INDIAN SCHOOL MUSCAT
SECOND PERIODIC ASSESSMENT

MATHEMATICS

CLASS: X   **Sub. Code: 041**   **Time Allotted: 50 mins**

12.**05.2019**   **Max. Marks: 20**

GENERAL INSTRUCTIONS:

a) All questions are compulsory.
b) Questions 1 to 4 carry TWO marks each.
c) Questions 5 to 7 carry FOUR marks each.

Section A

1. S and T are point on sides PR and QR of $\triangle$PQR such that $\angle$P = $\angle$RTS. Show that $\triangle$RPQ ~ $\triangle$RTS   2

2. M and N are points on the sides PQ and PR respectively of a $\triangle PQR$. If PN = 4.8cm, NR = 1.6cm and MQ= 1.5cm, then find whether MN parallel to QR or not.   2

3. Find the zeroes of the quadratic polynomial $6x^2 - 3 - 7x$ and verify the relationship between the zeroes and the coefficients.   2

4. Find the quadratic polynomial, whose zeroes are $\sqrt{2} + 3$ $and \sqrt{2} - 3$.   2

Section B

5. Prove that, if a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.   4

6. Check whether the first polynomial is a factor of the second polynomial by dividing the second polynomial by the first polynomial: $x^2 + 3x + 1, 3x^4 + 5x^3 - 7x^2 + 2x + 2$ 4

7. On dividing $x^3 - 3x^2 + x + 2$ by a polynomial $g(x)$, the quotient and remainder were $x - 2$ and $-2x + 4$, respectively. Find $g(x)$.   4

End of the Question Paper

INDIAN SCHOOL MUSCAT
FIRST PERIODIC ASSESSMENT

MATHEMATICS

CLASS: X **Sub. Code: 041** **Time Allotted: 50 mins**

12.05.2019 **Max. Marks: 20**

GENERAL INSTRUCTIONS:

a) All questions are compulsory.
b) Questions 1 to 4 carry TWO marks each.
c) Questions 5 to 7 carry FOUR marks each.

Section A

1. Find the zeroes of the quadratic polynomial $6x^2 - 3 - 7x$ and verify the relationship between the zeroes and the coefficients. 2

2. M and N are points on the sides PQ and PR respectively of a ΔPQR. If PN = 4.8cm, NR = 1.6cm and MQ= 1.5cm, then find whether MN parallel to QR or not. 2

3. Find the quadratic polynomial, whose zeroes are $\sqrt{2} + 3$ and $\sqrt{2} - 3$. 2

4. S and T are point on sides PR and QR of ΔPQR such that ∠P = ∠RTS. Show that ΔRPQ ~ ΔRTS 2

Section B

5. Check whether the first polynomial is a factor of the second polynomial by dividing the second polynomial by the first polynomial: $x^3 - 3x + 1, x^5 - 4x^3 + x^2 + 3x + 1$ 4

6. On dividing $x^3 - 3x^2 + x + 2$ by a polynomial $g(x)$, the quotient and remainder were $x - 2$ and $-2x + 4$, respectively. Find $g(x)$. 4

7. Prove that, if a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio 4

End of the Question Paper

C

INDIAN SCHOOL MUSCAT
FIRST PERIODIC ASSESSMENT

MATHEMATICS

CLASS: X **Sub. Code: 041** **Time Allotted: 50 mins**

12.05.2019 **Max. Marks: 20**

GENERAL INSTRUCTIONS:

a) All questions are compulsory.
b) Questions 1 to 4 carry TWO marks each.
c) Questions 5 to 7 carry FOUR marks each.

Section A

1. M and N are points on the sides PQ and PR respectively of a ΔPQR. If PN = 4.8cm, NR = 1.6cm   2
    and MQ= 1.5cm, then find whether MN parallel to QR or not.

2. Find the zeroes of the quadratic polynomial $6x^2 - 3 - 7x$ and verify the relationship between   2
    the zeroes and the coefficients.

3. S and T are point on sides PR and QR of ΔPQR such that $\angle P = \angle RTS$. Show that   2
    $\Delta RPQ \sim \Delta RTS$

4. Find the quadratic polynomial, whose zeroes are $\sqrt{2} + 3 \ and \sqrt{2} - 3$.   2

Section B

5. On dividing $x^3 - 3x^2 + x + 2$ by a polynomial $g(x)$, the quotient and remainder were $x - 2$ and   4
    $-2x + 4$, respectively. Find $g(x)$.

6. Prove that, if a line is drawn parallel to one side of a triangle to intersect the other two sides in   4
    distinct points, the other two sides are divided in the same ratio.

7. Check whether the first polynomial is a factor of the second polynomial by dividing the second   4
    polynomial by the first polynomial : $1 + 2x + x^2, 3x^3 + x^2 + 2x + 5$

End of the Question Paper