## 8. Costing and Stock Valuation

## (a) Overhead Apportionment

Stark Ltd has two Production Departments, A and B and two ancillary Service Departments, 1 and 2. The following are the expected overhead costs for the next period.

| Overhead | Total |
| :--- | ---: |
|  | $\boldsymbol{€}$ |
| Depreciation of equipment | 24,000 |
| Depreciation of factory buildings | 36,000 |
| Factory heating | 8,400 |
| Factory cleaning | 3,200 |
| Factory canteen | 12,600 |

The following information relates to the Production and Service Departments of the factory.

|  | Production |  | Service |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Dept. A | Dept. B | Dept. 1 | Dept. 2 |
| Volume in cubic metres | 2,000 | 4,000 | 800 | 1,200 |
| Floor area in square metres | 1,200 | 300 | 600 | 300 |
| Number of employees | 70 | 60 | 15 | 30 |
| Book value of equipment | $€ 30,000$ | $€ 10,000$ | $€ 8,000$ | $€ 16,000$ |
| Machine hours | 6,000 | 4,000 |  |  |

## You are required to:

(i) Calculate the overhead to be absorbed by each Department stating clearly the basis of apportionment used.
(ii) Transfer the Service Departments costs to Production Departments A and B on the basis of machine hours.
(iii) Calculate machine hour overhead absorption rates for Departments A and B.
(iv) Explain what is meant by 're-apportionment' of overheads.
(v) Illustrate and explain 'under-absorption' of overheads.
(b) Stock Valuation

Park Ltd is a retail store that buys and sells one commodity. The following information relates to the purchases and sales of the firm for the year 2011.

| Period | Purchases on credit | Credit Sales | Cash Sales |
| :--- | :--- | :--- | :--- |
| $01 / 01 / 2011-31 / 03 / 2011$ | $6,800 @ € 5$ each | $1,200 @ € 10$ each | $2,600 @ € 9$ each |
| $01 / 04 / 2011-30 / 06 / 2011$ | $4,300 @ € 6$ each | $1,400 @ € 11$ each | $3,100 @ € 10$ each |
| $01 / 07 / 2011-30 / 09 / 2011$ | $5,900 @ € 7$ each | $900 @ € 11$ each | $2,600 @ € 10$ each |
| $01 / 10 / 2011-31 / 12 / 2011$ | $7,200 @ € 8$ each | $800 @ € 12$ each | $1,600 @ € 11$ each |

On $1 / 1 / 2011$ there was opening stock of 4,100 units @ $€ 5$ each.

## You are required to:

(i) Calculate the value of closing stock using the 'First in/First out' (FIFO) method.
(ii) Prepare a Trading Account for the year ended 31/12/2011.

