BOARD OF SECONDARY EDUCATION (AP)
SUMMATIVE ASSESSMENT – II
TENTH CLASS MATHEMATICS MODEL PAPER
PAPER – II (TELUGU VERSION)

Please note: The provided content is in Telugu, which is a South Indian language. It is a model paper for the Tenth Class Mathematics examination. The content includes questions and solutions, which are typical for such assessments. The questions are structured to test understanding of mathematical concepts, problem-solving skills, and application of formulas.

For further assistance or detailed explanations, you might need a translator or someone proficient in Telugu.

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R-6-3-18
8. Let the 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th students sit in the classroom. Each student has 3 slices of apple. i) If the teacher assigns 5 slices of apple to each student, how many slices will be left? ii) If 3 students are absent, how many slices will be left?

9. The students of the 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th students are present in the classroom.

**Question 3 III**

i) a) If the students are more than 45, then the examiner will give 45. b) If the examiner gives 60, then the students will be marked.

ii) If the students are more than 50, then the examiner will give 50. b) If the examiner gives 100, then the students will be marked.

iii) If the students are more than 70, then the examiner will give 70. b) If the examiner gives 80, then the students will be marked.

<table>
<thead>
<tr>
<th>Class Interval</th>
<th>0-10</th>
<th>10-20</th>
<th>20-30</th>
<th>30-40</th>
<th>40-50</th>
<th>50-60</th>
<th>60-70</th>
<th>70-80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>7</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td>20</td>
<td>11</td>
<td>15</td>
<td>8</td>
</tr>
</tbody>
</table>

4 × 4 = 16

10. Let 0° ≤ θ ≤ 90°, then cosec θ + cot θ = K, and cosec θ = (K² + 1) cos θ = K² - 1. Solve.

b) Let the ACBD rectangle be 7 cm. a) APD, BPC and BPD are marked. (π = 22/7)

<table>
<thead>
<tr>
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<th>10-20</th>
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<th>50-60</th>
<th>60-70</th>
<th>70-80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>3</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

12. Let the 3rd, 5th, 7th, 9th, 11th, 13th, 15th, 17th, 19th, 21st, 23rd, 25th, 27th, 29th, 31st, 33rd, 35th, 37th, 39th, 41st, 43rd, 45th, 47th, 49th, 51st, 53rd, 55th, 57th, 59th, 61st, 63rd, 65th, 67th, 69th, 71st, 73rd, 75th, 77th, 79th, 81st, 83rd, 85th, 87th, 89th, 91st, 93rd, 95th, 97th, 99th students are present in the classroom. Let APD, BPC, and CDP are marked. (π = 22/7)

b) Let the ACBD rectangle be 7 cm. a) APD, BPC, and CDP are marked. (π = 22/7)

13. Let the 4th, 6th, 8th, 10th, 12th, 14th, 16th, 18th, 20th, 22nd, 24th, 26th, 28th, 30th, 32nd, 34th, 36th, 38th, 40th, 42nd, 44th, 46th, 48th, 50th, 52nd, 54th, 56th, 58th, 60th, 62nd, 64th, 66th, 68th, 70th, 72nd, 74th, 76th, 78th, 80th, 82nd, 84th, 86th, 88th, 90th, 92nd, 94th, 96th, 98th, 100th students are present in the classroom. Let APD, BPC, and CDP are marked. (π = 22/7)
14. (3, 5) (4, 2) ೑ ೒ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ 20 \times \frac{1}{2} = 10

15. (3, 0) (0, 3) (0, -5) (0, 1) 

16. A) 5 B) 15 C) 3 D) 25

17. A) \frac{2}{3} B) \frac{5}{2} C) 0.5 D) 0.56

18. \tan A = \sqrt{3}, \tan B = \frac{1}{\sqrt{3}} ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ 10°, 60° B) 45°, 60° C) 60°, 45° D) 60°, 30°

20. \sin A = \cos B ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ 10" Œ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ ೓ 45° B) 10° C) 15° D) 1°

21. \\frac{\sqrt{3}}{4} a^2 B) \sqrt{3} a^2 C) 6 \sqrt{3} a^2 D) 6 \frac{\sqrt{3} a^2}{4}

22. \cos^2 \theta = 1= 

A) \sin^2 \theta B) \cot^2 \theta C) -\sin^2 \theta D) 0

23. 10 m. B) 100 m. C) 15 m. D) 1 m.
24. 40 – 55 సంఖ్యల మధ్య సంఖ్య ( )
   A) 47          B) 47.5        C) 50          D) 45

25. 10 సంఖ్యలకు మధ్యమం 7 మార్కుల ఒంటి?
   A) కుటుంబ మధ్యమం    B) హార్మోనికా మధ్యమం  C) గ్రామం మధ్యమం    D) సారిసమయమం

26. ఒకటికి ప్రతి రోజు విశ్లేషించి ఎడియం ఉండాలి. భాగద్రీ జాతి కొంతా రోజు పాట ఉంటుంది. .....
   A) పత్రికా నాటికేళ్ళ   B) ప్రతియోగిత నాటికేళ్ళ  C) రాతికేళ్ళ      D) అంతిమం

27. (7, 8), (-2, 3) ప్టికి మధ్య రేఖ ఏంటి?
   A) 5          B) 15        C) 20          D) \( \sqrt{106} \)

28. \( X - y = \) =
   A) 1          B) 0       C) ప్రత్యేకానికి    D) \( x \)

29. \( \Delta ABC \)కు \( DE/BC \) తో అంశం \( \frac{AD}{AB} = \)
   A) \( \frac{AE}{EC} \)          B) \( \frac{AC}{AE} \)    C) \( \frac{AE}{AC} \)          D) \( \frac{EC}{AC} \)

30. ప్రత్యేకానికి 7 సంఖ్య ప్రతి రోజు ఈ 60° రోజు సంఖ్య?
    A) \( \frac{70}{3} \) రో.మి.   B) \( \frac{77}{3} \) రో.మి.  C) \( \frac{11}{3} \) రో.మి.   D) \( \frac{7}{3} \) రో.మి.

31. \( 1 + 2 (\tan^2 60°)² \) ఉంటాయి?
   A) 7          B) 8       C) \( 1 + 2\sqrt{3} \)    D) \( \sqrt{3} \)

32. 15 మ. ఎత్తు ఎత్తు పోయిన ప్రాంపాత్మక ప్రాంపాత్మక కొంతా రోజు పాట ఉంటుంది. ఎందుకంటే రోజ్చిని చేస్తుంది?
   A) 60°          B) 30°        C) 45°          D) 90°

33. భాగద్రీ 10 వంద ప్రయాణం కాలం?
   A) 10          B) 11       C) 13          D) 9

ప్రశ్ని - B ప్రత్యేకానికి

14-C; 15-A; 16-B; 17-B; 18-D; 19-C; 20-D; 21-D; 22-C; 23-A; 24-B; 25-C; 26-B; 27-D; 28-B; 29-C; 30-B; 31-A; 32-C; 33-A.