Class: VIII   **Subject: MATHS**

General Instructions:

    i)   *The Revision Sheet consists of four sections – A, B, C and D.*
    ii)   *All questions are compulsory.*
    iii)   *Section A contains 12 questions carrying 1 mark each.*
    iv)   *Section B contains 4 questions carrying 2 marks each.*
    v)   *Section C contains 6 questions carrying 3 marks each.*
    vi)   *Section D contains 3 questions carrying 4 marks each.*
    vii)   *Internal choice is given in few questions. Attempt any one out of the given choices.*

Section A

Multiple Choice Questions. Choose any one correct answer from the given choices.

Q1: If 90% of x is 315 km, then the value of x is

   a) 325km   b) 350km   c) 350m   d) 325m

Q2: For calculation of interest compounded half-yearly, keeping the principal same, which one of the following is true.

   a) Double the given annual rate and half the given number of years
   b) Double the given annual rate aa well as the given number of years.
   c) Half the given annual rate as well as the given number of years.
   d) Half the given annual rate and double the given number of years.

Q3: $(p^3q^6 – p^6q^3) \div p^3q^3$ is equal to:

   a) p^3q^3 b) $- p^3q^3$ c) $p^3 - q^3$ d) $q^3 - p$

Q4: The factors of $x^2 - 4$ are

   a) $(x – 2), (x – 2)$ b) $(x + 2), (x – 2)$ c) $(x + 2), (x + 2)$ d) $(x – 4), (x – 4)$

Q5: A machine produces 1800 tools in 6 hours. The number of tools produced by it in 9 hours is:

   a) 2700   b) 5400   c) 3600   d) 900

Q6: The rates of working powers of men are in the ratio 3 : 5. The number of days taken by them to finish a work will be in the ratio:

   a) 3 : 5   b) 5 : 3   c) 3 : 8   d) 8 : 3

Fill in the blanks to make the statement true:

Q7: _____ is a reduction on the marked price of the article.

Q8: The side of the square of area $9y^2$ is _____.

Q9: When the speed remains constant, the distance travelled is _____ proportional to the time.

Very Short Answer Type Questions:

Q10: Find the ratio of 5 m to 20 km.

Q11: If 15 workers can build a wall in 45 hours, how many workers will be required to do the same work in 30 hours ?

Q12: Factorise: $z – 7 + 7xy – xyz$

Section – B

Q13: The cost of an article was Rs 15,500. Rs 450 were spent on its repairs. If it is sold for a profit of 15%, find the selling price of the article.

Q14: Shezan got an increase of 10% in his salary. If his salary after increase was Rs 72,710, find his salary before increase.

Q15: Factorise: $x^2 - 2xy + y^2 - z^2$

<center>**OR**</center>

Factorise using an identity: $(205)^2 - (195)^2$

Q16: A private taxi charges a fare of Rs 260 for a journey of 200 km. How much would it travel for Rs 279.50 ?

<center>**Section - C**</center>

Q17: If 8% VAT is included in the prices, find the original price of
   a) A TV bought for Rs 13,500
   b) A shampoo bottle bought for Rs 180

Q18: Abhay lent Rs 8000 to his friend for 3 years at the rate of 5% per annum compound interest. What amount and compound interest does Abhay get after 3 years ?

<center>**OR**</center>

Rahman lent Rs 16000 to Rasheed at the rate of $12\frac{1}{2}$ % per annum compound interest. Find the amount payable by Rasheed to Rahman after 3 years.

Q19: Factorise: a) $16a^2 - \left(\frac{25}{4a^2}\right)$ b) $49x^2y - \left(\frac{y}{36x^2}\right)$
   c) $4x^2 - 4xy + y^2 - 9z^2$ d) $x^4 - (x - y)^4$

Q20: Factorise the following: a) $x^2 + 2x - 63$ b) $8x^2 - 22x + 9$ c) $2a^2 + 3a - 27$

Q21: If the weight of 12 sheets of thick paper is 40 grams, how many sheets of the same paper would weigh $2\frac{1}{2}$ kg ?

Q22: Suppose 2 kg of sugar contains 9×10^6 crystals. How many sugar crystals are there in (a) 6 kg of sugar? (b) 2.7 kg of sugar?

<center>**Section - D**</center>

Q23: A man sold two watches at Rs 25,920 each. These were sold at 8% gain and 4% loss respectively. Find the gain or loss percent in the whole transaction.

<center>**OR**</center>

Find the compound interest on Rs 2,50,000 at rate of 8% per annum for $1\frac{1}{2}$ years when the interest is
   a)   Compounded annually
   b)   Compounded half yearly
   c)   Compounded quarterly

Q24: Divide : a) $x^2 - 5x + 6$ by $x - 2$ b) $8a^2 - 18x + 9$ by $2x - 3$

Q25: A and B can do a piece of work in 18 days ; B and C in 24 days ; C and A in 20 days. How much time will A alone take to finish the work.