



Chapter 4 – Maths for Finance

Simple Interest and Compound Interest

Past Year Questions

PYQ May 18

- (1) If ₹1,000 be invested at interest rate of 5% and the interest be added to the principal every 10 years, then the number of years in which it will amount to ₹2,000 is:

- a. $16\frac{2}{3}$ years b. $6\frac{1}{4}$ years
c. 16 years d. $6\frac{2}{3}$ years

PYQ May 18

- (2) A person borrows ₹5,000 for 2 years at 4% per annual simple interest. He immediately lends to another person at 6.25% per annum for 2 years find his gain in the transaction for year:

- a. ₹112.50 b. ₹225
c. ₹125 d. ₹107.50

PYQ May 18

- (3) If an amount is kept at S.I. it earns an interest of ₹600 in first two years but when kept at compound interest it earns an interest of ₹660 for the same period, then the rate of interest and principal amount respectively are:

- a. 20%, ₹1,200 b. 20%, ₹1,500
c. 10%, ₹1,200 d. 10%, ₹1,500

PYQ Nov. 18

- (4) If ₹10,000 is invested at 8% p.a. compounded quarterly, then the value of the investment after 2 years is: $[(1+0.02)^8 = 1.171659]$

- a. ₹11,716.59 b. ₹10,716.59
c. ₹117.1659 d. None of these

PYQ Nov. 18

- (5) A bank pays 10% rate of interest compounded annually. A sum of ₹400 is deposited in the bank. The amount at the end of 1 year will be

- a. ₹440 b. ₹439
c. ₹441 d. ₹442

PYQ Nov. 18

- (6) A certain amount of money doubles itself in 10 years when deposited on simple interest. It would triple itself in

- a. 20 years b. 15 years
c. 25 years d. 30 years

PYQ Nov. 18

- (7) A man deposited ₹8,000 in a bank for 3 years at 5% per annum compound interest, after 3 years he will get

- a. ₹8,800 b. ₹9,261
c. ₹9,200 d. ₹9,000

PYQ Nov. 18

- (8) If in two years' time a principal of ₹100 amounts to ₹121 when the interest at $r\%$ is compounded annually, then the value of r is

- a. 10.5% b. 10%
c. 15% d. 14%

PYQ Nov. 18

- (9) A certain sum of money Q was deposited for 5 years and 4 months at 4.5% simple interest and amounted to ₹248, then the value of Q is

- a. ₹200 b. ₹210
c. ₹220 d. ₹240

PYQ Nov. 18

- (10) If compound interest on a sum for 2 years at 4% per annum is ₹102, then the simple interest on the same sum for the same period at the same rate will be

- a. ₹99 b. ₹101
c. ₹100 d. ₹95

PYQ Nov. 18

- (11) If the difference between the compound interest compounded annually and simple interest on a certain amount at 10% per annum for two years is ₹372, then the principal amount is

- a. ₹37,200 b. ₹37,000
c. ₹37,500 d. None of these

PYQ Nov. 18

- (12) The effective rate of interest for one year deposit corresponding to a nominal 7% rate of interest per annum convertible quarterly is

- a. 7% b. 7.5%
c. 7.4% d. 7.18%

PYQ Nov. 18

- (13) How much will ₹25,000 amount to in 2 years at compound interest if the rates for the successive years are 4% and 5% per year

- a. ₹27,300 b. ₹27,000
c. ₹27,500 d. ₹27,900



PYQ Nov. 18

- (14) ₹ 8,000/- at 10% p.a. interest compounded half yearly will become at the end of one year
- a. ₹ 8,800 b. ₹ 8,820
- c. ₹ 8,900 d. ₹ 9,600

PYQ June 19

- (15) The certain sum of money became ₹ 692 in 2 years and ₹ 800 in 5 years then the principal amount is
- a. ₹ 520 b. ₹ 620
- c. ₹ 720 d. ₹ 820

PYQ June 19

- (16) A sum of money amount to ₹ 6,200 in 2 years and ₹ 7,400 in 3 years as per S.I. then the principal is
- a. ₹ 3,000 b. ₹ 3,500
- c. ₹ 3,800 d. None of these

PYQ June 19

- (17) A sum was invested for 3 years as per C.I. and the rate of interest for first year is 9%, 2nd year is 6% and 3rd year is 3% p.a. respectively. Find the sum if the amount in three years is ₹ 550?
- a. ₹ 250 b. ₹ 300
- c. ₹ 462.16 d. ₹ 350

PYQ June 19

- (18) $P = ₹ 5,000$ $R = 15\%$ $T = 4\frac{1}{2}$ years using
- $$I = \frac{PTR}{100} \text{ then } I \text{ will be}$$
- a. ₹ 3,375 b. ₹ 3,300
- c. ₹ 3,735 d. None of these

PYQ June 19

- (19) The effective rate of interest does not depend upon
- a. Amount of Principal
- b. Amount of Interest
- c. Number of Conversion Periods
- d. None of these

PYQ June 19

- (20) If $P i^2 = ₹ 96$, and $R = 8\%$ compounded annually then $P =$
- a. ₹ 14,000 b. ₹ 15,000
- c. ₹ 16,000 d. ₹ 17,000

PYQ June 19

- (21) In SI if the principal is ₹ 2,000 and the rate and time are the roots of the equation $x^2 - 11x + 30 = 0$ then SI is
- a. ₹ 500 b. ₹ 600
- c. ₹ 700 d. ₹ 800

PYQ Nov. 19

- (22) A man invests ₹ 12,000 at 10% p.a. and another sum of money at 20% p.a. for one year. The total investment earns at 14% p.a. simple interest the total investment is:
- a. ₹ 8,000 b. ₹ 20,000
- c. ₹ 14,000 d. ₹ 16,000

PYQ Nov. 19

- (23) The difference in simple interest of a sum invested of ₹ 1,500 for 3 years is ₹ 18. The difference in their rates is:
- a. 0.4 b. 0.6
- c. 0.8 d. 0.10

PYQ Nov. 19

- (24) Find the effective rate of interest on ₹10,000 on which interest is payable half yearly at 5% p.a.
- a. 5.06% b. 4%
- c. 0.4% d. 3%

PYQ Nov. 19

- (25) Find the effective rate of interest at 10% p.a. when interest is payable quarterly
- a. 10.38% b. 5%
- c. 5.04% d. 4%

PYQ Nov. 19

- (26) What will be the population after 3 years when present population is ₹ 25,000 and population increases at the rate of 3% in 1 year, at 4% in 2nd year and 5% in 3rd year?
- a. ₹ 28,119 b. ₹ 29,118
- c. ₹ 27,000 d. ₹ 30,000

PYQ Nov. 19

- (27) The value of scooter is ₹ 10,000 find its value after 7 years if rate of depreciation is 10% p.a.
- a. ₹ 4,782.96 b. ₹ 4,278.69
- c. ₹ 42,079 d. ₹ 42,000

PYQ Nov. 19

- (28) $SI = 0.125P$ at 10% p.a. Find time.
- a. 1.25 years b. 25 years
- c. 0.25 years d. None of these

PYQ Nov. 19

- (29) Scrap value of a machine valued at ₹10,00,000, after 10 years within depreciation at 10% p.a.:
- a. ₹ 3,48,678.44 b. ₹ 3,84,679.45
- c. ₹ 4,00,000 d. ₹ 3,00,000

PYQ Nov. 19

- (30) The difference between CI and SI for 2 years, is 21. If rate of interest is 5% find principal
- a. ₹ 8,400 b. ₹ 4,800
- c. ₹ 8,000 d. ₹ 8,200