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## MATHS

## BOOKS - ARIHANT PUBLICATION JHARKHAND

## SIMPLE INTEREST AND COMPOUND

## INTEREST

Solved Examples

1. The sum required to earn a monthly interest of Rs. 400 at $10 \%$ per annum at simple Interest Is
(a) Rs. 45000
(b) Rs. 48000
(c) Rs. 56000
(d) Rs. 40000
A. Rs. 45000
B. Rs. 48000
C. Rs. 56000

D. Rs. 40000

## Answer: B

## D Watch Video Solution

2. The amount of each instalment will
discharge on debit of Rs. 3220 due In 4 yr at
$10 \%$ simple interest is
(a)Rs. 700
(b)Rs. 1000
(c)Rs. 500
(d)Rs. 900
A. Rs. 700
B. Rs. 1000
C. Rs. 500
D. Rs. 900

Answer: A
( Watch Video Solution
3. The amount and the compound Interest on

Rs. 24000 compounded semi-annually for $1 \frac{1}{2}$
yr at the rate of $10 \%$ per annum are
A. Rs. 27000, Rs. 3774
B. Rs. 27783 , Rs. 3583
C. Rs. 27000, Rs. 3780
D. Rs. 27783, Rs. 3783

Answer: D

D Watch Video Solution
4. The amount and the compound interest on

Rs. 100000 compounded quarterly for 9 months to the rate of $4 \%$ per annum is

A. ₹ 103030.10 , ₹ 3030.10

B. ₹ 103300.10, ₹3030.20
C. ₹ 103030.10 , ₹ 3031.10
D. ₹ 103300.10 , ₹ 3132.20

Answer: A

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5. Calculate the compound interest on Rs.

5000 compounded annually for 2 yr and 6 months at the of $10 \%$ per annum.
A. ₹ 1252.50
B. ₹ 1352.50
C. ₹ 1351.50
D. ₹ 1355.50

Answer: B

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6. The approximate compound interest on Rs.

5000 for 4 yr of the rate of interest Is $10 \%$ per
annum for the first two years and $15 \%$ for the next two years is
(a) ₹ 3001
(b) ₹ 2001
(c) ₹ 5001
(d) ₹ 3021
A. ₹ 3001
B. ₹ 2001
C. ₹ 5001

## D. ₹ 3021

## Answer: A

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## 7. The difference between the compound

interest and the simple interest on a certain
sum at $12 \%$ per annum for 2 yr Is Rs. 90 . The
sum Is equal to
A. ₹ 6260
B. ₹ 6350
C. ₹ 6250
D. ₹ 6255

## Answer: C

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8. Given that carbon: $14\left(\mathrm{C}_{14}\right)$ decays at a constant rate In such a way that it reduces to
$50 \%$ in 5568 yr. Then, the age of an old
wooden piece In which the carbon Is only
$12.5 \%$ of the original Is equal to
A. ₹ 16704
B. ₹ 16705
C. ₹ 16604
D. ₹ 16606

Answer: A
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1. The amount on a sum of Rs. 400 for 3 yr at simple interest at $5 \%$ per annum is
A. ₹ 460
B. ₹ 415
C. ₹ 435
D. ₹ 412

Answer: A

D Watch Video Solution
2. A sum of money at simple interest amount to Rs. 1260 in 2 yr and Rs. 1350 in 5 yr , then the rate per cent per annum is

A. $30 \%$<br>B. $10 \%$<br>C. $2.5 \%$<br>D. $5 \%$

Answer: C

D Watch Video Solution
3. The difference of simple interest of $13 \%$ per annum and $12 \%$ per annum of a sum in 1 yr is Rs. 110 . Then, the sum is

A. ₹ 12000

B. ₹ 13000
C. ₹ 11000
D. ₹ 16000

Answer: C

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4. The simple interest on a sum of money at $10 \%$ per annum for 6 yr is half the sum. Then, the sum is
A. Rs. 5000
B. not possible
C. Rs. 4000
D. Rs. 6000

Answer: B

D Watch Video Solution
5. The simple interest on a sum of money for 3
yr at $6 \frac{2}{3} \%$ per annum is Rs. 6750. The compound interest on the same sum at the same rate of interest for the same period will be
A. Rs. 7200
B. Rs. 7210
C. Rs. 7120
D. Rs. 7012

Answer: B
6. A certain sum lent out at simple interest amounts to Rs. 575 in 3 yr and to Rs. 625 in 5
$y r$. Then, the rate of interest is
A. $3 \%$
B. $5 \%$
C. $4 \%$
D. $7 \%$
7. The simple interest on a certain sum for 3 yr at $4 \%$ per annum is Rs. 48 . The principal is
A. Rs. 550
B. Rs. 500
C. Rs. 450
D. Rs. 400

Answer: D
8. The difference between the simple and the compound interest (compounded annually) on

Rs. 1250 for 2 yr at $8 \%$ per annum will be
A. Rs. 18
B. Rs. 2
C. Rs. 8
D. Rs. 4

# 9. The amount of a certain sum at compound 

 interest for 2 yr at $5 \%$ is Rs. 4410 . The sum isA. Rs. 4000
B. Rs. 4200
C. Rs. 3900

D. Rs. 3800

## Answer: A

10. Consider the following statements. If $a$ money is loaned at simple interest then the money gets doubled in 5 years if the rate of interest is $16 \frac{2}{3} \%$
money gets doubled in 5 years if the rate of interest is $20 \%$
money becomes four times in 10 years if it gets doubled in 5 years of these statements:.
A. I and III
B. Only II

## C. Only III

## D. II and III

Answer: B

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11. If certain sum is doubled in 8 yr on simple interest, in how many years will it be 4 times?
A. 20 yr
B. 12.5 yr

## C. 24 yr

D. None of these

## Answer: C

## D Watch Video Solution

12. A sum of money doubles itself in 10 yr . In
how many years would it triple itself?
A. 20 yr
B. 10 yr

## C. 30yr

D. None of these

## Answer: A

## D Watch Video Solution

13. The sum of money will amount to Rs. 900 in

4 yr at $5 \%$ per annum on simple interest is
A. Rs. 1250
B. Rs. 900
C. Rs. 750
D. None of these

## Answer: C

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14. In what time the simple interest on a sum of money be $\frac{3}{8}$ of the principal with rate of interest $3 \frac{1}{8}$ ?
A. 12 yr
B. $25 / 8 \mathrm{yr}$
C. 5 yr .
D. 15 yr

Answer: A

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15. Out of a sum of Rs. 625 , a part was lent at $5 \% \mathrm{SI}$ and the other at $10 \% \mathrm{SI}$. If the interest on the first part after 2 years is equal to the
interest on the second part after 4 years, then
the second sum (in Rs.) is :
A. Rs. 500
B. Rs. 625
C. Rs. 125
D. None of these

Answer: C
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16. A sum was put at simple interest at a certain rate for $2 y$. If the sum had been put at 3\% higher rate, it would have fetched Rs. 72 more. The sum is
A. Rs. 7200
B. Rs. 1200
C. Rs. 300
D. None of these

Answer: B
17. The compound interest on Rs. 2000 for 1 yr
at the rate of $8 \%$ per annum, when the interest is compounded semi-annually is
A. Rs. 163.20
B. Rs. 2163.20
C. Rs. 2000
D. None of these

Answer: A
18. The amount that Ram will pay on Rs. 8000 at the rate of $10 \%$ per annum compounded half-yearly for $1 \frac{1}{2} \mathrm{yr}$ is
A. Rs. 9261
B. Rs. 8000
C. Rs. 4200
D. None of these

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19. A certain sum invested at $4 \%$ per annum compounded semi-annually amounts to Rs.

7803 at the end of 1 yr . Then, the sum is
A. Rs. 7803
B. Rs. 7500
C. Rs. 261
D. Rs. 10935
20. Rs. 16000 invested at $10 \%$ per annum compounded semi-annually amounts to Rs.
18522. The period of investment is
A. 16 yr
B. 3 yr
C. $1 \frac{1}{2} \mathrm{yr}$
D. 2 yr
21. Nagma invested Rs. 6000 in a company at compound interest compounded semiannually. She receives Rs. 7986 after 18 months
from the company, the rate of interest per annum.is
A. $10 \%$
B. $12 \%$
C. $11 \%$

## D. $20 \%$

## Answer: D

## D Watch Video Solution

22. A sum of Rs. 25000 invested at $8 \%$ per annum compounded semi-annually amounts to Rs. 28121.60, Then, the time period is
A. 12 yr
B. 1 yr
C. $1 \frac{1}{2} \mathrm{yr}$
D. None of these

## Answer: C

## D Watch Video Solution

23. A sum of $R s .3,200$ invested at $10 \%$ p.a.
compounded quarterly amounts to $R s .3,362$.

Compute the time period.

$$
\text { A. } \frac{1}{2} \mathrm{yr}
$$

B. 1 yr
C. $\frac{3}{4} \mathrm{yr}$
D. None of these

Answer: A

## D Watch Video Solution

## 24. A sum amount to Rs. 9680 in 2 yr and to Rs.

10648 in 3 yr compounded annually, Then, the
sum and rate of interest respectively are
A. Rs. 8000, 3\%
B. Rs. $8000,10 \%$
C. Rs. 9000, 10\%
D. Rs. 1064.8, 10\%

Answer: B

D Watch Video Solution
25. If the value of a machine depreciates by
$10 \%$ of its value at the beginning of the year
and its present value is estimated as Rs. 10935,
then its value 3 yr ago was
A. Rs. 15000
B. Rs. 12000
C. Rs. 11000
D. None of these

Answer: A
( Watch Video Solution

