MATHS

BOOKS - CALCUTTA BOOK HOUSE

MATHS (BENGALI ENGLISH)

SIMPLE INTEREST

Multiple Choice Questions Mcq

1. A principal amounta double in 20 years at a certain rate of simple interest. At the same

rate of interest the principal amounts triple in-

A. 30 years

B. 33 years

C. 40 years

D. 45 years

Answer:

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2. If principal amounts double in 10 years, then the rate of yearly simple interest is

A. $5\ \%$

B. $10\ \%$

C. $15\ \%$

D. $20\ \%$

Answer:

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3. The total interest of any principal is Rsx in x years at the rate of yearly simple interest $x\ \%$. Then the principal is

A. Rsx

B. $Rs100x$

C. $Rs\frac{100}{x}$

D. $Rs\frac{100}{x^2}$

Answer:

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4. The total interest of a principal of $Rs2000$ in 18 months at the rate of yearly simple interest $6\ \%$ is

A. $Rs120$

B. $Rs180$

C. $Rs216$

D. $Rs260$

Answer:

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5. If the total interest of a principal in 6years be 30% of the principal , then the total interest will be equal to the principal in

A. 10 years

B. 20 years

C. 22 years

D. 30 years

Answer:

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6. At what rate of simple interest in percent per annum , a some of money becomes double in 15 years?

A. $5\frac{1}{2}\%$

B. 6%

C. $6\frac{2}{3}\%$

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

Answer:

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7. If a principal of $Rs2000$ becomes $Rs2600$ in 5 years, then in the same period of time at a 3% increased rate of simple interest , the same principal becomes

A. $Rs2900$

B. $Rs3200$

C. $Rs3600$

D. $Rs4000$

Answer:

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8. In how many years $Rs350$ will become $Rs420$ at a rate of $5\,\%$ simple interest per annum?

A. 4 years

B. 5years

C. 3 years

D. 6 years

Answer:

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9. If the simple interset of $Rs750$ in 3 months be $Rs22.50$, then the rate of interest in percent per annum is

A. $10\ \%$

B. $12\ \%$

C. $15\ \%$

D. $17\ \%$

Answer:

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Very Short Answer Type Questions

1. If the rate of simple interest per annum be $6\,\%$, then find the simple interest of $Rs3500$ from $5th$ January $31st$ March 1954.

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2. If the rate of simple interest per annum decreases from 4% to $3\frac{3}{4}\%$, then the yearly income of a person decreases by $60Rs$. Find the principal of that person.

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3. Determine the total amount of $Rs5000$ at the rate of $7\frac{1}{2}\%$ simple interest per annum is 5 years.

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4. If the interest of a principal in 2 years be $\frac{1}{8}$ of it, then find the rate of simple interest per annum.

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5. At what rate of simple interest in percent per annum, the ratio of principal and its interest after 20 years is $1:1$?

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6. The interest given or received for a certain period of time on certain amount of principal is called "Total interest".

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7. In return to the right of using the creditor's money for a short time, according to condition, the debtor gives him some extra money. This money is known as Rate of interest.

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8. A man who gives a loan is called _____.

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9. The amount of $Rs2p$ in t years at the rate of simple interest of $\frac{r}{2}\%$ per annum is $Rs(2p+\_\ \_\_\ \_\_\ \_)$.

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10. The ratio of the principal and the amount (principal along with interest) in 1 year is $8:9$, the rate of simple interest per annum is _____.

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11. At what rate of simple interest per annum in percent, the ratio of a principal and its amount will be $50:59$ after 3 years?

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12. At what rate of simple interest per annum in percent the interest of a principal in 20 years will be $\frac{4}{9}$ part of its amount ?

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13. The simple interest of a principal increases by $Rs42.50$ when the rate of simple interest per annum increases from 7% to $7\frac{1}{2}\%$. Find the principal.

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14. If Aparna deposits $Rs1200$ in a bank at the rate of 4% simple interset per annum, then after 1 year what amount of interest she will get from the bank?

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15. The amount of $Rs2p$ in n years at the rate of simple interest of $\frac{r}{2}\%$ per annum is $Rs\left(2p+\frac{prt}{100}\right)$

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16. A man who takes a loan is called a _____

.

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17. The ratio of the principal and the amoun (principal along with interest) in 1 year is $7:8$, the rate of simple interest per annum is _____ .

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18. The amount of $Rs2p$ in t years at the rate of simple interest of $r\%$ per annum is $Rs(2P +\_\ \_\_\ \_\square)$.

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Short Answer Type Questions

1. The yearly income of Amalbabu becomes $Rs60$ less when yearly rate of simple interest

becomes $3\frac{3}{4}\%$ decreasing from 4%. Then find the principal of Amalbabu.

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2. If the interest of a principal in 10 years be $\frac{2}{5}th$ part of itself, then find the yearly percentage of rate of simple interest.

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3. Find the principal of which the monthly interest is $1Rs$ at the rate of 5% annual simple interest.

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4. Find the interest of $300Rs$ from $3rd$ March to 15 May, 2016 at the rate of annual simple interest of 6%

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5. At the two different rates of annual simple interest a certain quantity of Principal becomes double in 5 years and triple in 12 years. In what case the investments is profitable?

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6. $10Rs$ is given as a loan to someone in such a condition that he will pay back the loan in 11 instalments at the rate of $1Rs$ per instalment. Find the rate of simple interest per annum.

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7. A person invested $\frac{1}{3}$ of his prinicipal at a simple interst of 7% per annum, $\frac{1}{4}$ of the principal at a simple interest of 8% per annum and the rest at a rate of 10% per annum in an association, so that he had earned $Rs561$ annually. Find the principal of the person.

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8. A certain quantity of money becomes three times in 20 years , then at the same rate of interest in how many years it will become double?

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9. If the rate of simple interest in percent per annum increases to $12\frac{1}{2}\%$ from 10%, the income of a person increases to $Rs1250$. Find the principal .

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10. At the rate of $6\frac{2}{3}\%$ simple interest per annum, if a principal of $Rs2600$ be invested in a monetary fund, then at least in how many years the principal should be kept invested in that fund, so that the interest obtained will be a whole number or an integer?

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11. The rate of simple interest in percent per annum of a monetary fund is 5%. If the

interest obtained is added to the principal at a regular interval of 10 years, then in how many years $Rs1000$ will amount to $Rs2000$?

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12. Find the rate of simple interest in percent per annum, if a principal becomes $\frac{4}{9}$ part of its amount in a period of time of 20 years.

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13. A person , giving two equal loans, one at a rate of simple interest of 8% per annum and the other at a rate of simple interst of 6% per annum, earns a total interest of $Rs756$ after a period of time of 18 months. Find the total amount of money he has given as loan.

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14. At a rate of simple interest $7\frac{1}{2}\%$ per annum, find the total amount of a principal of

$Rs600$ in 219 days.

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15. What will be the simple interest of a principal of $Rs3500$ at a rate of $6\,\%$ simple interest per annum from $5th$ January to 31st May, 2012?

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16. The annual interest of a principal is $\frac{1}{6}$ parts of itself. If after 5 years the principal amounts $Rs3300$, then find the principal.

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Long Answer Type Questions

1. Goutam took a loan of some money from a cooperative bank for opening a poultry farm at the rate of simple interest of 12% per

annum. Every month he has to repay $378Rs$ as interest. Determine the loan amount taken by him.

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2. If the interest of $292Rs$ in 1 day be 5 paise, then find the rate of simple interest in percent per annum.

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3. If a person get $1200Rs$ return as amount (principal along with interest) by depositing $800Rs$ in the bank at the rate of simple interest of $10\,\%$ per annum, then calculate the time for which the money was deposited in the bank.

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4. Rekhadidi deposited $10000Rs$ of her savings in two separate banks at the same time. The

rate of simple interest per annum is of 6% in one bank and that of 7% in other bank, after 2 years, if she gets $1280Rs$ in total as interest, then find the money she had deposited separately in each of two banks.

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5. Rahamatchaha takes a loan amount of $2,40,000Rs$ from a bank for constructing a building at the rate of simple interest of 12% per annum. After 1 year of taking the loan he

rents the house at the rate of $5200Rs$ per month. Then, determine the number of years he would take to repay his loan along with interest from the income of the houserent.

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6. A bank gives 5% simple interest per annum. In that bank, Dipubabu deposits $15,000Rs$ at the beginning of the year, but withdraws $3000Rs$ after 3 months and then again, after 3 months he deposits $8000Rs$.

Determine the amount (principal along with interest) Dipubabu will get at the end of the year.

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7. Aslamchacha got Rs 100000 when he retired from his service. He deposited some of that money in the bank and rest of his money in the post-office and got $5400Rs$ in total per year as interest. If the rates of simple interest per annum in the bank and in the post-office

are 5% and 6% respectively, then find the money he had deposited in the bank and post-office.

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8. Rathinbabu deposits the money for each of his two daughters in such a way that when the ages of each of his daughters will be 18 years each one will get $120000Rs$. The rate of simple interest per annum in the bank is 10% and the present ages of his daughters are 13 years

and 8 years respectively. Determine the money, he had deposited separately in the bank for each of his daughters.

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9. At the same rate of simple interest in percent per annum, if a principal becomes the amount of $7100Rs$ in 7 years and of $6200Rs$ in 4 years. Determine the principal and rate of simple interest in percent per annum.

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10. Soma auntie deposits $6, 20, 000Rs$ in such a way in three banks at the rate of simple interest of $5\,\%$ per annum for 2 years , 3 years and 5 years respectively so that the total interests in the 3 banks are equal. Calculate the money deposited by Soma auntie in each of the three banks.

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11. Jayanta deposits $1000Rs$ on the first day of every month in a monthly savings scheme. In the bank, if the rate of simple interest is 5% per annum, then determine the amount, Jayanta will get at the end of 6 months.

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12. A person deposited $50000Rs$ for his son of age 10 years, in a monetary fund. The fund investing that money at the rate of 4%

simple interest per annum, gave the sone a quantity of $1200Rs$ at the end of every year. The annual expenses of the fund is $300Rs$. After fulfilling 18 years, what amount the boy will get from the fund?

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13. A certain money amounts $9440Rs$ on simple interest in 3 years. If the rate of simple interest be $25\,\%$ increased per annum, then the money will become $9800Rs$ after same

period of time. Find the principal and the rate of interest in percent per annum.

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14. In a bank if $4750Rs$ is deposited in simple interest, it becomes an amount of $6650Rs$ after a period of time of 4 years. According to the same rate of interest, in how many days $85000Rs$ will amount $106250Rs$?

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15. In a certain bank, the rate of simple interest in percent per annum during first 2 years is 3%, 6% during the next 3 years and 9% during the rest of the years. If a person deposits some money to that bank, he gets an interest of $Rs2760$ after 10 years. Find the principal of the person.

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16. If a debt of $4600Rs$ at a rate of simple interest 10% per annum, is to be repaid in 4

years, then what will be the instalment per annum?

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17. The simple interest of a principal in 1 year and 9 months at the rate of simple interest of 5% per annum is $63Rs$ more than of the same principal in 2 years and 4 months at the rate of simple interest of $4\frac{1}{2}\%$ per annum. Find the principal.

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18. A person took a loan of $Rs40000$ at the rate of $10\,\%$ simple interest per annum to contruct a house. After 2 years he gave return $Rs20000$ to the bank. After more 2 years what amount should he return to the bank so as to repay his completely?

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19. A gives some money to B at a rate of $5\,\%$ and to $CRs800$ more at a rate of $7\,\%$ per

annum. They repaid both the loans after 5 years and so that C have to pay $1240Rs$ more than R. Find the quantities of money which both of them had debted.

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20. If at the rate of simple interest in percent per annum by which a principal becomes double in 20 years and also amounts to $7Rs20$ after 4 years, then find the principal.

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21. A person deposited a principal of $Rs3000$ in a fixed depoosit scheme, in a bank under this condition that the principal will amount double at the end of 6 years. Find the rate of simple interst in percent per annum of the fixed deposite scheme. Due to special circumstance, the person have forced to withdraw all of his deposited money 2 years before the term of condition of period of time and so that the bank gave him interest at a rate of $5\,\%$ less than the previous. Determine

the amount of money which the person will get back from the bank.

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22. Bimanbabu for the higher education of his son and daughter, deposited some money in a bank at a rate of 12% simple interest per annum. After 20 years, the total amount that Bimanbabu got from the bank, distributed the money among his son and daughter in the ratio $5:3$ and then bought two govt.

debenture. If the value of the deventure of son be $Rs25500$, then find the amount of money which Bimanbabu invested in the bank at first.

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23. A took a loan of $Rs960$ from B for 4 years at a rate of simple interest of 6% per annum. As per condition applied, in the first three years $\frac{1}{4}$th part of the principal must be repaid and at the end of $4th$ year, rest of the principal and all of its interest should be repaid. Then

what amound of money A have to repay at the end of the $4th$ year?

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24. The total interest at the rate of simple interest of 5% per annum of $Rs300$ and at the rate of simple interest of 3% per annum of $Rs500$ for 2 years more period of time, is together $Rs150$. Find the period of time for which the interest of two principals have been claculated.

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25. At the beginning of a year, a person took a loan of $Rs800$ and after 7 months, he again took another loan of $Rs240$ at a rate of twice than the first . If at the end of the year , he have to pay a total interest of $Rs50$, then find the rate of interest in percent per annum of the first loan.

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26. A person bought a house for $Rs200000$ by taking a loan from the bank at a rate of simple interest of 5% per annum and then rented the house. If he can repay his loan with all the interest in 10 years by the income of the houserent, then find the monthly rent of the house.

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27. If the rate of simple interest in percent per annum of a monetary fund be 8% for the first two years, 8% for the next three years and 10% for the last years, then find the principal, the interest of which in 6 years is $Rs1520$.

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28. A person distributed his savings of $Rs15860$ amongest his three sons. A, B and C in such a way that at the end of 2 years, 3

years and 4 years respectively, they could have an equal amount of money. If the rate of simple interest in percent per annum be $5\,\%$, then find the ratio of the money distributed amongest his three sons A, B and C.

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29. Ghanshyambabu deposited his savings equally in two banks, one with a rate of simple interest of $14\frac{1}{2}\,\%$ per annum and the other at a rate of simple interest of $15\,\%$ per

annum. If the difference of the interests obtained by him from two banks be rs.$Rs4720$, then find the principals he has deposited in each bank.

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30. If the amount of a principal be $Rs5184$ and 5832 for 2 years and 3 years respectively, then find the principal and rate of simple interest in percent per annum.

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31. To repay a loan of $Rs6450$ at a rate of simple interest of $5\,\%$ per annum in 4 years, find the amount of each instalment.

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32. Divide the principal of $Rs2600$ in two parts in such a way that the simple interest of the first part at a rate of $5\,\%$ for 5 years and the simple interest of the second part at a rate of $4\frac{1}{2}\,\%$ for 6 years are equal.

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33. Divide the principal of $Rs2186$ into three parts in such a way that the amounts of each part are same at a rate of simple interest of 4% per annum, the period of time of the three parts being 1 year , 2 years and 3 years respectively. Also find the smallest part.

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34. A certain principal amounts $Rs2750$ in 2 years at a rate of simple interest of $5\,\%$ per annum. Then find the rate of simple interest in percent per annum for which the principal amounts $Rs3000$ in 2 years.

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35. A person borrowed Rs 10000 from four men. If he had to repay the first man for his Rs 2000 at the rate of simple interest of $8\,\%$ per

annum, the second man for his Rs 4000 at the rate of simple interest of $7\frac{1}{2}\%$ per annum and the third man for his Rs 1400 at a rate of simple interest of $8\frac{1}{2}\%$ per annum, then in what rate of simple interest in percent per annum, the fourth man should be paid for his rest part of principal so as to the average rate of simple interest be 8.13% per annum?

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36. A have took a loan of some money, the rate of simple interest of which is 6% per annum for the first one year, but the rate of simple interest increases at a rate of 0.5% per annum for the next every year. If A have repaid a total of simple interest of Rs 3375 for 4 years, then find what amount of money A have took as a loan?

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37. A, giving a loan to B of Rs 2000 and to C of Rs 2200, gets a total of simple interest of Rs 168.44 after 1 year. If the rate of simple interest of the second loan be $\frac{1}{2}\%$ more than that of the first loan, then find the two rate of simple interests in percent per annum.

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