

1.

Find out the due date of the following invoices:

Date of Invoice (year 2013)	Credit Period Allowed
31st Jan.	1 month
29th Jan.	30 days
2nd Mar.	30 days
16th July	30 days
30th June	3 months
26th Dec.	1 month

(8 Marks)

SOLUTION 1

Date of Invoice	Due Date
31st Jan.	28.02.2013
29th Jan.	28.02.2013
2nd Mar.	31.03.2013 Since 1st April (being a bank holiday) is a public holiday.
16th July	14.08.2013 Since 15th Aug. (being Independence Day) is a public holiday.
30th June	29.09.2013 Since 30th Sept. (being a bank holiday) is a public holiday.
26th Dec.	25.01.2014 Since 26th Jan. (being Republic Day) is a public holiday.

2.

X and Y had the following mutual dealings and desire to settle their account on the average due date:

01.01.2014	Balance owing by Mr. X Rs 5,000
30.01.2014	Goods sold to Y (credit period 30 days) Rs 1,000
31.01.2014	Goods purchased by X (credit period 1 month) Rs 2,000
13.07.2014	Goods sold to Y (credit period 30 days) Rs 1,000
28.09.2014	Goods purchased by X (credit period 3 months) Rs 1,000

Required: Ascertain the average due date.

(8 Marks)

SOLUTION 2

Let the Base Date be 01.01.2014

FOR OWINGS BY MR X

A Due Date	B Amount	C No. of days from Base Date to Date	D = B x C Product
01.01.2014*	5,000	1	5,000
29.02.2014	2,000	30 + 29 = 59	1,18,000
28.12.2014	1,000	366 - 4 = 362	3,62,000
	8,000		4,85,000

* It is the date of brought down balance and not the date of transaction.

A Due Date	B Amount	C No. of days from Base Date to Date	D = B x C Product
29.02.2014	1,000	30 + 29 = 59	59,000
12.08.2014	1,000	30 + 29 + 31 + 30 + 31 + 30 + 31 + 12 = 224	2,24,000
	2,000		2,83,000

$$\begin{aligned} \text{Average Due Date} &= \text{Base Date} + \frac{\text{Total of Products}}{\text{Total Amount}} \text{ Days} \\ &= 01.01.2013 + \frac{\text{Rs } 4,85,000 - \text{Rs } 2,83,000}{\text{Rs } 8,000 - \text{Rs } 2,000} \text{ Days} \\ &= 01.01.2013 + 33.67 \text{ Days} = 04.02.2014 \end{aligned}$$

3.

Rams draw upon Vinod several bills of exchange due to payment on different dates as under:

Date of the Bill	Amount Rs	Tenure of the Bill
1st June	1,200	3 Months
19th June	1,600	2 Months
10th July	2,000	3 Months
27th July	1,500	3 Months
7th Aug.	1,800	1 Month
15th Aug.	2,400	2 Months

Find out average due date in which payments may be one single amount.

(10 Marks)

SOLUTION 3

Calculation of Average Due Date [Base Date: 22nd Aug.]

A Date of Maturity	B Amount	C No. of days from base date	D = B x C Product
4th Sept.	1,200	13	15,600
22nd Aug.	1,600	0	0
13th Oct.	2,000	52	1,04,000
30th Oct.	1,500	69	1,03,000
10th Sept.	1,800	19	34,200
18th Oct.	2,400	57	1,36,800
	10,500		3,94,100

$$\begin{aligned} \text{Average due date} &= 22\text{nd Aug.} + \frac{\text{Total of Product}}{\text{Total of Amounts}} \text{ days} \\ &= 22\text{nd Aug.} + \frac{3,94,100}{10,500} \text{ days} \\ &= 22\text{nd Aug.} + 38 \text{ Days} = 29^{\text{th}} \text{ Sep.} \end{aligned}$$

4.

R owns S the following Sums of money due from him on the dates stated:

- Rs 300 due on March 9,
- Rs 1,000 due on April 2,
- Rs 4,000 due on April 30,
- Rs 100 due on June 1,

(8 Marks)

SOLUTION 4

CALCULATE OF AVERAGE DUE DATE [BASE DATE 9TH MARCH]

A Date of Maturity	B Amount	C No. of days from base date	D = B x C Product
9th March	300	0	
2nd April	1,000	24	24,000
30th April	4,000	52	2,08,000
1st June	100	84	8,400
	5,400		2,40,400

$$\begin{aligned} \text{Average Due Date} &= \text{Base date} + \frac{\text{Total of Product}}{\text{Total of Amount}} \text{ days} \\ &= 9\text{th March} + \frac{2,40,000 + 2,40,400}{5,400} \\ &= 9\text{th March} + 44.52 \text{ days} = 23^{\text{rd}} \text{ April} \\ \text{Interest for 68 days from A.D.D. to date of payment} &= \text{Rs } 5,400 \times \frac{5}{100} \times \frac{68}{365} = \text{Rs } 50.30 \end{aligned}$$

5.

A partner has withdrawn the following sum during the half year ending 30th June:

Rs		
January	15	500
February	10	400
March	12	700
April	5	800
May	20	1,000
June	18	900

Interest is to be charged at 10 per annum. Find out the average due date and calculated the interest on drawings.

(8 Marks)

SOLUTION 5

CALCULATION AVERAGE DUE DATE (BASE DATE 15TH JAN.)

A Date of Maturity	B Amount	C No. of days from base date	D = B x C Product
January 15	500	0	0

February 10	400	26	10,400
March 12	700	56	39,200
April 5	800	80	64,000
May 20	1,000	125	1,25,000
June 18	900	154	1,38,600
	4,300		3,77,200

Average Due Date = Base date + $\frac{\text{Total of Product}}{\text{Total of Amount}}$ Days

= 15th Jan. + $(3,77,200/4,300)$ = 87.72 (or) 88 days.

Average Due Date = 13th April,

Interest from 13th April to 30th June @ Rs 10%

= Rs 4300 x $(78/365)$ x $(10/100)$ = Rs 91.89

6.

From the followings particulars, you are required to ascertain the Average Due Date:

Due Date	Amount of the Bill (Rs)
18th May	1,100
24th June	625
30th July	1,800
18th Aug.	1,750
20th Oct.	1,000
24th Nov.	500

(8 Marks)

SOLUTION 6

CALCULATION OF AVERAGE DUE DATE [BASE DATE: 18TH MAY]

A Date of Maturity	B Amount	C No. of days from base date	D = B x C Product
18 th May	1,100	0	0
24th June	625	13 + 24 = 37	23,125
30th July	1,800	13 + 30 + 30 = 73	1,31,400
18th Aug.	1,750	13 + 30 + 31 + 18 = 92	1,61,000
20th Oct.	1,000	13 + 30 + 31 + 31 + 30 + 20 = 155	1,55,000
24th Nov.	500	13 + 30 + 31 + 31 + 30 + 31 + 24 = 190	95,000
	6,775		5,65,525

Average Due Date = Base date + $\frac{\text{Total of Product}}{\text{Total of Amount}}$ Days

= 18th May + $\frac{5,65,525}{6,775}$ = 83.47 Days or 83 days

= 18th May + 83 days

= 9th August,