**MATHEMATICS (BASIC) – Code No. 241**
**PRE-BOARD QUESTION PAPER- MARKING SCHEME**
**CLASS - X (2025 - 26)**

| **SECTION – A**<br>**(Multiple Choice Questions)** | | |
|---|---|---|
| **Q. No.** | **Marking scheme** | **Marks** |
| **Q1.** | b)588 | **1** |
| **Q2.** | c) 2 | **1** |
| **Q3.** | c)9 | **1** |
| **Q4.** | b) | **1** |
| **Q5.** | b)-2 | **1** |
| **Q6.** | b)-7 | **1** |
| **Q7.** | a)(x,0) | **1** |
| **Q8.** | d) 3,-7 | **1** |
| **Q9.** | d)cosA | **1** |
| **Q10.** | b) | **1** |
| **Q11.** | c) | **1** |
| **Q12.** | d) | **1** |
| **Q13.** | b) | **1** |
| **Q14.** | d) | **1** |
| **Q15.** | c) | **1** |
| **Q16.** | d) | **1** |
| **Q17.** | d) | **1** |
| **Q18.** | c) | **1** |

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|---|---|---|
| **Q19.** | **a)** | **1** |
| **Q20.** | a) | **1** |

| **SECTION – B**<br>**(Very Short Answers)** | | |
|---|---|---|
| **Q. No.** | **Marking scheme** | **Marks** |
| **Q21.** | **6=2x3**<br>$6^n=(2x3)^n$<br>As prime factorisation of 6 does not contain 2 and 5 both ,so $6^n$ will never end with unit digit 0 | **2** |
| **Q22.** | **Speed=**66km/h., distance covered in 10 min= 11 km= 1100000 cm.<br>No of revo.= distance/ circumference= 4375.<br>OR<br>Central angle=$30^0$<br>Area swept= 30/360 x 2 x22/7x 14= 22/3 sq. cm | **2** |
| **Q23.** | **For correct proof** | **2** |
| **Q24.** | **For finding zeroes** x= 2 or x=-1<br>**For verification** | **1**<br>**1** |
| **Q25.** | A+B=$60^0$, A-B= $45^0$<br>A= $52.5^0$ , B= $7.5^0$ | **1**<br>**1** |

| **SECTION – C**<br>**(Short Answers)** | | |
|---|---|---|
| **Q. No.** | **Marking scheme** | **Marks** |
| **Q26.** | **For forming correct equqtion**<br>For solving and finding correct value | **1**<br>**2** |
| **Q27.** | i) 64/49 , ii) 64/49 | **1.5**<br>**1.5** |

| | | |
|---|---|---|
| **Q28.** | **For correct proof**<br>**For finding distance= 13 cm** | **2**<br>**1** |
| **Q29.** | i) 1/6 ii) 5/18 iii) 1/36 | **1 mark each** |
| **Q30.** | **For correct proof** | **3** |
| **Q31.** | **For given, to prove, fig**<br>**For correct proof** | **1**<br>**2** |

| **SECTION – D**<br>**(Long Answers)** | | |
|---|---|---|
| **Q. No.** | **Marking scheme** | **Marks** |
| **Q32.** | **For given, to prove, contruction and figure**<br>**For correct proof** | **2**<br>**3** |
| **Q33.** | TSA of remaining solid=CSA of cylinder + 2 CSA of hemisphere<br>For correct formula<br>For finding TSA= 308 sq. cm.<br>OR<br>TSA of remaining solid= CSA of cylinder + CSA of cone+ ar of base<br>For correct formula<br>For finding TSA( l= 2.5 cm)= 17.6 sq. cm | **1**<br>**1**<br>**3** |
| **Q34.** | For finding median= 24.6<br>For finding mode= 25.6<br>For finding mean using impirical formula=24.1 | **2**<br>**2**<br>**1** |
| **Q35.** | For correct equation<br>For correct solution<br>For writing answer .( the numbers are 18 and 12) | **2**<br>**2**<br>**1** |

| **SECTION - E**<br>**(Case-study Based Questions)** | | |
|---|---|---|
| **Q. No.** | **Marking scheme** | **Marks** |
| **Q36.** | i)(45,10)<br>ii) 10 √17 unit<br>iii)5√53 OR ( 25,20) | **1**<br>**1**<br>**2** |
| **Q37.** | i)$45^0$ ii) $14\sqrt{3}$ m iii) $42\sqrt{3}$ m OR Rs 84x50= RS 4200 | **1+1+2** |

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|---|---|---|
| **Q38.** | i)100,120,140…….. ii) 220 iii) 2520 OR $12^{th}$ month | **1+2+1** |