

## MILITARY COLLEGE MURREE ENTRANCE EXAM XI YEAR SYLLAUBUS

1. English Syllabus: Following contents comprise the syllabus:-
> Hazrat Muhammad (SAW)
an embodiment of justice
> First Aid
> Little by Little One walks
Far!
$>$ A World Without Books
> Faithfulness
> Chinese New Year
$>$ The Rain $>$ Television vs Newspapers
$>$ Peace $>$ Selecting the Right Career
> Population Growth and World Food Supplies
2. Recommended Books
a. English 10: Caravan Book House, Lahore
b. English Grammar \& Composition 9-10: Punjab Textbook Board, Lahore

3. Mathematics Syllabus: Following contents comprise the syllabus:-

## Title of Chapter

a. Quadratic Equations
b. Theory Of Quadratic Equations
c. Variations
d. Partial Fractions
e. Sets And Functions
f. Basic Statistics
g. Introduction To Trigonometry
h. Theorems: Following statements of theorems comprise the syllabus:

STATEMENTS
(1) In any triangle ,the square on the side opposite to acute angle

Chapter
1
2
3
4
5
6 is equal to sum of the squares on the side containing that acute angle diminished by twice the rectangle contain by one of those sides and the projection on it of the other.
(2) In an obtuse angled triangle ,the square on the side opposite to the obtuse angle is equal to the sum of the square on the side containing the obtuse angle together with twice the rectangle contained by one of the sides and the projection on it of the other
(3) In any triangle, the sum of the squares on any two sides is equal to twice the square on half the third side together with
twice the square on the median which bisects the third side.
(4) One and only one circle can pass through three non collinear points
(5) A straight line, drawn from the center of a circle to bisect a 9 chord (which is not a diameter)is perpendicular to the chord
(6) Perpendicular from the center of a circle on a chord bisects it.
(7) If two chords of a circle are congruent then they will be equidistant from the center
(8) Two chords of a circle equidistant from the center are 10 congruent
(9) If a line is drawn perpendicular to a radial segment of a circle atits outer end point it is tangent to the circle at the point
(10) The tangent to a circle and the radial segment joining the point of contact and the center are perpendicular to each other.
(11) Two tangent drawn to a circle from a point outside it are equal in length.
(12) If two circles touch externally then the distance between there center is equal to the sum of their radii.
(13) If two circles touch each other internally, then the point of contact lies on the line segment through there centers and distance between there centers is equal to the difference of their radii
(14) If two arcs of a circle (or of congruent circles) are congruent then the corresponding chords are equal.
(15) If two chords of a circle (or of congruent circles) are equal, then there corresponding arcs (minor, major or semi-circle) are congruent in equal circles or in the same circle, if two chords are equal thy cut of equal arcs.
(16) Equal chords of a circle (or of congruent circles) subtends equal angles at the center (at the corresponding centers).
(17) If the angles subtends by two chords of a circle (or congruent circle) at the center (corresponding centers) are equal, the chords are equal.
i. Angle in segment of a circle
j. Practical Geometry-Circles
4. Recommended Book. The question papers will be syllabus oriented. However, the following book is recommended for reference and supplementary reading: -

5. Physics Syllabus. Following contents comprise the syllabus:-
a. Simple Harmonic Motion and Waves
b. Sound
c. Geometrical Optics
d. Electrostatics
e. Current Electricity
f. Electromagnetism
g. Atomic and Nuclear Physics
h. Introductory / Basic Electronics
i. Information and communication Technology
6. Physics Recommended Book. The question papers will be syllabus oriented. However, the following book is recommended for reference and supplementary reading: Physics 10

Malik Sirajuddin\& Sons Lahore

7. Syllabus Chemistry. Following contents comprise the syllabus:-
a. Chemical Equilibrium Sound
b. Acids, Bases, and Salts
c. Organic Chemistry
d. Hydrocarbons
e. Biochemistry
f. The Atmosphere
g. Water
h. Chemical Industries
8. Chemistry Recommended Book. The question papers will be syllabus oriented. However, the following book is recommended for reference and supplementary reading:

