

2007 MBA - MATHEMATICS MODEL QUESTION PAPER

TIME - 3HOUR

MARK - 100

Question 1 of 25

compound interest on Rs. 480 at $16\frac{2}{3}\%$ per annum for $2\frac{3}{4}$ years is:

1. Rs. 260
2. Rs. 252
3. Rs. 255
4. Rs. 263.33

Mark for revision | Unmark

Question 2 of 25

Dhiraj invests a part of Rs. 8000 at 4% p.a. & the remainder at 5% per year. His annual income from the investments is Rs. 350. How much has he invested at each rate? (in rupees)

1. 3000, 4000
2. 5000, 3000
3. 3000, 5000
4. 4500, 5000

Mark for revision | Unmark

Question 3 of 25

A sum of Rs. 2600 is lent in two parts in such a way that the interest on one part at 10% for 5 years is equal to that on another part at 9% for 6 years. The sum lent out at 10% is :

1. Rs. 1250
2. Rs. 1350
3. Rs. 1150

4. Rs. 1450

Mark for revision | Unmark

Question 4 of 25

The simple interest on a sum of money for 2 years is Rs. 100 and the compound interest on the same sum at the same rate for the same time is Rs. 104. The rate of interest is:

1. 2% p.a.

2. 11/13% p.a.

3. 4% p.a.

4. 8% p.a.

Mark for revision | Unmark

Question 5 of 25

Ram's capital exceeds Shyam's capital by of Shyam's capital. Shyam invests his capital at C.I. for 3 years at 5% per annum. At what rate % per annum at S.I. must Ram invest his capital in order that at the end of 3 years, the two amounts are the same?

1. 1.67

2. 1.37

3. 2.21

4. None of these

Mark for revision | Unmark

Question 6 of 25

A owes B Rs. 456.75 payable 4 months hence and B owes A Rs. 455.51 payable 3 months hence. If they agree to settle their account by a ready money payment, what sum should be paid over and to whom, reckoning the rate of true discount at 4 percent per annum?

1. Rs. 2 paid to A

2. Rs. 1 paid to A

3. Rs. 2.5 paid to B

4. Rs. 3 paid to B

Mark for revision | Unmark

Question 7 of 25

A certain sum is invested for certain time. It amounts to Rs. 80 at 5% per annum. But when invested at 2% per annum, it amounts to Rs. 40. Find the sum and the time?

1. Rs. 26.67, 100 years

2. Rs. 13.33, 50 years

3. Rs. 13.33, 100 years

4. Rs. 21.33, 100 years

Mark for revision | Unmark

Question 8 of 25

Raghav obtains Rs. 1100 after lending out Rs. x at 5% per annum for 2 years and obtains Rs. 1800 after lending out Rs. y at 10% per annum for 2 years. Find the value of $x + y$?

1. Rs. 2100

2. Rs. 2200

3. Rs. 2500

4. Rs. 2600

Mark for revision | Unmark

Question 9 of 25

If the difference between compound interest and simple interest on a certain amount, for two years is Rs. 7.35, find the principal, if the rate of interest is 7%?

1. Rs. 1500

2. Rs. 1200

3. Rs. 1480

4. Rs. 620

Mark for revision | Unmark

Question 10 of 25

A sum of money at compound interest amounts in two years to Rs. 3630, and in three years to Rs. 3993. Find the original sum?

1. Rs. 3000
2. Rs. 2500
3. Rs. 2800
4. Rs. 3200

Mark for revision | Unmark

Question 11 of 25

The simple interest on a certain sum of money for 4 years at 4 per cent per annum lags the compound interest on the same sum for 2 years at 10 per cent, per annum by Rs. 60. Find the sum?

1. Rs. 1400
2. Rs. 1200
3. Rs. 1500
4. None of these

Mark for revision | Unmark

Question 12 of 25

The C.I. and simple interest on certain sum for 2 years are respectively Rs. 41 & Rs. 40. Find the sum & rate per cent?

1. Rs. 400, 5%
2. Rs. 450, 3%
3. Rs. 500, 4%
4. None of these

Mark for revision | Unmark

Question 13 of 25

Divide Rs. 3903 between A & B such that A's share at the end of 7 years is equal to B's share at the end of 9 years at 4% p.a. rate of compound interest?

1. Rs. 2233, 1670

2. Rs. 2125, 1778

3. Rs. 2075, 1828

4. Rs. 2028, 1875

Mark for revision | Unmark

Question 14 of 25

Simple interest on a certain sum at a certain rate is $\frac{9}{16}$ of the sum. If the number representing rate percent and time in years be equal, then find the rate?

1. $7\frac{1}{2}\%$

2. 7%

3. 8%

4. 8.5%

Mark for revision | Unmark

Question 15 of 25

A sum of money is invested at compound interest payable annually. The interest in successive years was Rs. 225 and Rs. 238.50. Find the rate % p.a.?

1. 5%

2. 6.5%

3. 5.5%

4. 6%

Mark for revision | Unmark

Question 16 of 25

Nishit deposited a certain sum of money in a post office at 10% p.a. for 4 years & deposited an equal amount in a fixed

deposit in a bank for $5\frac{1}{2}$ years at 11% p.a. If the difference in the interest from the two sources is Rs. 563.75, find the sum deposited.

1. Rs. 2250
2. Rs. 2450
3. Rs. 2550
4. Rs. 2750

Mark for revision | Unmark

Question 17 of 25

A sum of money lent out at simple interest amount to Rs. 680 after 3 years and to Rs. 980 after a further period of 5 years. Find the rate %?

1. 8.5 %
2. 8 %
3. 7.8%
4. 12%

Mark for revision | Unmark

Question 18 of 25

Out of a certain sum, is invested at 4%, th at 5% and the rest at 10%. If the simple interest for 3 years from all these investments amounts to Rs. 900, find the original sum?

1. Rs. 5000
2. Rs. 5100
3. Rs. 4500
4. Rs. 4900

Mark for revision | Unmark

Question 19 of 25

Amit invested two equal sums of Rs. 5000 for 2 years at 10% C.I. – one at C.I. payable yearly and other at C.I. payable half yearly. Find the difference in amounts that he will get at the end of 2 years.

1. Rs. 23.50
2. Rs. 24.50
3. Rs. 25.50
4. Rs. 27.50

Mark for revision | Unmark

Question 20 of 25

Mr. X invested a sum at C.I. pay payable half yearly in May and November. If the C.I. in November, 2003 was Rs. 225 and in May 2004 it was Rs. 236.25, then find the annual rate of interest?

1. 7%
2. 8%
3. 9%
4. 10%

Mark for revision | Unmark

Question 21 of 25

A tractor is sold for Rs. 450000 cash or Rs. 150000 cash down payments together with ten equal monthly installments of Rs. 32000 each. Find the rate of interest charged under the investment plan.

1. 12.38%
2. 13.38%
3. 14.38 %
4. 15.38%

Mark for revision | Unmark

Question 22 of 25

A lent B Rs. 900 for a certain time at a certain rate percent per annum, which is equal to the square root of the number of the months of the time. After the time B wanted to return the money, but A instead of taking the interest which amounted to Rs. 48 asked for a certain sum of money at the same rate for a certain number of years which is equal to the square root of the rate percent. Find the sum of money so that none of them should be the loser? (Take simple

interest)

1. Rs. 620
2. Rs. 540
3. Rs. 600
4. Rs. 580

Mark for revision | Unmark

Question 23 of 25

A sum of money is accumulating at compound interest at a certain rate of interest. If simple interest instead of compound were reckoned, the interest for the first two years would be diminished by Rs. 20 and that for the first three years, by Rs. 61. Find the sum.

1. Rs. 7500
2. Rs. 7000
3. Rs. 6500
4. Rs. 8000

Mark for revision | Unmark

Question 24 of 25

Raghav has to repay a loan of Rs. 12,820 in three annual payments; the first payment being half of the second and one third of the third. If the C.I. is calculated annually at rate of 10%, then find the value of the third payment that Raghav has to make?

1. 5324
2. 6934
3. 7986
4. 8986

Mark for revision | Unmark

Question 25 of 25

A certain sum of money when deposited in a post-office, becomes $\frac{7}{5}$ of itself in 8 years. An equal sum deposited in a

fixed deposit in a bank doubles itself in $12\frac{1}{2}$ years. Which of the two agencies the post office or the bank gives a better rate of interest?

1. the bank
2. the post
3. both are equal
4. cannot say

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