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\documentclass[12pt]{article}
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\usepackage{amsmath}
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\begin{document}
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\section*{Important Medical Formulae}
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\subsection*{1. Body Mass Index (BMI)}
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\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m)}^2}
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\subsection*{2. Mean Arterial Pressure (MAP)}
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\text{MAP} = \text{DBP} + \frac{\text{SBP} - \text{DBP}}{3}
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\]
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Where:

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\begin{itemize}
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\item ( \text{DBP} ) = Diastolic Blood Pressure
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\item ( \text{SBP} ) = Systolic Blood Pressure
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\end{itemize}
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\subsection*{3. Cardiac Output (CO)}
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\text{CO} = \text{SV} \times \text{HR}
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Where:

```
\begin{itemize}
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\item ( \text{SV} ) = Stroke Volume
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\item ( \text{HR} ) = Heart Rate
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\end{itemize}
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\subsection*{4. Creatinine Clearance (Cockcroft-Gault Formula)}

For males:

$$\text{CrCl} = \frac{(140 - \text{Age}) \times \text{Weight (kg)}}{\text{Serum Creatinine (mg/dL)}} \times 72$$

For females:

$$\text{CrCl} = 0.85 \times \frac{(140 - \text{Age}) \times \text{Weight (kg)}}{\text{Serum Creatinine (mg/dL)}} \times 72$$

\subsection*{5. Dosage Calculation}

$$\text{Dose (mg)} = \frac{\text{Desired Dose (mg/kg)}}{\text{Concentration (mg/mL)}} \times \text{Weight (kg)}$$

\subsection*{6. Alveolar Gas Equation}

$$\text{PAO}_2 = \text{FiO}_2 \times (\text{Patm} - \text{PH}_2\text{O}) - \frac{\text{PaCO}_2}{R}$$

Where:

\begin{itemize}

\item FiO_2 = Fraction of Inspired Oxygen

\item Patm = Atmospheric Pressure

\item PH_2O = Water Vapor Pressure

\item PaCO_2 = Partial Pressure of Arterial CO₂

\item R = Respiratory Exchange Ratio

\end{itemize}

\subsection*{7. Henderson-Hasselbalch Equation}

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$$\text{pH} = \text{pKa} + \log\left(\frac{\text{HCO}_3^-}{\text{H}_2\text{CO}_3}\right)$$

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\subsection*{8. Ideal Body Weight (IBW)}

For males:

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$$\text{IBW (kg)} = 50 + 2.3 \times (\text{Height (inches)} - 60)$$

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For females:

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$$\text{IBW (kg)} = 45.5 + 2.3 \times (\text{Height (inches)} - 60)$$

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\subsection*{9. Anion Gap}

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$$\text{Anion Gap} = \text{Na}^+ - (\text{Cl}^- + \text{HCO}_3^-)$$

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\subsection*{10. GFR (Modification of Diet in Renal Disease Formula)}

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$$\text{GFR} = 186 \times (\text{Serum Creatinine})^{-1.154} \times (\text{Age})^{-0.203} \times (0.742 \text{ if female}) \times (1.21 \text{ if African American})$$

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\end{document}