## Quizzes for Module 8

## Unit 8.1.5

Q 8.1.5.1: For the circuit shown below use Nodal Analysis to solve for the nodal voltages $V_{A}, V_{B}, V_{C}$ and $V_{D}$.


Solution: (Self Assessment) $V_{A}=100 \mathrm{~V}, V_{B}=65 \mathrm{~V}, V_{C}=20 \mathrm{~V}$ and $V_{D}=75 \mathrm{~V}$.

## Unit 8.2.5

Q 8.2.5.1: For the circuit shown below use Mesh Analysis to solve for the mesh currents $I_{1}, I_{2}$ and $I_{3}$. From the values of the mesh currents calculate the voltage $V_{E F}$.


Solution: (Self Assessment) $I_{1}=14.25 \mathrm{~A}, I_{2}=9.5 \mathrm{~A}, I_{3}=-1 \mathrm{~A}$ and $V_{E F}=123 \mathrm{~V}$.

