

St. Mira's College for Girls,  
(Autonomous-Affiliated to Savitribai Phule Pune University)

Class: FYBCOM

Subject: Banking and Finance

Subject Code: AC11507

SEMI I

(2018-19)

Unit 4: Mathematics in Banking

Skill Development - Mathematical ability - understanding calculation of Interest on Fixed Deposits as one of the asset classes

$\frac{10}{10}$  MSW

ST MIRA'S COLLEGE FOR GIRLS, PUNE  
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CLASS: F.Y.B.Com/ F.Y.B.A.

SEMESTER: I (2018-2019)

SUBJECT: Banking and Finance

Title of the Paper: Fundamentals of Banking

Flexi. Test 1

Name: Madhusa Mishra

Date: 4/9/18

F.Y. B.COM (B)

Roll No.: 3290

Total Marks: 10

1. Mr. Kishor opened a Fixed Deposit Account of Rs. 9,00,000/- for a period of 9 years, @ 9.50% p.a. Calculate interest on quarterly compounding.

$$\rightarrow MV = P \left[ 1 + \frac{R}{100 \times m} \right]^{n \times m}$$

where,

MV = Maturity Value

P = Principle amount

R = Rate of interest

n = no. of year

m = no. of months for which interest is compounded.

P = 900000

n = 9 year

R = 9.50% p.a

$$\begin{aligned} MV &= 900000 \left[ 1 + \frac{9.50}{100 \times 4} \right]^{9 \times 4} \\ &= 900000 \left[ 1 + \frac{9.50}{400} \right]^{36} \\ &= 900000 \left[ \frac{400 + 9.50}{400} \right]^{36} \\ &= 900000 \left[ \frac{409.5}{400} \right]^{36} \\ &= 900000 \left[ 1.02375 \right]^{36} \\ &= 900000 \times 2.32798904137 \\ &= \underline{\underline{Rs 2095190.13723}} \end{aligned}$$

Meenakshi Wagh MSWagh

Name and Signature of the Faculty:

Dr. Meenakshi Wagh



  
Principal Incharge  
St. Mira's College for Girls