

Question	A sum of money at simple interest amounts to Rs. 815 in 3 years and to Rs. 854 in 4 years. The sum is:	
Type	multiple_choice	
Option	4500	incorrect
Option	5110	incorrect
Option	5600	incorrect
Option	6400	correct
Solution	<p>Let the sum invested in Scheme A be Rs. x and that in Scheme B be Rs. (13900 - x).</p> <p>Then,</p> $(x * 14 * 2) / 100 + \{(13900 - x) * 11 * 2\} / 100 = 3508$ $28x - 22x = 350800 - (13900 * 22)$ $6x = 45000$ $x = 7500.$ <p>So, sum invested in Scheme B = Rs. (13900 - 7500) = Rs. 6400.</p>	
Marks	1	0

Question	How much time will it take for an amount of Rs. 450 to yield Rs. 81 as interest at 4.5% per annum of simple interest?	
Type	multiple_choice	
Option	3yrs	incorrect
Option	4yrs	correct
Option	2yrs	incorrect
Option	2.5yrs	incorrect
Solution	Time = $(100 * 81) / (450 * 4.5) = 4$ yrs	
Marks	1	0

Question	Rita took a loan of Rs. 1200 with simple interest for as many years as the rate of interest. If she paid Rs. 432 as interest at the end of the loan period, what was the rate of interest?	
Type	multiple_choice	
Option	5	incorrect
Option	10	incorrect
Option	12	incorrect
Option	6	correct
Solution	<p>Let rate = R% and time = R years.</p> <p>Then,</p>	

	$\frac{(1200 \times R \times R)}{100} = 432$ 100 $12R^2 = 432$ $R^2 = 36$ $R = 6.$	
Marks	1	0

Question	An automobile financier claims to be lending money at simple interest, but he includes the interest every six months for calculating the principal. If he is charging an interest of 10%, the effective rate of interest becomes:	
Type	multiple_choice	
Option	10.25%	correct
Option	10%	incorrect
Option	7%	incorrect
Option	8%	incorrect
Solution	<p>Let the sum be Rs. 100. Then,</p> <p>S.I. for first 6 months = Rs. $(100 \times 10 \times \frac{1}{100 \times 2})$ = Rs. 5</p> <p>S.I. for last 6 months = Rs. $(105 \times 10 \times \frac{1}{100 \times 2})/100$ = Rs. 5.25</p> <p>So, amount at the end of 1 year = Rs. $(100 + 5 + 5.25)$ = Rs. 110.25</p> <p>So, Effective rate = $(110.25 - 100) = 10.25\%$</p>	
Marks	1	0

Question	A lent Rs. 5000 to B for 2 years and Rs. 3000 to C for 4 years on simple interest at the same rate of interest and received Rs. 2200 in all from both of them as interest. The rate of interest per annum is:	
Type	multiple_choice	
Option	8%	inorrect
Option	17%	incorrect
Option	20%	correct
Option	10%	incorrect
Solution	<p>Let the rate be R%.</p> <p>Then,</p> $(5000 \times R \times \frac{2}{100}) + (3000 \times R \times \frac{4}{100}) = 2200.$ $100R + 120R = 2200$ $R = 10.$ <p>Rate = 10%. Ans</p>	
Marks	1	0

Question	A sum of Rs. 725 is lent in the beginning of a year at a certain rate of interest. After 8 months, a sum of Rs. 362.50 more is lent but at the rate twice the former. At the end of the year, Rs. 33.50 is earned as interest from both the loans. What was the original rate of interest?	
Type	multiple_choice	
Option	2	incorrect
Option	3	incorrect
Option	4	incorrect
Option	3.46	correct
Solution	<p>Let the original rate be R%. Then, new rate = (2R)%.</p> <p>Note: Here, original rate is for 1 year(s); the new rate is for only 4 months i.e. 1/3year(s).</p> $(725 * R * 1/100) + (362.50 * 2R * 1/100 * 3) = 33.50$ $(2175 + 725) R = 33.50 \times 100 \times 3$ $(2175 + 725) R = 10050$ $(2900)R = 10050$ $R = 10050/2900 = 3.46$ <p>Original rate = 3.46% Ans</p>	
Marks	1	0

Question	A sum of money amounts to Rs. 9800 after 5 years and Rs. 12005 after 8 years at the same rate of simple interest. The rate of interest per annum is:	
Type	multiple_choice	
Option	12%	correct
Option	9%	incorrect
Option	8%	incorrect
Option	10%	incorrect
Solution	<p>S.I. for 3 years = Rs. (12005 - 9800) = Rs. 2205.</p> <p>S.I. for 5 years = Rs. (2205 * 5/3) = Rs. 3675</p> <p>Principal = Rs. (9800 - 3675) = Rs. 6125.</p> <p>Hence, rate = $(100 \times 3675 / 6125 \times 5)\%$ = 12% Ans</p>	
Marks	1	0

Question	What will be the ratio of simple interest earned by certain amount at the same rate of interest for 6 years and that for 9 years?	
Type	multiple_choice	
Option	1:2	incorrect
Option	1:5	incorrect
Option	2:3	correct

Option	3:4	incorrect
Solution	Let the principal be P and rate of interest be R%. Required ratio $= (P \times R \times 6/100) / (P \times R \times 9/100) = 6PR/9PR = 2 : 3$. Ans	
Marks	1	0

Question	A certain amount earns simple interest of Rs. 1750 after 7 years. Had the interest been 2% more, how much more interest would it have earned?	
Type	multiple_choice	
Option	Cannot be determined	correct
Option	630	incorrect
Option	620	incorrect
Option	650	incorrect
Solution	We need to know the S.I., principal and time to find the rate. Since the principal is not given, so data is inadequate.	
Marks	1	0

Question	A person borrows Rs. 5000 for 2 years at 4% p.a. simple interest. He immediately lends it to another person at $6\frac{1}{4}\%$ p.a for 2 years. Find his gain in the transaction per year.	
Type	multiple_choice	
Option	Rs.102.50	incorrect
Option	Rs.912.50	incorrect
Option	Rs.110	incorrect
Option	Rs.112.50	correct
Solution	Gain in 2 years = $\text{Rs.}(5000 \times 25/4 \times 2/100) - (5000 \times 4 \times 2/100)$ = Rs. (625 - 400) = Rs. 225. Gain in 1 year = $\text{Rs.}(225/2) = \text{Rs. } 112.50$	
Marks	1	0

Question	A sum of money becomes $\frac{7}{6}$ of itself in 3 years at a certain rate of simple interest. The rate per annum is:	
Type	multiple_choice	
Option	$5\frac{5}{9}\%$	correct
Option	5 %	incorrect
Option	4 %	incorrect
Option	6%	incorrect
Solution	Let Sum = x Amount = $\frac{7}{6}x$ Simple Interest = Amount - Sum = $\frac{7}{6}x - x$ = $x/6$	

	Time = 3years $\therefore \text{Rate} = 100 \times \frac{x}{x \times 6 \times 3\%} = 5(5/9)\%$	
Marks	1	0

Question	A sum of Rs 10,000 is lent partly at 8% and remaining at 10% per annum . If the yearly interest on the average is 9.2%, the two parts are:	
Type	multiple_choice	
Option	3000,7000	incorrect
Option	5000,5000	incorrect
Option	2000,8000	incorrect
Option	4000,6000	correct
Solution	<div style="display: flex; justify-content: space-around;"> 8% 10% </div> <div style="text-align: center; margin-top: 10px;"> 9.2% </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> (10-9.2)%. (9.2-8)% </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> 2 : 3 </div> <div style="margin-top: 10px;"> 5units = 10,000 2units = 4000 3units = 6000 </div>	
Marks	1	0

Question	A sum of Rs 1550 was lent partly at 5% and partly at 8% simple interest. The total interest received after 3 years is Rs 300. The ratio of money lent at 5% to that at 8% is:	
Type	multiple_choice	
Option	16:15	correct
Option	14:15	incorrect
Option	11:12	incorrect

Marks	1	0
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Question	A money lender finds that due to a fall in the annual rate of interest 8% to $31\frac{1}{4}\%$, his yearly income diminishes by Rs 61.50. His capital is	
Type	multiple_choice	
Option	24600	correct
Option	24000	incorrect
Option	25600	incorrect
Option	23600	incorrect
Solution	<p>Let his capital be Rs.M</p> <p>Initial simple interest = $(M \times 1 \times 8)/100$</p> <p>New simple interest = $\{M \times (31/4) \times 1\}/100$</p> <p>According to question,</p> $-\{(M \times 8 \times 1)/100\} - \{M \times (31/4) \times 1\}/100 = 61.50$ $= 32M - 31M = 61.5 \times 400$ $M = 24600 \text{ Ans}$	
Marks	1	0

Question	A person borrows some money for 5 years and loan amount : total interest amount = 5:2. The ratio loan amount: interest rate is equal to	
Type	multiple_choice	
Option	25:3	incorrect
Option	25:4	incorrect
Option	22:5	incorrect
Option	25:2	correct
Solution	<p>Loan Amount:Total Interest => 5:2</p> <p>Principal→5</p> <p>Interest for 1 year⇒2</p> <p>Interest for 5 year⇒10</p> $10 = (5 \times R \times 5/100)$ $R\% = 40\% = 40/100 = 2/5$ <p>A/Q</p> $P:R = 5:2/5 = 25:2 \text{ Ans}$	
Marks	1	0

Question	An old article is available for Rs 12000 at cash payment or is available for Rs Rs 7000 cash payment and a monthly installment of Rs 630 for 8 months. The rate percent per annum is	
Type	multiple_choice	
Option	1.2%	correct
Option	3.2%	incorrect

Option	2.2%	incorrect
Option	2%	incorrect
Solution	Interest paid = $7000 + 630 \times 8 - 12000 = \text{Rs.}40$ A/Q $40 = 5000 \times r \times (8/12) / 100$. ———>(Interest formula) $r = 1.2\%$ Ans	
Marks	1	0

Question	A person invests money in three different schemes for 6 years, 10 years and 12 years at 10%, 12% and 15% simple interest respectively. At the completion of each scheme, he gets the same interest, the ratio of his investment is:	
Type	multiple_choice	
Option	6:3:2	correct
Option	6:4:1	incorrect
Option	2:3:5	incorrect
Option	7:2:3	incorrect
Solution	Suppose the amounts invested in three schemes are x, y and z respectively $x \times 6 \times 10 = y \times 10 \times 12 = z \times 12 \times 15$ $60x = 120y = 180z$ $x = 2y = 3z$ LCM(1,2,3) = 6 Let, $x = 2y = 3z = 6k$ $= x = 6k, y = 3k$ and $z = 2k$ Hence, $x:y:z = 6:3:2$	
Marks	1	0

Question	In how many years will a sum of money double itself at 12% per annum?	
Type	multiple_choice	
Option	9 years 4 months	incorrect
Option	8 years 4 months	correct
Option	8 years	incorrect
Option	9 years	incorrect
Solution	Let sum = x After t year it double then interest = x Rate of interest = 12% Hence, Time = $x \times 100 / x \times 12 = 8$ years 4 months	
Marks	1	0

Question	If $3A = 4B = 5C$, then A:B:C is equal to:	
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Type	multiple_choice	
Option	20:17:18	incorrect
Option	20:15:12	correct
Option	16:15:12	incorrect
Option	20:12:15	incorrect
Solution	Given $3A = 4B = 5C$ Let $3A=4B=5C=K$ $A=K/3, B=K/4, C=K/5$ $LCM(3,4,5)=60$ $A=60K/3, B= 60K/4, C= 60K/5$ $A:B:C= 20:15:12$ ANS	
Marks	1	0

Question	If the simple interest on rs x at a rate of a% for m years is same as that on Rs y at rate of $a^2\%$ for m^2 years, then x: y is	
Type	multiple_choice	
Option	$m^2:a^2$	incorrect
Option	m:a	correct
Option	$1/m:1/a$	incorrect
Option	$m^2:a$	incorrect
Solution	A/Q $x \cdot m \cdot a / 100 = y \cdot m^2 \cdot a^2 / 100$ $X/y = m^2 \cdot a^2 / ma = ma$	
Marks	1	0

Question	The principal which gives % 1 interest per day at a rate of 5% simple interest per annum is	
Type	multiple_choice	
Option	Rs 7200	incorrect
Option	Rs 7300	correct
Option	Rs 7000	incorrect
Option	Rs 6300	incorrect
Solution	$SI = P \times R \times T / 100$ $1 = P \times 5 \times (1/365) / 100$ $p = Rs 7300$	
Marks	1	0

Question	Ram deposited a certain sum of money in a compound at 12% per annum	
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	simple interest for 4 yr and deposited equal amount in fixed deposit in a bank for 5 yr at 15% per annum simple interest. If the difference in the interest from two sources is Rs 1350, then the sum deposited in each case is	
Type	multiple_choice	
Option	Rs 6000	incorrect
Option	Rs 5000	correct
Option	Rs 7000	incorrect
Option	Rs 4000	incorrect
Solution	$r_1 = 12\%$, $t_1 = 4\text{yr}$, $r_2 = 15\%$, $t_2 = 5\text{yr}$ Let principle p A/Q $(p \cdot 15 \cdot 5 / 100) - (p \cdot 12 \cdot 4 / 100) = \text{Rs}(1350)$ $P/100(75-48)=1350$ $p = \text{Rs}(5000)$ Ans	
Marks	1	0

Question	The ratio of the principal and its yearly amount is 8 : 9. What is the rate of simple interest per annum?	
Type	multiple_choice	
Option	15%	incorrect
Option	12.5%	correct
Option	16%	incorrect
Option	20%	incorrect
Solution	Principal = $8x$ Amount = $9x$ Interest = $9x - 8x = x$ $\% \text{Rate} = x \cdot 100 / 8x \cdot 1 = 25/2\%$	
Marks	1	0

Question	Rakesh invests ₹12000 as fixed deposit at a bank at the rate of 10% per annum SI. But due to some pressing needs he has to withdraw the entire money after 3 years. for which the bank allowed him a lower rate of interest. If he gets ₹3320 less than what he would have got at the end of 5 years. the rate of interest allowed by the bank is	
Type	multiple_choice	
Option	7(5/9)%	incorrect
Option	7(4/9)%	correct

Option	7%	incorrect
Option	5%	incorrect
Solution	<p>Interest paid by the person in 5 years = $\text{Rs}(12000 \times 10 \times 5 / 100) = \text{Rs. } 6000$</p> <p>Interest received by the person after 3 years $\Rightarrow \text{Rs. } (6000 - 3320) = \text{Rs. } 2680$</p> <p>By using formula, $\text{Rate\%} = 2680 / 12000 \times 100 / 3$ $= 67 / 9\% = 7(4/9)\%$ Ans</p>	
Marks	1	0