्य रूप से पूछे जाते हे। यह आपको 100 ऐसे महत्वपूर्ण प्रश्न उलब्ध करा रहे हे जो आप के आगामी परीक्षा के बहुत उपयोगी सिद्ध होंगे।

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Directions: In the following questions, four suggested options are given as answers, out of which one is correct. Identify the correct answer—

- 1. In an exam, of the total number of students 36% have failed in Hindi, 54% have failed in English and 20% have failed in both English and Hindi. What is the percentage of students who have passed in both the subjects?
- (a) 30% (b) 45% (c) 25% (d) 20% (Ans : a)
- 2. Rs. 1500 has been divided into two parts and one part has been given at the interest of 6% and the other part at the interest of 5%. If the annual interest on both the investments is Rs 85, then how much investment has been made at 6%?
- (a) Rs. 1200 (b) Rs. 1000 (c) Rs. 1300 (d) Rs. 1150 (Ans: b)

- 3. Today, Ram is 30 years younger to his uncle. 5 years ago Ram's age was 1/4th the age of his uncle. What will be the age of Ram's uncle 5 year from today?
- (a) 60 years (b) 45 years (c) 50 years (d) None of these (Ans : c)
- 4. A train travelling at a uniform speed covers the distance of 32 km, in 12 minutes. What is the speed of the train in km/hour?
- (a) 364 (b) 160 (c) 255 (d) None of these (Ans : b)
- 5. 16 men can do a piece of work in 16 days. Four days after the start of the work, 8 more persons have joined in. How many more days will be needed to complete the rest of the work?
- (a) 10 days (b) 6 days (c) 8 days (d) None of these (Ans : c)
- 6. If cadets in NCC parade are made to stand in a column of 45, then 18 columns are formed. If 30 cadets stand in a column, then how many columns will be formed?
- (a) 27 (b) 25 (c) 33 (d) None of these (Ans: a)

- 7. Anil invested Rs. 70,000 to start a business. After 8 months Vimal invested Rs. 180,000 to join in the same business. After one year in what proportion will Anil and Vimal share the profit ?
- (a) 7:6 (b) 7:5 (c) 8:7 (d) None of these (Ans:a)
- 8. Which is that minimum number which when subtracted from 6708 will be exactly divisible by 9?
- (a) 1 (b) 2 (c) 3 (d) None of these (Ans : b)
- 9. A group of labourers are ready to do a piece of work in 25 days. If 6 of the labourers do not come to the work and the rest of them complete the work In 40 days. then what was originally the number of labourers?
- (a) 22 (b) 20 (c) 18 (d) 16 (Ans : d)
- 10. If a sum of money doubles in 5 years at the compound interest, then in how many years will the same amount become 8 times?
- (a) 25 years (b) 20 years (c) 15 years (d) 10 years (Ans : c)

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11. If A: B = 3: 4 and B: C = 2: 3, then what will be A: B: C?

(a) 3:4:6(b) 3:4:12(c) 4:3:6(d) None of these (Ans. a)

12. 8.73×8.73×8.73+4.27×4.27×4.27

8.73×8.73-

 $8.73 \times 4.27 + 4.27 \times 4.27 = ?$

(a) 11 (b) 12 (c) 13 (d) None of these (Ans : c)

- 13. . Mohan gets 3 marks for every correct answer and loses 2 marks for every wrong answer. After solving 30 questions he gets 40 marks. How many questions did he solve correctly?
- (a) 10 (b) 15 (c) 20 (d) 25 (Ans : c)
- 14. A lady has 25 paise and 50 paise coins in her bag. She has a total of 120 coins amounting to Rs 50. What is the respective number of each of coins in her bag?
- (a) 40, 80 (b) 70, 50 (c) 90, 30 (d) 60, 60 (Ans: a)

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15. In a factory, 80% staff is males. 20% of them are matriculates and the rest are graduates. Amongst the females 25% are matriculates and the rest are graduates. If the total number of female staff in the factory is 600, then how many graduates are there in the factory?

(a) 2370 (b) 3000 (c) 1940 (d) None of these (Ans: a)

16. 600 prisoners are kept in a garrison which has a provision of 18 ounce per person for 35 days. If 300 more persons are added to the garrison and the daily allowance is reduced to 15 ounce per day, then how long (for how many days) will this arrangement last?

(a) 28 days (b) 35 days (c) 40 days (d) None of these (Ans: a)

17. The price of sugar has been increased from Rs. 6.00 per kg. to Rs 7.50 per kg. By what percentage should a consumer reduce his consumption so that he doesn't have to make any extra expenditure on sugar?

(a) 20% (b) 25% (c) 30% (d) None of these (Ans: a)

- 18. If 75% of $480 = ? \times 15$, then the value of? is
- (a) 30 (b) 32 (c) 24 (d) 18 (Ans : c)
- 19. The average age of 20 boys is 14 years. A boy of 16 years leaves them and a new boy comes in his place. Now their average age becomes 13.8 years, then what is the age of the new boy?
- (a) 13 years (b) 12 years (c) 11 years (d) None of these (Ans : b)
- 20. A train goes from Agra to Mathura at the speed of 60 km/hr. and reaches there in 45 minutes. If in the return journey the speed of the train decreases by 10%, then what will be the time taken to reach Agra from Mathura?
- (a) 60minutes (b) 55 minutes (c) 50 minutes (d) None of these (Ans: c)
- 21. In a bank a sum of money has been deposited which doubles in 10 years. What is the rate of simple interest?
- (a) 8% (b) 10% (c) 12% (d) 13% (Ans : b)

- 22. If x/16 = 196/x then what is the value of x?
- (a) 56 (b) 28 (c) 24 (d) None of these (Ans: a)
- 23. In an exam, each student opted for either science or civics or both. 65.8% students opted of science and 59.2% opted for civics. If the total number of students is 2000, then how many students opted for both science and civics?
- (a) 450 (b) 500 (c) 520 (c) None of these (Ans : b)
- 24. In a 20 litre mixture, 20% is alcohol and the rest water. If 5 litres of water is added, then what will be the percentage of Alcohol in the new mixture?
- (a) 16 (b) 15 (c) 18 (d) None of these (Ans : a)
- 25. The ratio of the ages of A and B is 2 : 3. Ten years later the ratio will be 3 : 4. What is their present age (in years)?
- (a) 30, 40 (b) 28, 42 (c) 20, 30 (d) None of these(Ans : c)

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Directions (1-2): In the following questions, Four choices are given as answers. Identify the correct answer.

- 1. In the word CLANGOLLR, how many pairs of letters are such which have between them as many letters as in the alphabetical order?
- (a) Four (b) Three (c) Two (d) None of these (Ans: a)
- 2. Darkness is related to fear in the same way as honesty is related to.....?
- (a) Dishonesty (b) Faith (c) Wealth (d) Victory (Ans : b)

Directions (3-4): A person has a basket of fruits in which there are 60 fruits. The number of apples is half the number of mangoes and oranges are 1/4th of the total of apples and mangoes. The cost of each mango is equal to that of two apples or three oranges. There is no other fruit apart from mangoes, apples and oranges. Now answer question 3 and 4.

- 3. How many mangoes are there in the basket?
- (a) 36 (b) 38 (c) 40 (d) 32 (Ans : d)
- 4. If the total cost of fruits is Rs. 660/- then what is the cost of a piece of orange?
- (a) Rs. 4 (b) Rs. 5 (c) Rs. 6 (d) Rs. 7 (Ans: b)
- 5. In a leap year if the 1st Jan. falls on Monday, then how many months including January will begin from Monday in the year?
- (a) 2 (b) 3 (c) 4 (d) 5 (Ans b)

Directions (6-7): Three persons A, Band C along with their wives x. y, z are sitting around a round table, no husband is sitting to the left or right of his wife, while the sitting arrangement is one woman after a man. If C is to the right of y, then

- 6. Who is sitting to the left of z?
- (a) C (b) A (c) B (d) Cannot be determined (Ans : c)
- 7. Which of the following statements is true?
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- (a) X is to the right of C (b) A is to the right of X (c) Z is in front of B(d) Y is in front of C (Ans : a)
- 8. A person is standing facing south. He turns 135° in the anticlockwise direction and again turns 225° in the clockwise direction. In which direction is he facing now?
- (a) East (b) West (c) North (d) South (Ans b)
- 9. Pointing at a photograph, a man says, "I do not have a brother or sister but this person's father is the son of my father. Whose photo-graph is being pointed by the person?
- (a) His son's (b) His father's (c) His brother's son (d) His own (Ans : a)

Directions (10-11): In the following questions, three words are given which are related in some way. From the four given options, you have to choose the option which conveys the relationship?

10. Solar system, Earth, Satellite-

- (a) Orange, fruit, vegetable (b) Poem, poetry, music (c) Page, book, word (d) Seed, fruit, Plant (Ans : b)
- 11. Researcher, Historian, Learned-
- (a) Teacher, Professor, Lecturer (b) History, Story, Book (c) Ballad, Novel, Book (d) Teacher, Bachelor, Poet (Ans.: c)

Directions (12-15): In the following questions. four words are given in each question, three of which are similar in some way and one is different You have to identify the word which is different.

- 12. (a) Pagoda (b) Monastery (c) Temple (d) Mosque (Ans : b)
- 13. (a) BD6 (b) FH14 (c) JL22 (d) NP31 (Ans : d)
- 14. (a) 6: 16 (b) 7: 19 (c) 10: 27 (d) 11: 31 (Ans: c)
- 15. (a) JMG (b) PSM (c) WZT (d) EIB (Ans : d)

Directions (16-17): Which of the numbers given in the four options will come next in the series?

17. 25, 36, 49, 64,

18. Identify the missing number in the question-

675

828

49?

(a) 5 (b) 6 (c) 4 (d) 7 (Ans: a)

Directions (19-20): In the following questions. there is a certain relationship between the given pair of words in each question. From the given options, you have to identify a word pair which bears the same relationship.

19. Typewriter: Letter

(a) Hammer: Nail (b) Ocean: wave (c) Computer: Automation (d)

Piano: Musical notes (Ans: d)

20. Strawberry: Fruit

(a) Chair: Furniture (b) Shoes: Leather (c) Letter: Language (d)

Eyes: Face (Ans: a)

Directions (21-23): Answer the questions below on the basis of the following groups of letters represented below.

RAR NGN RAN

RGGN ANR DGN

ANA GNRAR

- 21. Which letter has the maximum frequency?
- (a) R (b) A (c) N (D) G (Ans : c)
- 22. How many Rs are such before which there is N and A after?
- (a) 1 (b) 2 (c) 3 (d) 4 (Ans : a)
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- 23. Which letter has the minimum frequency?
- (a) A (b) N (c) G (d) R (Ans : c)
- 24. The code for the word GARIMA is 625742, then what will be the code for MARIA?
- (a) 62752 (b) 42572 (c) 57432 (d) 25752 (Ans: b)
- 25. 4, 16, 64, 256,
- (a) 1024 (b) 976 (c) 1164 (d) 996 (Ans: a)

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1. Total monthly income of two persons is Rs. 7500. They spend 90% and 80% of their incomes respectively. If the ratio of their monthly savings is 3:4, what are their monthly incomes?

- (a) 5000, 2500 (b) 4000, 3500 (c) 5500, 2000 (d) 4500, 3000 (Ans: d)
- 2. A man can row upstream at 16 km/hr and downstream at 22km/hr. Find the man's speed in still water in km/hr.
- (a) 19 (b) 14 (c) 17 (d) 18 (Ans: a)
- 3. The difference of simple interest of Rs. 1200 for 3 years and that of Rs. 800 for 4 years at some rate is Rs. 20. The rate percent per annum is—
- (a) 2.5 (b) 5 (c) 8 (d) 10 (Ans: b)
- 4. A exceeds B by 40% and B is less than C by 20%, then A: C is-
- (a) 28:25 (b) 26:25 (c) 3:2 (d) 3:1 (Ans:a)
- 5. If there be a loss of 20% on cost price, the rate of loss calculated on selling price would be—
- (a) 15% (b) 20% (c) 25% (d) 30% (Ans : c)

- 6. The value of $-2/3\times3/(5/6)\times2/3$ of $1\frac{1}{4}$)
- (a) 2 (b) 1 (c) ½ (d) 2/3 (Ans : a)
- 7. Two three digit numbers have their H.C.F. (Highest Common Factor) 29 and L.C.M. (Lowest Common Multiple) 4147. The sum of the numbers is—
- (a) 966 (b) 696 (c) 669 (d) 666 (Ans: b)
- 8. In a school, 65% of the students passed in English, 55% in Mathematics and 40% passed in both the subjects in the last annual examination. If 20 students failed in both the subjects, find the total number of examinees in the school.
- (a) 12 (b) 80 (c) 100 (d) 90 (Ans : c)
- 9. In a camp of 4,000 men there was provision for food for 190 days. After 30 days 800 men went away to other place. How many days will the rest of food provide for the remaining men?
- (a) 100 (b) 160 (c) 200 (d) 220 (Ans : c)

10. In a certain type of brass, 25% is zinc and rest is copper. How much copper is present in 264 kg of this quality of brass?

(a) 198 kg (b) 202 kg (c) 66 kg (d) 132 kg (Ans: a)

11. Out of 3,650 villagers in a village, the ratio of number of adults to the number of minors is 7:3. Find the number of adults in the village.

(a) 2550 (b) 1095 (c) 2555 (d) 2600 (Ans:c)

12. How many seconds a caravan 120 metres long running at the rate of 10 m/s will take to pass a standing boy.

(a) 10 (b) 12 (c) 11 (d) 14 (Ans: b)

13. The number 72 is divided into two parts such that 20% of one part is equal to 25% of the other part. Find the two parts.

(a) 40, 32 (b) 50, 22 (c) 48, 24 (d) 60, 12 (Ans : a)

- 14. 15 labourers can plough 18 bighas of land in 5 days. If 10 labourers work for 10 days, then how much land will be ploughed?
- (a) 20bighas (b) 12bighas (c) l8bighas (d) 24bighas (Ans (d)
- 15. The average of 25 results is 18. The average of first 12 of them is 14 and that of last 12 is 17. The thirteenth result is—
- (a) 28 (b) 78 (c) 72 (d) 85 (Ans: b)
- 16. P can do a piece of work, in 20 days and Q in 40 days. P begins the work and thereafter they work alternately on one on each day. On which day will the work be completed?
- (a) 24th day (b) 25th day (c) 26th day (d) 27th day (Ans : d)
- 17. What is the least number which when lessened by 5 is divisible by 36, 48, 21 and 28?
- (a) 1008 (b) 1003 (c) 1013 (d) 1018 (Ans : c)

18. The sum of the present ages of father and his son is 65 years. Ten years ago the ratio of their ages was 7:2. What will be the ratio of their ages ten years hence?

(a) 12:6 (b) 11:6 (c) 11:5 (d)12:7 (Ans : b)

- 19. What principal will amount to Rs. 747 in 6 years at the rate of 11 % per annum?
- (a) 500 (b) 425 (c) 450 (d) 600 (Ans : c)
- 20. A boy was asked to multiply a number by 12. By mistake, he multiplied the number by 21 and got his answer 63 more than the correct answer. The number to be multiplied was—
- (a) 7 (b) 9 (c) 8 (d) 12 (Ans: a)
- 21. In a certain code, PAN is written as 31 and PAR is coded as 35; what will be the code of PAT in the same code?
- (a) 30 (b) 37 (c) 39 (d) 41 (Ans : b)
- 22. If 'ghost' is coded as 'haste', then how will you code 'rose'?
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(a) pose (b) dsep (c) oser (d) osep (Ans : d)

23. A man starts from his office and goes 3 km East. Then he turns to the left and again walks for 3 km. Again he turns left and walks 5 km. At what distance is he from the starting point?

(a) 3km (b) 4km (c) 6km (d) 7km (Ans : b)

24. The lowest number of 4 digits which is a perfect square is-

(a) 1000 (b) 1024 (c) 1089 (d) 1156 (Ans : b)

25. In a queue at the bus stop, A is 7th from the front and B is 9th from the end. When they both exchange their positions, A becomes 11th from the beginning. How many people are there in the queue?

(a) 20 (b) 19 (c) 18 (d) 21 (Ans : b)

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- 1. A person borrowed some money at 10% compound interest. If at the end of three years he returns Rs. 2662 then how much money did he borrow? (RRB Allahabad TC and CC)
- (A) Rs. 2000 (B) Rs. 1900 (C) Rs. 1800 (D) Rs. 1980 (Ans: A)
- 2. A milkman mixes water in milk and earns 20% profit by selling it at the cost price, then how many grams of water does he mix in 1 kilogram of milk? (RRB Muzaffarpur ASM)
- (A) 200 gram (B) 100 gram (C) 250 gram (D) 50 gram (Ans: A)
- 3. $0.000033 \div 0.11 = ?$ (RRB Muzaffarpur ASM)
- (A) 0.003 (B) 0.3 (C) .0003 (D) 0.30 (Ans : C)
- 4. A shopkeeper sells his items at cost price but he weighs 950 grams instead of one kg. What is the percentage of profit? (RRB Guwahati Goods Guard)
- (A) 5% (B) 5.26% (C) 6.5% (D) 6% (Ans : B)

- 5. The side of the two trianles are 3cm., 4cm., 5cm. and 6cm., 8cm. and 10cm. respectively, then what will be the difference in the areas of two triangles? (RRB Kolkata ASM)
- (A) 10 sq. cm. (B) 12 sq. cm. (C) 16 sq. cm. (D) 18 sq. cm. (Ans : D)
- 6. The sum of the series 3 + 2 5 + 3 + 2 5 + 3 + 2 5 + up to 50 terms is? [RRB Bhopal (Non-Tech.)]
- (A) Rs. 35.28 (B) Rs.31.50 (C) Rs.36.00 (D) Rs. 32.48 (Ans : B)
- 7. The value of 1.07 \times 65 + 1.07 \times 26 + 1.07 \times 9 is— (RRB Jammu Junior Clerk)
- (A) 10.73 (B) 10.7 (C) 10.70 (D) 107 (Ans : D)
- 8. What is the simple interest on Rs. 5000 in 5 years at the rate of 5% per annum? (RRB Secunderabad Goods Guard)
- (A) Rs. 1200 (B) Rs. 1250 (C) Rs. 1300 (D) Rs. 1350 (Ans : B)

9. What will be the ratio of 0.43 and 0.00129? (RRB Ahmedabad Traffic App.)

(A) 10:3 (B) 3:1000 (C) 1000:3 (D) 100:3 (Ans:D)

10. Of three numbers, whose average is 60, the first is 1/4th of the sum of the others. Find the first number? (RRB Mahendrughat Patna Ecrc/CC/Sr. Clerk)

(A) 30 (B) 36 (C) 42 (D) 45 (Ans : B)

- 11. Tap A fills a tank in 15 hours and tap B in 20 hours. Tap C empties it in 60 hours. A servant by mistake opens all the taps. How much time will be taken to fill up the tank? (RRB Allahabad TC and CC)
- (A) 10 hours (B) 12.5 hours (C) 11 hours (D) 11.5 hours (Ans : A)
- 12. In a military camp there is enough food for 95 armymen for 200 days. After 5 days 30 armymen go to a different camp. For how many days will be food available for rest of the armymen? (RRB Guwahati Goods Guard)
- (A) 285 days (B) 280 days (C) 275 days (D) 250 days (Ans : A)
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13. In a bag, there are coins of 50 paise and 25 paise. The number of these coins is in the ratio of 17: 6 If the total coins in the bag amount to Rs. 20, then what is the number of 50 paise coins? (RRB Kolkata ASM)

(A) 6 (B) 17 (C) 26 (D) 34 (Ans : D)

14. Surface area of sphere is 5544 sq. cm. Find its volume? (RRB Ajmer Goods Guard)

(A) 30808 cu. cm. (B) 38808 cu. cm. (C) 380808 cu. cm. (D) 380800 cu. cm. (Ans : B)

15. Find the value of 453-653+203? (RRB Ajmer Goods Guard)

(A) -175500 (B) 165500 (C) Zero (D) -174500 (Ans : A)

16. Two numbers are in the ratio of 1:2 If 7 is added to both the numbers then the ratio changes to 3:5 Which is the greater number? [RRB Bhopal (Non-Tech.)]

(A) 24 (B) 28 (C) 36 (D) 42 (Ans : B)

17. If A: B = 3: 4 and B: C = 2: 3, then what will be A: B: C? (RRB Chandigarh ASM)

(A) 3:4:6(B) 3:4:12(C) 4:3:6(D) None of these (Ans:A)

18. If 75% of 480 = $? \times 15$, then the value of ? is— (RRB Chandigarh ASM)

(A) 30 (B) 32 (C) 24 (D) 18 (Ans : C)

19. The highest common factor of 42, 70, 98 and 126 is— (RRB Jammu Junior Clerk)

(A) 11 (B) 12 (C) 13 (D) 14 (Ans : D)

20. The least number which when divided by 27, 42, 63, 84 will leave in each case 21 as remainder, is—(RRB Secunderabad ASM)

(A) 760 (B) 745 (C) 777 (D) 767 (Ans : C)

- 21. The annual rainfall at a certain place is 65 cm. then the annual rainfall in liters per hectare will be— (RRB Gorakhpur ASM)
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(A) 6.5×103 (B) 6.5×106 (C) 6.5×105 (D) 6.5×104 (Ans : B)

22. Two numbers are in the ratio of 3:5. IF 9 be subtracted form each, they are in the ratio of 12:23. The first number is—(RRB Secunderabad ASM)

(A) 27 (B) 33 (C) 55 (D) 49 (Ans : B)

23. By how much percent a housewife should reduce her consumption of oil if its price is increased by 25% ? (RRB Gorakhpur ECRC)

(A) 30% (B) 25% (C) 16 2/3% (D) 20% (Ans : D)

24. A class comprises of 60 students. 35 students out of them study mathematics, 20 students study mathematics and chemistry both. The number of students studying only chemistry will be—(RRB Gorakhpur ASM)

(A) 40 (B) 35 (C) 25 (D) 15 (Ans : C)

25. A's money is to B's money as 4 : 5 and B's money is to C's money as 2 : 3. If A has Rs. 800, C has— (RRB Bhopal and Mumbai TC)

(A) Rs. 1000 (B) Rs. 1200 (C) Rs. 1500 (D) Rs. 2000 (Ans: 6)

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