

Compound Interest

Type I: Questions on Yearly

1) What would be the compound interest accrued on an amount of 8000 Rs. at the end of 2 years at the rate of 5 % per annum?

- A) 8920 B) 8820 C) 8780 D) 8810

2) What would be the compound interest accrued on an amount of 6250 Rs. at the end of 2 years at the rate of 8 % per annum?

- A.) 1060 B.) 1040
C.) 1020 D.) 1050

3) There is 60% increase in an amount in 6 years at simple interest. What will be the compound interest of Rs.12,000 after 3 years at the same rate?

- A.) Rs.3972 B.) Rs.2160
C.) Rs.3120 D.) Rs.6240

4) What would be the compound interest accrued on an amount of 12500 Rs. at the end of 3 years at the rate of 10 % per annum?

- A.) 4137.5 B.) 4537.5
C.) 4237. D.) 4337.5

5) Hari lent a sum of Rs.8000 for 20% per annum at compound interest then the sum of the amount will be Rs.13824 is obtained. After how many years he will get that amount?

- A.) 2 years B.) 1 year
C.) 4 years D.) 3 years

6) The Compound interest in a particular amount for the first year at 8% is Rs.50/-.The compound interest for 2 years at the same rate on the amount will be?

- A.) Rs.52/- B.) Rs.104/-
C.) Rs.102/- D.) Rs.54/-

7) What will be compounded interest on a sum of Rs.25,000 after 3 years at the rate of 12 p.c.p.a.?

- A.) Rs.9000.30 B.) Rs.10123.20
C.) Rs.9720 D.) Rs.9820

8) The Compound interest of Rs.10240/- at 6 ¼% per annum for 2 years 292days is:

- A.) Rs.1898/- B.) Rs.1798/-
C.) Rs.1688/- D.) Rs.1698/-

9) What would be the compound interest on Rs.7700/- at 15 ¼% per annum for 2 years compounded annually

- A.) Rs.2725.75/- B.) Rs.2527.57/-
C.) Rs.2227.57/- D.) Rs.2520.57/-

10) Find compound interest on Rs. 8000 at 15% per annum for 2 years 4 months, compounded annually

- A) 2109 B) 3109 C) 4109 D) 6109

11) The Compound interest of Rs.10240/- at 6 ¼% per annum for 2 years 292days is:

- A.) Rs.1898/- B.) Rs.1798/-
C.) Rs.1688/- D.) Rs.1698/-

12) What sum of money at compound interest will amount to Rs 32000 in 3 years at the rate of interest 20% in first years, 16 (2/3)% in second year and 14 (2/7)% in third year.

- A) Rs 18,000 B) Rs 20,000
C) Rs 22,000 D) Rs 25,000 E) None of these

13) At a sum of Rs24000 a man charge C.I at 16(2/3)% rate of interest in 1st year and 14(2/7)% in 2nd year and 12.5% in 3rd year. Find the C.I?

- A) 15000 B) 12000 C) 18000
D) 10000 E) 22000

14) A man lent Rs. 4500 at 30% compound interest per annum for 3 years. What is the difference between the interest earned by the man in the 2nd year only and the interest earned by the man in the 3rd year only?

- A)Rs. 545.5 B)Rs. 502 C)Rs. 526.5
D)Rs. 532 E)Rs. 529

Type II - Half yearly / Quarterly

1) Find the C.I on Rs 20,000 at 10% rate of interest in 2 years if compounded half yearly. (Approximately)

- A) Rs 4210 B) Rs 4310 C) Rs 4410
D) Rs 4510 E) None of these

2) Find the compound interest on Rs. 10,000 in 2 years at 4% per annum, the interest being compounded half-yearly.

- A) 524.32 B) 624.32
C) 724.32 D) 824.32

3) A sum of money lent at compound interest for 2 years at 20% per annum would fetch Rs.482 more, if the interest was payable half yearly than if it was payable annually . The sum is

- A) 10000 B) 20000
C) 40000 D) 50000

4) The difference between the simple interest on a certain sum at the rate of 10%per annum for 2 years and compound interest which is compounded every 6 months is Rs.124.05. what is the principal sum

- A) Rs.6000 B) Rs.8000
C) Rs.12000 D) none of these

5) The effective annual rate of interest corresponding to a nominal rate of 6% per annum payable half-yearly is:

- A) 6.10% B) 6.11%
C) 6.08% D) 6.09%

6) Find the compound interest on Rs. 16,000 at 20% per annum for 9 months, compounded quarterly

- A) 2422 B) 2522 C) 2622 D) 2722

7) Find the compound interest on Rs. 5000 for 9 months at 6% per annum, if the interest is reckoned quarterly.

- A) Rs. 218.98 B) Rs. 228.39
C) Rs. 250.69 D) Rs. 356.50

8) Find the compound interest on Rs. 10,000 at 20% per annum for 6 months. Compounded quarterly.

- A)Rs.4353 B)Rs. 1329
C)Rs. 1025 D)Rs. 2649

- 9) If Rs. 1000 amounts to Rs. 1166.40 in two years compounded annually, Find the rate of interest per annum.
A) 2% p.a B) 4% p.a
C) 6% p.a D) 8% p.a

Type III - Difference

- 1) The simple interest on a certain sum for 2 years at the rate of 5% per annum is Rs.160. What would be the difference of compound interest and simple interest for the same period and at the same rate of interest?
A) Rs.2 B) Rs.10 C) Rs.6
D) Rs.4 E) Rs.8

- 2) The difference between simple interest and compound interest on Rs. 1200 for one year at 10% per annum reckoned half yearly is
A) Rs.2.50 B) Rs.3
C) Rs.4 D) Rs.4.50

- 3) The difference between the compound interest and the simple interest on a certain sum at 12% p.a. for two years is Rs.90. What will be the value of the amount at the end of 3 years?
A) 8560 B) 8673
C) 8746 D) 8780.80

- 4) What is the difference between CI and SI ,if sum is Rs.10,000 for 3 years at the rate of 3%?
A) Rs.42 B) Rs.30
C) Rs.27.27 D) Rs.35 E) Rs.25

- 5) The difference between C.I. and S.I. on a certain sum of money at 10% per annum for 3 years is Rs. 620. Find the principal if it is known that the interest is compounded annually.
A) Rs. 2,00,000 B) Rs. 20,000
C) Rs. 10,000 D) Rs. 1,00,000 E) None

- 6) If the difference between CI and SI earned on a certain amount at 20% pa at the end of 3 years is Rs.640, find out the principal.
A) Rs5500 B) Rs6500
C) Rs4500 D) Rs5000 E) None

- 7) The difference between the simple interest on a certain sum at the rate of 10%per annum for 2 years and compound interest which is compounded every 6 months is Rs.124.05. what is the principal sum
A) Rs.6000 B) Rs.8000
C) Rs.12000 D) none of these

- 8) What is the difference between the compound interests on Rs. 5000 for $1\frac{1}{2}$ years at 4% per annum compounded yearly and half-yearly?
A) 2.04 B) 3.04
C) 4.04 D) 5.04

Type IV – P becomes n times of itself

- 1) Rs.100 doubled in 5 years when compounded annually. How many more years will it take to get another Rs.200 compound interest
A) 3years B) 5years
C) 6years D) 7years

- 2) A sum is being lent at 20 % per annum compound interest. What is the ratio of increase in amount of 4th year to 5th year?
A) 4:5 B) 5:4 C) 5:6 D) can't be determined

- 3) If a principal becomes triple in 3years on C.I. then find in how many years it will be 27 fold?
A) 39years B) 9years C) 18years
D) 27years E) 10years

- 4) A sum of money doubles itself at compound interest in 5 years. In how many years will it become eight times?
A)20 years B)25 years C) 30 years
D) 15 years

- 5) The least number of complete years in which a sum of money put out at 20% compound interest will be more than doubled is:
A) 3 B) 4 C) 5 D) 6

Type V - P becomes A in given period

- 1) If Rs 25 amounts to Rs. 36 in 2 years at CI Find rate of interest.
A) 16% B) 20% C) 15% D)10%

- 2) If Rs 225 amounts to Rs. 256 in 2 years at CI Find rate of interest.
A) 6.25% B) 6% C) 6.66% D) 5%

- 3) If Rs 102400 amounts to Rs. 145800 in 3 years at CI Find rate of interest.
A) 12.5% B) 20% C) 15% D)10%

- 4) Rs 15000 amounts to Rs 25920 in 3 years at r% per annum of compound interest. What is the value of r?
A) 10 B) 15 C) 20 D) 12 E) None

- 5) A sum of money invested at compound interest amounts to Rs. 800 in 3 years and to Rs. 840 in 4 years. The rate of interest per annum is
A) 6% B) 4% C) 5% D) 7%

- 6) A sum becomes 8000 in 3years and 10000 in 6years at C.I. Find the sum ?
A) Rs6400 B) Rs6500 C) Rs6000
D) Rs7000 E) Rs7200

- 7) In what time will Rs 390625 amount to Rs 456976 at 4% compound interest?
A) 4 B) 5 C) 8 D) 6 E) None

- 8) If certain sum of money amounts to Rs. 4500 in 5 years and Rs. 6750 in 10 years at C.I. Find that sum.
A) Rs.3000 B) Rs.6000
C) Rs.8000 D) none of these

9) If certain sum of money amounts to Rs. 650 in 2 years and Rs. 676 in 4 years at C.I. Find that sum.

- A) Rs.325 B) Rs.625
C) Rs.500 D) none of these

10) If certain sum of money amounts to Rs. 8000 in 2 years and Rs. 27000 in 5 years at C.I. Find that sum.

- A) Rs.30000/7 B) Rs.32000/7
C) Rs.32000/9 D) none of these

Type VI – Miscellaneous Examples

1) Divide Rs. 1301 between A and B, so that the amount of A after 7 years is equal to the amount of B after 9 years, the interest being compounded at 4% per annum.

- A) Rs.625 B) Rs.626
C) Rs.286 D) Rs.627

2) Rs. 5887 is divided between Shyam and Ram, such that Shyam's share at the end of 9 years is equal to Ram's share at the end of 11 years, compounded annually at the rate of 5%. Find the share of Shyam.

- A) 3567 B) 3452
C) 3087 D) 3544

3) At a certain rate of interest the compound interest of 3 years and simple interest of 5 years for certain sum of money is respectively Rs. 1513.2 and Rs. 2400. Find the common rate of interest per annum ?

- A) 5% B) 6% C) 4% D) 3%

4) ₹ 6100 was partly invested in Scheme A at 10% pa compound interest (compounded annually) for 2 years and partly in Scheme B at 10% pa simple interest for 4 years. Both the schemes earn equal interests. How much was invested in Scheme A ?

- A) ₹ 3750 B) ₹ 4500
C) ₹ 4000 D) ₹ 3250 E) ₹ 5000

5) What will be compounded amount?

I. Rs. 200 was borrowed for 192 months at 6% compounded annually.

II. Rs. 200 was borrowed for 16 years at 6%.

- A) I alone sufficient while II alone not sufficient to answer
B) II alone sufficient while I alone not sufficient to answer
C) Either I or II alone sufficient to answer
D) Both I and II are not sufficient to answer

Answers:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<u>Type I</u>	A	B	A	A	D	B	B	A	B	B	A	B	B	C
<u>Type II</u>	B	D	B	B	D	B	B	C	D					
<u>Type III</u>	D	B	D	C	B	D	B	A						
<u>Type IV</u>	B	C	B	D	B									
<u>Type V</u>	B	C	A	C	C	A	A	A	B	C				
<u>Type VI</u>	A	C	A	C	C									