

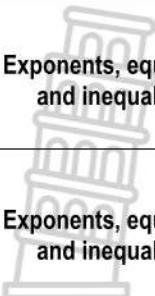
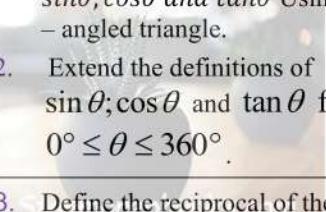
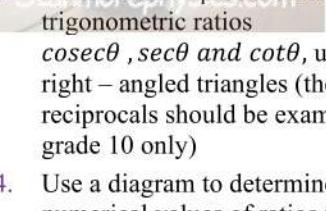
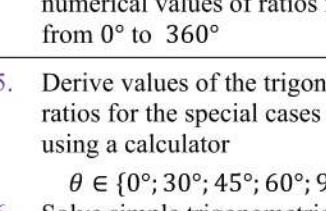
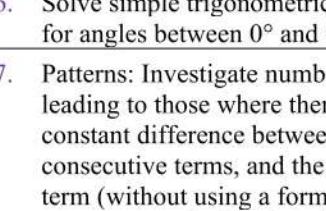
**GAUTENG PROVINCE**  
**MATHEMATICS – ANNUAL TEACHING PLAN –GRADE 10**  
**GRADE 10 ATP 2026 FINAL**



**GAUTENG PROVINCE**  
**EDUCATION**  
**REPUBLIC OF SOUTH AFRICA**

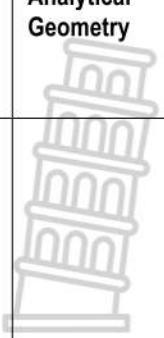
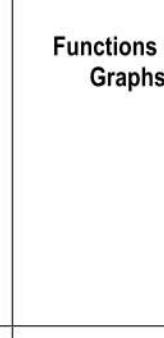
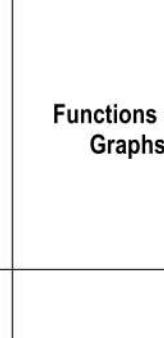
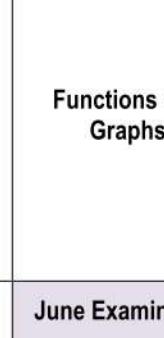
**TERM 1 – 11 WEEKS (53 DAYS)**

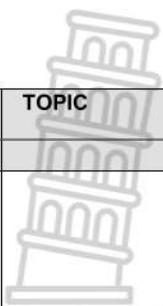
| DATE                                     | TOPIC   | CONTENT  | F           | ASSESSMENT                      |  | % Completed |
|--|---|--|-------------|---------------------------------|--|-------------|
| <b>TERM 1</b>                            |   |  |             | <b>2 TASKS FOR TERM 1</b>       |  |             |
| <b>Week 1</b><br>14/1 – 16/1<br>(3 days) | <b>Algebraic Expression</b>                   | 1. Understand that real numbers can be rational or irrational. (Revise Number System)<br>2. Establish between which two integers a given simple surd lies.<br>3. Round real numbers to an appropriate degree of accuracy.  |             |                                 |  | 3%          |
| <b>Week 2</b><br>19/1 – 23/1<br>(5 days) | <b>Algebraic Expression</b>                   | Revise multiplication of monomial by binomial ; binomial by binomial and squaring a binomial<br>4. Multiplication of a binomial by a trinomial.<br>5. Factorization to include types taught in Grade 9 and Revise <ul style="list-style-type: none"> <li>• common factor</li> <li>• difference of squares</li> <li>• trinomials</li> <li>• grouping in pairs</li> </ul>          | Formal Task | <b>Investigation</b><br>25% SBA |  | 6%          |
| <b>Week 3</b><br>26/1 – 30/1<br>(5 days) | <b>Algebraic Expression</b>                   | 6. Simplifying, adding, and subtracting algebraic fractions using factorization with denominators of cubes (limited to sum and difference of cubes).   |             |                                 |  | 9%          |
| <b>Week 4</b><br>2/2 – 6/2<br>(5 days)   | <b>Exponents, Algebraic Expression</b>        | 1. Revise laws of exponents learnt in Grade 9 were<br>$x ; y > 0 ; n, m \in \mathbb{Z}$ <ul style="list-style-type: none"> <li>• <math>x^m \times x^n = x^{m+n}</math></li> <li>• <math>x^m \div x^n = x^{m-n}</math></li> <li>• <math>(x^m)^n = x^{mn}</math></li> </ul>  |             |                                 |  | 12%         |
| <b>Week 5</b><br>09/2 – 13/2<br>(5 days) | <b>Exponents, equations, and inequalities</b> | <ul style="list-style-type: none"> <li>• <math>x^m \times y^m = (xy)^m</math></li> </ul> Also, by definition:<br>$x^{-n} = \frac{1}{x^n}$ , $x \neq 0$ and $x^0 = 1$ ,<br>$x \neq 0$<br>2. Use the laws of exponents to simplify expressions and solve equations, accepting that the rules also hold for $m, n \in \mathbb{Q}$ .<br>3.1 Revise the solution of linear equations. |             |                                 |  | 15%         |

|                                    |  |  |             |                 |  |     |
|------------------------------------|--|--|-------------|-----------------|--|-----|
|                                    |  | 3.2 Solve quadratic equations (by factorisation).  |             |                 |  |     |
| Week 6<br>16/2 – 20/2<br>(5 days)  | <br><b>Exponents, equations, and inequalities</b> | 3.3 Solve simultaneous linear equations in two unknowns.<br>3.4 Solve word problems involving linear, quadratic, or simultaneous linear equations  |             |                 |  | 18% |
| Week 7<br>23/2 – 27/2<br>(5 days)  | <br><b>Exponents, equations, and inequalities</b> | 3.5. Solve literal equations (changing the subject of a formula).<br>3.6. Solve linear inequalities (and show solution graphically). Interval notation must be known.  |             |                 |  | 21% |
| Week 8<br>2/3 – 6/3<br>(5 days)    | <br><b>Trigonometry</b>                           | Revise the Pythagoras Theorem<br>1. Define the trigonometric ratios $\sin\theta, \cos\theta$ and $\tan\theta$ Using the right – angled triangle.<br>2. Extend the definitions of $\sin\theta, \cos\theta$ and $\tan\theta$ for $0^\circ \leq \theta \leq 360^\circ$  |             |                 |  | 24% |
| Week 9<br>09/3 – 13/3<br>(5 days)  | <br><b>Trigonometry</b>                          | 3. Define the reciprocal of the trigonometric ratios $\cosec\theta, \sec\theta$ and $\cot\theta$ , using the right – angled triangles (these three reciprocals should be examined in grade 10 only)<br>4. Use a diagram to determine the numerical values of ratios for angles from $0^\circ$ to $360^\circ$ |             |                 |  | 27% |
| Week 10<br>16/3 – 20/3<br>(4 days) | <br><b>Trigonometry</b>                         | 5. Derive values of the trigonometric ratios for the special cases (without using a calculator)<br>$\theta \in \{0^\circ; 30^\circ; 45^\circ; 60^\circ; 90^\circ\}$<br>6. Solve simple trigonometric equations for angles between $0^\circ$ and $90^\circ$   | Formal Task | Test<br>75% SBA |  | 30% |
| Week 11<br>23/3 – 27/3<br>(5 days) | <br><b>Number Patterns</b>                      | 7. Patterns: Investigate number patterns leading to those where there is a constant difference between consecutive terms, and the general term (without using a formula-see content overview) is therefore linear.   |             |                 |  | 33% |

**END OF TERM 1 SCHOOLS CLOSES ON 27/03/2026**

| DATE                                     | TOPIC                      | CONTENT  | F           | ASSESSMENT                | Date Completed | % Completed |
|--|----------------------------|--|-------------|---------------------------|----------------|-------------|
| <b>TERM 2</b>                            |                            |  |             |                           |                |             |
| <b>Week 1</b><br>8/4 – 10/4<br>(3 days)  | <b>Euclidean Geometry</b>  | <ol style="list-style-type: none"> <li>Revise basic results established in earlier grades regarding lines, angles and triangles, especially the similarity and congruence of triangles</li> </ol>  |             |                           |                | <b>36%</b>  |
| <b>Week 2</b><br>13/4 – 17/4<br>(3 days) | <b>Euclidean Geometry</b>  | <ol style="list-style-type: none"> <li>Define the following special quadrilaterals: : Kite, parallelogram, rectangle, rhombus, square and trapezium. Investigate and make conjectures about the properties of the sides, angles, diagonals, and areas of these quadrilaterals. Prove these conjectures</li> </ol>  |             |                           |                | <b>39%</b>  |
| <b>Week 3</b><br>20/4 – 24/4<br>(5 days) | <b>Euclidean Geometry</b>  | <p><b>4. The following proofs are examinable</b></p> <ul style="list-style-type: none"> <li>The opposite sides and angles of a parallelogram are equal.</li> <li>The diagonals of a parallelogram bisect each other.</li> <li>If one pair of opposite sides of a quadrilateral are equal and parallel the quadrilateral is a parallelogram.</li> <li>The diagonals of a rectangle are equal.</li> <li>The diagonals of a rhombus bisect each other at right angle and bisect the interior angles.</li> </ul> <p>Solve problems and prove riders using the properties of parallel lines, triangles, and quadrilaterals.</p> |             |                           |                | <b>42%</b>  |
| <b>Week 4</b><br>28/4 – 30/4<br>(5 days) | <b>Euclidean Geometry</b>  | <ol style="list-style-type: none"> <li>Investigate line segment joining the midpoints of two sides of a triangle.</li> </ol> <p><b>The following theorem is examinable</b></p> <p>The line segment joining the midpoints of two sides of a triangle is parallel to the third side and equal to half the length of the third side</p> <p>Solve problems and prove riders using the properties of parallel lines, triangles, quadrilaterals, and midpoint theorem.</p>   | Formal Task | <b>ASSIGNMENT 25% SBA</b> |                | <b>45%</b>  |
| <b>Week 5</b><br>4/5 – 8/5<br>(5 days)   | <b>Analytical Geometry</b> | <p>Represent geometric figures on a Cartesian coordinate system.</p> <p>Derive and apply for any two points <math>(x_1; y_1)</math> and <math>(x_2; y_2)</math> the formulae for calculating the:</p> <p><b>1. Distance</b> between the two points.</p>  |             |                           |                | <b>48%</b>  |

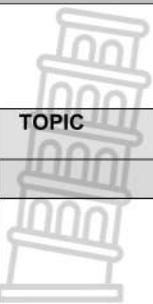
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|---|--|---|--|------------------|--|-----|
| Week 6<br>11/5 – 15/5<br>(5 days)                 | <br><b>Analytical Geometry</b>    | 2. Gradient of the line segment connecting the two points (and from that identify parallel and perpendicular lines); and<br>3. Coordinates of the <b>Mid-point</b> of the line segment joining the two points   |  |                  |  | 51% |
| Week 7<br>18/5 – 22/5<br>(5 days)                 | <br><b>Functions and Graphs</b>   | 1. The concept of a function, where a certain quantity (output value) uniquely depends on another quantity (input value). Work with relationships between variables using tables, graphs, words, and formulae. Convert flexibly between these representations.<br><br><b>Note</b> : the graph defined by $y = x$ should be known from grade 9<br>2. Point by point plotting of basic graphs defined by $y = x$<br>3. Investigate the effect of $a$ and $q$ in $y = ax + q$ to discover shape, domain (input values), range (output values), asymptotes, axes of symmetry, turning points and intercepts on the axes (where applicable). |  |                  |  | 55% |
| Week 8<br>25/5 – 29/5<br>(5 days)                 | <br><b>Functions and Graphs</b>  | 2. Point by point plotting of basic graphs defined by $f(x) = x^2$<br>3. Investigate the effect of $a$ and $q$ in $f(x) = ax^2 + q$ to discover shape, domain (input values), range (output values), asymptotes, axes of symmetry, turning points and intercepts on the axes (where applicable).  |  |                  |  | 57% |
| Week 9<br>1/6 – 5/6<br>(5 days)                   | <br><b>Functions and Graphs</b> | 2. Point by point plotting of basic graphs defined by $f(x) = \frac{1}{x}$<br>3. Investigate the effect of $a$ and $q$ in and $f(x) = \frac{a}{x} + q$ to discover shape, domain (input values), range (output values), asymptotes, axes of symmetry, turning points and intercepts on the axes (where applicable).   |  |                  |  | 61% |
| Week 10<br>8/6 – 12/6<br>(5 days)                 | June Examination   | June Examination  |  | June Examination |  |     |
| <b>15 JUNE - SCHOOL HOLIDAY</b>                   |  | <b>16 JUNE YOUTH DAY – SCHOOL HOLIDAY</b>   |  |                  |  |     |
| Week 11<br>17/6 – 19/6<br>(3 days)                | June Examination   | June Examination  |  | June Examination |  |     |
| Week 12<br>22/6-26/6<br>(5 days)                  | June Examination   | June Examination  |  | June Examination |  |     |
| <b>END OF TERM 2 SCHOOLS CLOSES ON 26/06/2026</b> |  |   |  |                  |  |     |



## TERM 3 - 10 WEEKS (47 Days)

| DATE  | TOPIC                   | CONTENT  | F                  | ASSESSMENT  | Date Completed | % Completed |
|---|-------------------------|--|--------------------|-------------|----------------|-------------|
| TERM 3  |                         |  | 2 TASKS FOR TERM 3 |             |                |             |
| Week 1<br>21/7 –24/7<br>(5 days)                                  | Functions and Graphs    | <p>2. Point by point plotting of basic graphs defined by <math>y = b^x; b &gt; 0</math></p> <p>3. Investigate the effect of <math>a</math> and <math>q</math> in <math>y = ab^x + q; b &gt; 0, b \neq 1</math> to discover shape, domain (input values), range (output values), asymptotes, axes of symmetry, turning points and intercepts on the axes (where applicable).</p>  |                    |             |                | 64%         |
| Week 2<br>27/7 – 31/8<br>(4 days)                                 | Trigonometric Functions | <p>4. Point by point plotting of basic graphs defined by, <math>y = \sin \theta, y = \cos \theta</math> and <math>y = \tan \theta</math> for <math>\theta \in [0^\circ; 360^\circ]</math></p> <p>5. Study the effect of <math>a</math> and <math>q</math> on the graphs defined by : <math>y = a \sin \theta + q</math>, where <math>a</math> and <math>q \in Q</math> and <math>\theta \in [0^\circ; 360^\circ]</math> through point by point sketching</p> <ul style="list-style-type: none"> <li>discover shape, range, turning points, intercepts, amplitude, asymptotes, increasing decreasing ( where applicable)</li> </ul> |                    |             |                | 67%         |
| Week 3<br>3/8 – 7/8<br>(5 days)                                   | Trigonometric Function  | <p>● <math>y = a \cos \theta + q</math> and<br/>● <math>y = a \tan \theta + q</math><br/>where <math>a</math> and <math>q \in Q</math> and <math>\theta \in [0^\circ; 360^\circ]</math></p> <p>through point by point sketching</p> <ul style="list-style-type: none"> <li>discover shape, range, turning points, intercepts, amplitude, asymptotes, increasing decreasing ( where applicable);</li> </ul>   |                    |             |                | 69%         |
| <b>09 AUGUST –NATIONAL WOMEN'S DAY – 10 AUGUST PUBLIC HOLIDAY</b> |                         |  |                    |             |                |             |
| Week 4<br>11/8 – 14/8<br>(4 days)                                 | Trigonometric Functions | <p>6. Sketch graph determine the equations of given graphs and <b>INTERPRET</b> graphs.</p> <p><b>INTERPRET</b> with focus on</p> <ul style="list-style-type: none"> <li>Determining the equation</li> <li>Intercepts with axis</li> <li>Amplitude</li> <li>Period</li> <li>Vertical and horizontal Lengths</li> <li>Point of intersection</li> <li>Inequalities</li> </ul>  | Formal Task        | TEST<br>50% |                | 73%         |

|   |                           |   |                    |                 |            |
|---|---------------------------|---|--------------------|-----------------|------------|
|   |                           | <ul style="list-style-type: none"> <li>Reflection about <math>x</math> – axis and vertical translation</li> </ul> <p><b>Note :</b> Sketching of the graphs must be based on the observation of the effect of <math>a</math> and <math>q</math> (<math>a</math>, a vertical stretch and/or a reflection about the <math>x</math> -axis and <math>q</math> a vertical shift)</p>  |                    |                 |            |
| <b>Week 5</b><br>17/8 - 21/8<br>(5 days)  | <b>Trigonometry (2D)</b>  | <ol style="list-style-type: none"> <li>1. Solve two dimensional problems involving right angled – triangle</li> <li>2. Problems in two dimensional</li> </ol>   |                    |                 | <b>76%</b> |
| <b>Week 6</b><br>24/8 – 28/8<br>(5 days)  | <b>Statistics</b>         | <ol style="list-style-type: none"> <li>1. Measures of central tendency in ungrouped data. Calculate the mean. Determine the median and the mode.</li> <li>2. Measures of central tendency in grouped data: calculation of mean estimate of grouped and ungrouped data and identification of modal interval and interval in which the median lies.</li> <li>3. Range as a measure of dispersion and extension to include percentiles, quartiles, inter-quartile, and semi-inter-quartile range.</li> <li>4. Five number summary(maximum , minimum and quartiles) and box and whisker diagram.</li> </ol> |                    |                 | <b>79%</b> |
| <b>Week 7</b><br>31 /8– 4/9<br>(5 days)   | <b>Statistics</b>         | <ol style="list-style-type: none"> <li>5. Use the statistical summaries (measures of central tendency and dispersion), and graphs to analyse and make meaningful comments on the context associated with the given data.</li> <li>6. Represent the data on bar graphs, line graphs and Histogram</li> </ol>   |                    |                 | <b>82%</b> |
| <b>Week 8</b><br>7/9 – 11/9<br>(5 days)   | <b>Probability</b>        | <ol style="list-style-type: none"> <li>1.The use of probability models to compare the relative frequency of events with the theoretical probability.</li> <li>2.The use of Venn diagrams to solve probability problems, deriving and applying the following for any two events in a sample space <math>S</math>:</li> </ol> $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$  | <b>Formal Task</b> | <b>TEST 50%</b> | <b>85%</b> |
| <b>Week 9</b><br>14/9 – 18 /9<br>(5 days) | <b>Probability</b>        | <p>A and B are Mutually exclusive if <math>P(A \text{ and } B) = 0</math>;</p> <p>A and B are complementary if they are mutually exclusive; and</p> $P(A) + P(B) = 1.$ <p>then <math>P(B) = P(\text{not}(A)) = 1 - P(A)</math></p>  |                    |                 | <b>88%</b> |
| <b>Week 10</b><br>21/9 – 23/9<br>(3 days) | <b>Finance and growth</b> | <ol style="list-style-type: none"> <li>1.Use the simple and compound growth formulae <math>A = P(1 + in)</math> and <math>A = P(1 + i)^n</math> to solve problems, including interest, hire purchase,</li> </ol>  |                    |                 | <b>91%</b> |



## TERM 4 - 10 WEEKS (47 DAYS)

| DATE  | TOPIC   | CONTENT  | Formal Task              | ASSESSMENT | Date Completed | % Completed |
|---|---|--|--------------------------|------------|----------------|-------------|
| <b>TERM 4</b>   |   |  | <b>1 TASK FOR TERM 4</b> |            |                |             |
| <b>Week 1</b><br>6/10– 9/10<br>(4 days)                           | <b>Finance and growth</b>                             | Use the simple and compound growth formulae $A = P(1+in)$ and $A = P(1+i)^n$ to solve problems, including interest, inflation, population growth and other real-life problems.<br>Understand the implication of fluctuating foreign exchange rates ( e.g. on the petrol price , imports , exports , overseas travel) |                          |            |                | 94%         |
| <b>Week 2</b><br>12/10 – 16/10<br>(5 days)                        | <b>Measurement</b>                                    | 1. Revise the volume and surface area of right-prisms and cylinders.<br>2. Study the effect on volume and surface area when multiplying any dimension by a constant factor k.  |                          |            |                | 97%         |
| <b>Week 3</b><br>19 /10 – 23/10<br>(5 days)                       | <b>Measurement</b>                                    | 3. Calculate the volume and surface area of spheres, right pyramids, right cones, and combination of those objects (figures).  | Formal Task              | TEST       |                | 100%        |
| <b>Week 4</b><br>26/10 – 29/10<br>(5 days)                        | <b>Revision of Algebra</b>                            | <b>Revision of Algebra and Functions</b>   |                          |            |                |             |
| <b>Week 5</b><br>2/11 – 6/11<br>(5 days)                          | <b>Revision Trigonometry &amp; Euclidean Geometry</b> | <b>Revision Trigonometry &amp; Euclidean Geometry</b>  |                          |            |                |             |
| <b>Week 6</b><br>9/11 –13/11<br>( 5 days)                         | <b>FINAL EXAMINATIONS</b>                             |  |                          |            |                |             |
| <b>Week 7</b><br>16/11 – 20/11<br>( 5 days)                       | <b>FINAL EXAMINATIONS</b>                             |  |                          |            |                |             |
| <b>Week 8</b><br>23/11 – 27/11<br>(5 days)                        | <b>FINAL EXAMINATIONS</b>                             |  |                          |            |                |             |
| <b>Week 9</b><br>30/11 – 4/12<br>(5 days)                         | <b>FINAL EXAMINATIONS</b>                             |  |                          |            |                |             |
| <b>Week 10</b><br>7/12 – 11/12<br>(5 days)                        | <b>REPORTING</b>                                      |  |                          |            |                |             |
| 7/12 – 11/12<br>(5 days)  |   |  |                          |            |                |             |
|   |   |  |                          |            |                |             |
|   |   |  |                          |            |                |             |
| <b>END OF TERM 4 SCHOOLS CLOSES ...11/ 12 / 2026: END OF YEAR</b> |   |  |                          |            |                |             |

**note:**

- Modelling as a process should be included in all papers, thus contextual questions can be set on any topic.
- Questions will not necessarily be compartmentalised in sections, as this table indicates. Various topics can be integrated in the same question.

Mark distribution for Mathematics NCS end-of-year papers: Grades 10-12

Paper 1: Grades 12: bookwork: maximum 6 marks

| description                              | Grade 10   | Grade 11   | Grade 12   |
|--|------------|------------|------------|
| Algebra and equations (and inequalities) | $30 \pm 3$ | $45 \pm 3$ | $25 \pm 3$ |
| Patterns and sequences                   | $15 \pm 3$ | $25 \pm 3$ | $25 \pm 3$ |
| Finance and growth                       | $10 \pm 3$ |            |            |
| Finance, growth and decay                |            | $15 \pm 3$ | $15 \pm 3$ |
| Functions and graphs                     | $30 \pm 3$ | $45 \pm 3$ | $35 \pm 3$ |
| Differential Calculus                    |            |            | $35 \pm 3$ |
| Probability                              | $15 \pm 3$ | $20 \pm 3$ | $15 \pm 3$ |
| <b>Total</b>                             | <b>100</b> | <b>150</b> | <b>150</b> |

Paper 2: Grades 11 and 12: theorems and/or trigonometric proofs: maximum 12 marks

| description                        | Grade 10   | Grade 11   | Grade 12   |
|------------------------------------|------------|------------|------------|
| Statistics                         | $15 \pm 3$ | $20 \pm 3$ | $20 \pm 3$ |
| Analytical Geometry                | $15 \pm 3$ | $30 \pm 3$ | $40 \pm 3$ |
| Trigonometry                       | $40 \pm 3$ | $50 \pm 3$ | $50 \pm 3$ |
| Euclidean Geometry and Measurement | $30 \pm 3$ | $50 \pm 3$ | $40 \pm 3$ |
| <b>Total</b>                       | <b>100</b> | <b>150</b> | <b>150</b> |

**NB: 7 SBA TASKS TO BE COMPLETED IN 2025 YEAR END.**

| MATHEMATICS GRADE 10                                  |                            |                            |                            |                             |                            |                            |                            |
|---|----------------------------|----------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|
| Task Number (SBA)                                     | 7 (Seven)                  |                            |                            |                             |                            |                            |                            |
| Term  | Term 1                     |                            | Term 2                     |                             | Term 3                     |                            | Term 4                     |
| Task Name   | Project/Investigation      | Test                       | Assignment                 | June Exam                   | Test                       | Test                       | Test                       |
| <b>Mark allocation indicate if fixed or suggested</b> | Suggested Minimum Marks 50 | Suggested Minimum Marks 50 | Suggested Minimum Marks 50 | Suggested Minimum Marks 150 | Suggested Minimum Marks 50 | Suggested Minimum Marks 50 | Suggested Minimum Marks 50 |
| <b>Weighting</b>                                      | <b>15%</b>                 | <b>14%</b>                 | <b>15%</b>                 | <b>14%</b>                  | <b>14%</b>                 | <b>14%</b>                 | <b>14%</b>                 |
| <b>Term Reporting Weightings</b>                      | <b>25%</b>                 | <b>75%</b>                 | <b>25%</b>                 | <b>75%</b>                  | <b>50%</b>                 | <b>50%</b>                 | <b>SBA= 40% Exam= 60%</b>  |