2007 MBA - MATHEMATICS MODEL QUESTION PAPER

TIME – 3HOUR

MARK - 100

Question 1 of 25

A sum of money is invested at compound interest at a certain rate percent. If simple interest at the same rate is calculated, the interest for the first two years would be diminished by Rs. 20 & that for the first three years by Rs. 61. Find the rate percent.

1. 5

2. 10

3. 7

4. 3

Mark for revision | Unmark
Question 2 of 25

A debt of Rs. 800 is due in 4 years. What would have been the annual payment, at the rate of interest 10% P.A. that would discharge this debt?

1. 190

2. 130

3. 150

4. 200

Mark for revision | Unmark
Question 3 of 25

A father left a will of Rs.35 lakhs between his two daughters aged 8.5 and 16 such that they may get equal amounts when each of them reach the age of 21 years. The original amount of Rs.35 lakhs has been instructed to be invested at 10% p.a. simple interest. How much did the elder daughter get at the time of the will?

1. Rs. 17.5 lakhs

2. Rs. 21 lakhs

3. Rs. 15 lakhs

4. Rs. 20 lakhs

Mark for revision | Unmark
Question 4 of 25

Ritesh deposited Rs. 8,000 in State Bank of India. But he had to pay 10% of the first year's interest as his college fees, after which Rs. 900 of the interest left. Calculate the rate percent at which interest was paid.

1. 13.5%

2. 12.5%

3. 10%

4. 11.5%

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Question 5 of 25

Mr. Khanna is a big industrialist. He pays 10% p. a interest on his loan while charges 12% p.a as interest from it's borrowers. If at the end of the year, he earns Rs. 2.4 crores at SI in the transaction, how much money was transacted in business?

1. Rs. 480 crores

2. Rs. 240 crores

3. Rs. 120 crores

4. Rs. 60 crores

Mark for revision | Unmark
Question 6 of 25

Rajat's four annual salary increases of Rs. 3600 each & Mangat's two salary increases of Rs. 7200 each at 2 years intervals were placed in saving account earning 6% simple interest. Rajat received his first increase on March 1, 1997, Mangat received on March1, 1998. After receiving their increase on March 1, 2000, the total amount hold by Rajat as compared with Mangat's total is:

1. The same

2. Rs. 216 less

3. Rs. 432 more

4. Rs. 216 more

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Question 7 of 25
Five years after purchasing the value of a bike is Rs. 2000. Two years ago, its value was Rs. 4000.

The approximate value of bike when it was new.

1. Rs. 8000

2. Rs. 1500

3. Rs. 15,000

4. Rs. 10,000

Mark for revision | Unmark
Question 8 of 25

The Compound Interest on a certain sum for 2 years is Rs. 648 and the Simple interest is Rs. 600. Find the annual rate of interest.

1. 10%

2. 127%

3. 16%

4. 14%

Mark for revision | Unmark
Question 9 of 25
Five years after purchasing the value of a bike is Rs. 2000. Two years ago, its value was Rs. 4000.
Find the decay factor (assume it to be constant).

1. 0.707

2. 1.709%

3. 7.07%

4. 0.0707 %

Mark for revision | Unmark
Question 10 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. The rate of interest is 7%

1. Rs.1500

2. Rs.1200

3. Rs.1400

4. None of these

Mark for revision | Unmark
Question 11 of 25

A sum of money is lent at 8% Compound interest. If the interest for the second year exceeds that for the first year by Rs.32, find the sum lent.

1. Rs.4000

2. Rs.8000

3. Rs.5000

4. Rs.6000

Mark for revision | Unmark
Question 12 of 25
On what sum will the difference between simple & compound interests for 3 years at 5% p.a amount to Rs.12.20?

1. Rs.1200

2. Rs.1500

3. $Rs.1600

4. Rs.2000

Mark for revision | Unmark
Question 13 of 25
A sum of money put out at compound interest amounts in 2 years to Rs.578.40 and in 3 years to Rs.614.55. Find the rate of interest.

1. 5%

2. 4%

3. 6.25%

4. 3.5%

Mark for revision | Unmark
Question 14 of 25

If the compound interest on a certain sum for 2 years at 3 p.c. be Rs.101.50, what would be the simple interest

1. Rs.200

2. Rs.90

3. Rs.95

4. Rs.100

Mark for revision | Unmark
Question 15 of 25

A man borrows money at simple interest at a rate of 5% per annum and lends it out at 4% pa. Compound interest payable half yearly. Find his net gain or loss at the end of 2 years as a percentage of sum borrowed by him.

1. 1.76%gain

2. 1.76%loss

3. 2%loss

4. 2%gain

Mark for revision | Unmark
Question 16 of 25

Find the sum that earns an interest of Rs. 2128 in 2 years 4 months at 4% p.a. after deducting income tax at 5p in the rupee.

1. Rs. 24000

2. Rs. 12000

3. Rs. 36000

4. Rs. 10000

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Question 17 of 25

At a certain rate of simple interest Rs. 700 in 2 years amount to Rs. 840. If the rate of interest be increased by 2%, what will be the amount after 3 years?

1. Rs. 1056

2. Rs. 860

3. Rs. 940

4. Rs. 952

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Question 18 of 25

A lent Rs. 600 to B for 2 years and Rs. 150 to C for 4 years and received altogether from both Rs. 90 as simple interest. The rate of interest is :

1. 12%

2. 4%

3. 5%

4. 10%

Mark for revision | Unmark
Question 19 of 25

A certain sum of money at simple interest amounts to Rs. 1260 in 2 years and to Rs. 1350 in 5 years. The rate percent per annum is :

1. 2.5 %

2. 3.75%

3. 5%

4. 7.5%

Mark for revision | Unmark
Question 20 of 25

What annual payment will discharge a debt of Rs. 580 due in 5 years, the rate being 8% per annum?

1. Rs. 166.40

2. Rs. 65.60

3. Rs. 100

4. Rs. 120

Mark for revision | Unmark
Question 21 of 25
A man invested 1/4 of his capital at 5%; 1/3 at 6% and the remainder at 7%. If his annual income is Rs. 370; the capital is

1. Rs. 5400

2. Rs. 6000

3. Rs. 7000

4. Rs. 6200

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Question 22 of 25

If the interest on Rs. 1200 be more than the interest on Rs. 1000 by Rs 50 in 3 years, the rate percent is :

1. 10 1/3 %

2. 6 2/3 %

3. 8 1/3 %

4. 9 2/3 %

Mark for revision | Unmark
Question 23 of 25
The simple interest at x/2 % for x years will be Rs. 2x on a sum of :

1. Rs. 4x

2. Rs 400x

3. Rs(400/x)

4. Rs. (400/x2)

Mark for revision | Unmark
Question 24 of 25
A sum of money amounts to Rs. 767 in 3 years and Rs. 806 in 4 years. The sum is :

1. Rs. 600

2. Rs. 650

3. Rs.700

4. Rs. 675

Mark for revision | Unmark
Question 25 of 25

A sum was put at simple interest at a certain rate for 4 years. Had it been put at 5% higher rate, it would have fetched Rs.200 more. Find the sum.

1. Rs 1000

2. Rs 1100

3. Rs 1200

4. None of these