**INDIRECT COSTS**

**Additional Exercises**

**Reference info:**



**Formula to convert TC to TDC:**

 **TC / (1 – TC) = TDC**

**BUDGETING**

4. Modified Total Direct Cost (MTDC) - Using a 60% indirect rate with a MTDC base (KFS type J), calculate the total cost of this award:

|  |  |  |  |
| --- | --- | --- | --- |
| **Budget Category** | **Direct** | **F&A** | **Total** |
| ACAD SAL REGULAR FACULTY | 43,350 |  |  |
| ACAD SAL OTHER ACADEMICS | 2,750 |  |  |
| GENERAL ASSISTANCE | 289,500 |  |  |
| BENEFITS | 91,600 |  |  |
| SUBCONTRACT (1) | 122,150 |  |  |
| SUPPLIES AND EXPENSE | 518,900 |  |  |
| TRAVEL | 13,050 |  |  |
| EQUIPMENT AND FACILITIES | 9,500 |  |  |
| **TOTAL** | **1,090,800** |  |  |

5. Total Direct Cost (TDC) - Using a 25% indirect rate with a TDC base (KFS type B), calculate the total cost of this award:

|  |  |  |  |
| --- | --- | --- | --- |
| **Budget Category** | **Direct** | **F&A** | **Total** |
| ACAD SAL OTHER ACADEMICS | 100,500 |  |  |
| BENEFITS | 34,800 |  |  |
| SUPPLIES AND EXPENSE | 800 |  |  |
| TRAVEL | 1,400 |  |  |
| **TOTAL** | **137,500** |  |  |

6. Total Cost (TC) - Using a 20% indirect rate with a TC base, calculate the total cost of this award. What is the *effective* F&A rate to be used on the ledger?

|  |  |  |  |
| --- | --- | --- | --- |
| **Budget Category** | **Direct** | **F&A** | **Total** |
| GENERAL ASSISTANCE | 62,600 |  |  |
| BENEFITS | 12,500 |  |  |
| SUBCONTRACT (1) | 8,400 |  |  |
| SUPPLIES AND EXPENSE | 15,250 |  |  |
| TRAVEL | 500 |  |  |
| **TOTAL** | **102,250** |  |  |

**REBUDGETING**

4. Your supplies budget is fully spent, but $2,700 of additional supplies are needed for the project. Using a 52% indirect rate with a **Modified Total Direct Cost (MTDC)** base, determine the new budget after moving $2,700 to supplies from benefits. Adjust indirect costs as needed.

|  |  |  |  |
| --- | --- | --- | --- |
| **Budget Category** | **Direct** | **F&A** | **Total** |
| SALARIES | 62,600 |  |  |
| BENEFITS | 15,500 |  |  |
| SUBCONTRACTS | 8,300 |  |  |
| SUPPLIES | 15,250 |  |  |
| TRAVEL | 500 |  |  |
| **TOTAL DIRECT COSTS** | 102,150 |  |  |
| INDIRECT COSTS | 53,118 |  |  |
| **TOTAL** | **155,268** |  |  |

5. Your supplies budget is fully spent, but $3,500 of additional supplies are needed for the project. Using a 19% indirect rate with a **Total Direct Cost (TDC)** base, determine the new budget after moving $3,500 from equipment to supplies. Adjust indirect costs as needed.

|  |  |  |  |
| --- | --- | --- | --- |
| **Budget Category** | **Direct** | **F&A** | **Total** |
| GENERAL ASSISTANCE | 10,350 |  |  |
| BENEFITS | 1,525 |  |  |
| SUPPLIES AND EXPENSES | 225 |  |  |
| EQUIPMENT | 50,400 |  |  |
| **TOTAL DIRECT COSTS** | 62,500 |  |  |
| INDIRECT COSTS | 11,875 |  |  |
| **TOTAL** | **74,375** |  |  |

6. Your equipment budget is fully spent, but $5,500 of additional equipment is needed for the project. Using a 60.0% indirect rate with a **Modified Total Direct Cost (MTDC)** base, determine the new budget after moving $5,500 to equipment from benefits. Adjust indirect costs as needed.

|  |  |  |  |
| --- | --- | --- | --- |
| **Budget Category** | **Direct** | **F&A** | **Total** |
| GENERAL ASSISTANCE | 179,500 |  |  |
| BENEFITS | 63,700 |  |  |
| TRAVEL | 6,900 |  |  |
| EQUIPMENT | 27,400 |  |  |
| **TOTAL DIRECT COSTS** | 277,500 |  |  |
| INDIRECT COSTS | 128,802 |  |  |
| **TOTAL** | **406,302** |  |  |