

### **Problem No. 3**

**Name:** Draw the input, output and transfer characteristics of CE BJT configuration according to the student ID of your group members. Also determine the value of CE current gain at a particular value.

**BJT model =**  
**Q2N1566 ;  $4 \leq A \leq 5$**   
**(A = 4)**

Orcad Capture - [/ - (SCHEMATIC1 : PAGE1)]

File Edit View Place Macro PSpice Accessories Options Window Help

SCHEMATIC1-03

Simulation Settings - 03

General Analysis Include Files Libraries Stimulus Options Data Collection Probe Window

Analysis type: DC Sweep

Options:

- ☒ Primary Sweep
- ☒ Secondary Sweep
- ☐ Monte Carlo/Worst Case
- ☐ Parametric Sweep
- ☐ Temperature (Sweep)
- ☐ Save Bias Point
- ☐ Load Bias Point

Sweep variable:

- ☒ Voltage source Name: VBB Model type: Model name: Parameter name:
- ☐ Current source
- ☐ Global parameter
- ☐ Model parameter
- ☐ Temperature

Sweep type:

- ☒ Linear Start value: 0 End value: 10 Increment: 1
- ☐ Logarithmic Decade
- ☐ Value list

OK Cancel Apply Help

Type here to search

Earnings upcoming

ENG 11:23 AM  
INTL 2/8/2024

Orcad Capture - [/ - (SCHEMATIC1 : PAGE1)]

File Edit View Place Macro PSpice Accessories Options Window Help

SCHEMATIC1-03

Simulation Settings - 03

General Analysis Include Files Libraries Stimulus Options Data Collection Probe Window

Analysis type: DC Sweep

Options:

- ☒ Primary Sweep
- ☒ Secondary Sweep
- ☐ Monte Carlo/Worst Case
- ☐ Parametric Sweep
- ☐ Temperature (Sweep)
- ☐ Save Bias Point
- ☐ Load Bias Point

Sweep variable:

- ☒ Voltage source Name: VCC Model type: Model name: Parameter name:
- ☐ Current source
- ☐ Global parameter
- ☐ Model parameter
- ☐ Temperature

Sweep type:

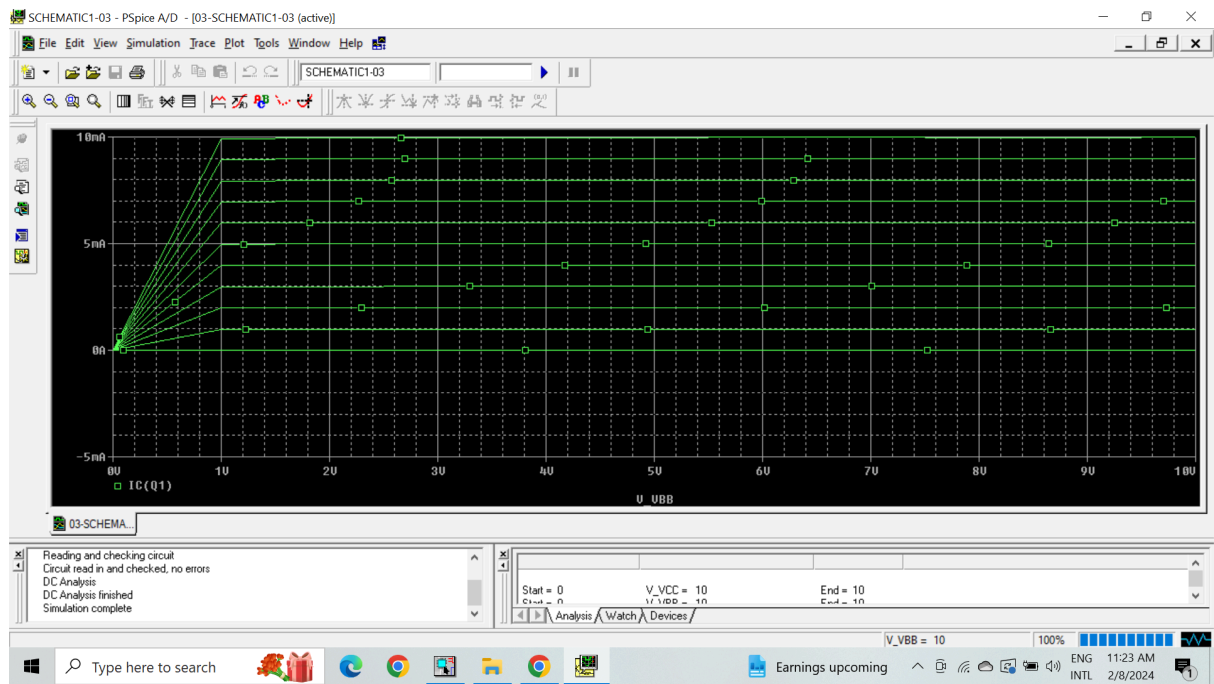
- ☒ Linear Start value: 0 End value: 10 Increment: 1
- ☐ Logarithmic Decade
- ☐ Value list

OK Cancel Apply Help

Type here to search

Earnings upcoming

ENG 11:23 AM  
INTL 2/8/2024



And

Orcad Capture - [/ - (SCHEMATIC1 : PAGE1)]

File Edit View Place Macro PSpice Accessories Options Window Help

SCHEMATIC1-03

Simulation Settings - 03

General Analysis Include Files Libraries Stimulus Options Data Collection Probe Window

Analysis type: DC Sweep

Options: ☒ Primary Sweep ☒ Secondary Sweep ☐ Monte Carlo/Worst Case ☐ Parametric Sweep ☐ Temperature (Sweep) ☐ Save Bias Point ☐ Load Bias Point

Sweep variable: ☒ Voltage source Name: VBB ☐ Current source Model type: ☐ Global parameter Model name: ☐ Model parameter Model name: ☐ Temperature Parameter name:

Sweep type: ☒ Linear Start value: 0 End value: 5 Increment: 0.5 ☐ Logarithmic Decade ☐ Value list

OK Cancel Apply Help

Windows 11, version 22H2 is ready for your PC.

Orcad Capture - [/ - (SCHEMATIC1 : PAGE1)]

File Edit View Place Macro PSpice Accessories Options Window Help

SCHEMATIC1-03

Simulation Settings - 03

General Analysis Include Files Libraries Stimulus Options Data Collection Probe Window

Analysis type: DC Sweep

Options: ☒ Primary Sweep ☒ Secondary Sweep ☐ Monte Carlo/Worst Case ☐ Parametric Sweep ☐ Temperature (Sweep) ☐ Save Bias Point ☐ Load Bias Point

Sweep variable: ☒ Voltage source Name: VCC ☐ Current source Model type: ☐ Global parameter Model name: ☐ Model parameter Model name: ☐ Temperature Parameter name:

Sweep type: ☒ Linear Start value: 0 End value: 10 Increment: 1 ☐ Logarithmic Decade ☐ Value list

OK Cancel Apply Help

Windows 11, version 22H2 is ready for your PC.

