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HYDERABAD REGION

SCORING KEY FOR COMMON SUMMATIVE ASSESSMENT – II

SESSION

CLASS: VIII

SUBJECT: MATHEMATICS

SECTION – A

For each correct answer: 1 mark

1) D
2) C
3) D
4) B
5) D
6) D
7) A
8) B

SECTION – B

9) WAGE (in Rs) | NO. OF WORKERS | (8*1/4=2m)
---|---|---
2100-2110 | 3 |
2110-2120 | 2 |
2120-2130 | 1 |
2130-2140 | 9 |
2140-2150 | 5 |
2150-2160 | 1 |
2160-2170 | 3 |
2170-2180 | 1 |
TOTAL | 25 |

10) Euler’s Formula: \( F + V - E = 2 \)

\[
\begin{align*}
20 + 12 - E &= 2 \\
E &= 32 - 2 = 30
\end{align*}
\]

1m

11) 

(i) \( 0.00000000837 = 8.37 \times 10^{-9} \) 

1m

(ii) \( 3.61492 \times 10^6 = 3614920 \) 

1m

Or
\\{(1/3)^2 - (1/2)^3\} \div (1/4)^{2} = (3^2 - 2^3) \div 4^2 \\
= (9-8) \div 16 \\
= 1/16 \\

12) 

<table>
<thead>
<tr>
<th>No. of bottles</th>
<th>840</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time( in hr)</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

**DIRECT VARIATION**

\[
840/6 \times x/5 \\
x=700
\]

13) \(15pq+25p+15+9q\)

\[
= 5p(3q+5) + 3(5+3q) \\
= (5p+3)(3q+5)
\]

14) Sum of the digits =3+1+z+5=9+z

9+z is one of the multiples of 9 i.e., is 9+z is one of the nos. of 0, 9, 18, 27, so on.

Since z is a digit, therefore 9+z=9 or 18

z=0 or 9

**SECTION- C**

15) For finding central angles (Blue-180°, Yellow-30°, Red-60°, Green-90°)

For correct pie chart

16) (i) \((2x+5) (4x-3)= 8x^2-6x+20x-15\)

\[
=8x^2+14x-15
\]

(ii) \((t+s^2) (t^2 +s)=t^3+ts+s^3t^2+s^3\)

Or

(i) \(2x(z-x-y) + 2y (z-y-x )=2xz-2x^2-2xy+2yz-2y^2-2xy\)

\[
= -2x^2-2y^2-4xy+2yz+2xz
\]

(ii) For removing brackets

For correct answer 5l^2+25ln

17) For \(r=42\text{cm}=0.42\text{m}\)

For correct formula

Area covered in one revolution=2.64m^2
Area covered in 750 revolutions = 1980 m²

For correct formula
For substitution of values

For correct answer b = 7 cm

18) For each correct view

19) \(5^{m-3} = 5^5\)

For simplification \(m + 3 = 5\)
For correct answer \(m = 2\)

20) NO. OF CHILDREN 24 20
    NO. OF SWEETS 5 y

Inverse variation

24 X 5 = 20 X y
For y = 6

21) (i) For taking 3 common
For correct answer = xy

(ii) For factorization of \(y^2 + 7y + 10\)
For correct answer = \(y + 2\)

22) Sum in One’s column = \(A + 8 = 3\)
A has to be 5
\((A + 8 = 5 + 8 = 13)\)

Sum in ten’s column = 1 + 4 + 9 = 14
B has to be 4
C has to be 1

SECTION –D

23) VCR

For loss = Rs. 320
For SP = Rs. 7680
For Profit=Rs.640------ 1/2m 
For SP=Rs.8640-------- 1m 
Profit on whole transaction=Rs. 320------ 1/2m 
For gain %=2-------- 1/2m 

Or

**FABINA (Simple Interest case)**

For correct formula of SI -------- 1/2m 
For getting SI =Rs.4500------- 1m 

**RADHA (Compound interest case)**

For correct formula of Amount----- 1/2m 
For getting Amount =Rs.16637.50-------- 1m 
For getting correct CI=Rs.4137.50-------- 1/2m 
Fabina pays more interest by Rs.362.50-------- 1/2m 

24) (i) For expansion by using identity--------- 1m 
For correct answer=4y^2+20y+25-------- 1 m 
(ii)(153+147)(153-147)--------- 1m 
=300 x 6------------------------- 1/2m 
=1800------------------------- 1/2m 

25) Formula for area of a rhombus-------- 1/2m 
Area of 1 tile =675 sq.cm--------------- 1m 
Area of 3000 tiles=2025000 sq.cm--------- 1m 
For converting 2025000 sq.cm into sq. m=202.5 sq.m------ 1/2m 
For total cost =Rs. 810------ 1m 

26) For suitable scales----------------- 1m 
For graph--------------------------- 2m 
(i) 20km----------------- 1/2m 
(ii) 7.30 a.m.----------------- 1/2m 

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