



Mahendra's



SSC CGL/CPO/CHSL

MATHS

COMPOUND INTEREST

(चक्रवृद्धि ब्याज)

PART 3

Most Asked Questions By SSC



LIVE

06:30 PM





Chhavi Saxena 22 hours ago
Home work answer is 11%
Nice session sir Thank you

 1  REPLY

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MONOJIT 22 hours ago
Sir app tough sums bahat easily samjhate or batate hai
Thank you!!!

  REPLY



SANDHYA ROY 22 hours ago
Thank you very much sir outstanding session homework answer is option b...11



  REPLY



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Muskan.... 🌟 22 hours ago
11% is the Rgt answer



officialshaurya4235 12 minutes ago
11% ryt answer

  REPLY





Tanu Vishwakarma 22 hours ago
Homework answer__(11%)

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ARNAB DEBROY 22 hours ago
b) 11%

  REPLY



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AYAN PRAMANIK 22 hours ago
11% nice class



creative sg 7 hours ago
11%


  REPLY

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RUPA KUMARI 22 hours ago

11% 


  REPLY

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MONOJIT 22 hours ago

r = 11% answer


  REPLY

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Arun Kaiwart 22 hours ago

11% sir

  REPLY

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sakshi parate 20 hours ago

Ans is 11%

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Anjali Kushwaha 11 hours ago

11%

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Mohd Irfan 22 hours ago

11%



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Sneha Dey 22 hours ago

11%



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Sukanta sen 22 hours ago

11%

  REPLY





Sukanta sen 22 hours ago

11%



  REPLY

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puspranjan singh 22 hours ago

11%

  REPLY

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Manoj Kumar 22 hours ago

11% is the right answer home work question.
Very nice session guru G.

  REPLY

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Prashant Rajput 22 hours ago

11%%%


  REPLY

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Nidhi Gupta 22 hours ago

Hw 11 percent

  REPLY

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If **Difference of Simple interest and Compound interest** is given on Principal P

❖ For 2 Years,

$$\frac{D}{P} = \frac{1}{y^2}$$



Where $y = \frac{100}{R}$

❖ For 3 Years,

$$\frac{D}{P} = \frac{3y+1}{y^3}$$

❖ For 4 Years,

$$\frac{D}{P} = \frac{6y^2+4y+1}{y^4}$$

❖ For 5 Years,

$$\frac{D}{P} = \frac{10y^3+10y^2+5y+1}{y^5}$$

If the difference between CI and SI on a certain sum of money of Rs.40000 for 2 years is Rs.484. Find rate of interest?

40000रु के धन का 2 वर्ष का साधारण ब्याज और चक्रवृद्धि ब्याज का अंतर 484रु है तो दर ज्ञात करें ?
[SSC CHSL 2018]

01:00

- a. 10%
- b. 11%
- c. 12 %
- d. 13 %

If the difference between C.I. and S.I. is Rs. 555 in three years and the principal is Rs.25920. Find the rate of interest, if compounded annually.

यदि रु. 25920 के मूलधन पर 3 वर्षों के साधारण और चक्रवृद्धि ब्याज का अंतर रु. 555 है तो ब्याज की दर बताइए ?

[SSC CGL 2018]

01:00

A.16.66%

B. 8.33%

C. 12.5%

D.14.28%

P.Chandra's Concept of Compound Interest

If CI for two consecutive complete n years (CI_n) and n+1 years(CI_{n+1}) are given , then use **P.Chandra's formula**(© copyright)

$$\frac{CI_{n+1} - CI_n}{CI_n} = \frac{z^n}{\sum_{n_1=1}^{n_1=n} y^{n_1} z^{n-n_1}}$$

→ Where $z=y+1$, $y = \frac{100}{\text{Rate}(R)}$

$$\text{OR Rate } R\% = \frac{100}{y} = \frac{100}{z-1}$$

➤ If CI for 1 year and 2 years are given

$$\frac{CI_2 - CI_1}{CI_1} = \frac{z}{y}$$

➤ If CI for 2 years and 3 years are given

$$\frac{CI_3 - CI_2}{CI_2} = \frac{z^2}{y^2 + yz}$$

➤ If CI for 3 years and 4 years are given

$$\frac{CI_4 - CI_3}{CI_3} = \frac{z^3}{y^3 + y^2z + yz^2}$$

➤ If CI for 4 years and 5 years are given

$$\frac{CI_5 - CI_4}{CI_4} = \frac{z^4}{y^4 + y^3z + y^2z^2 + yz^3}$$

If C.I. of a certain sum at the end of 2 years and 3 years are Rs. 234 and Rs.381 respectively. Find the rate of interest?

किसी निश्चित धनराशि पर दो साल और तीन साल में चक्रवृद्धि ब्याज क्रमशः 234 और 381 है। ब्याज की दर ज्ञात करें?

[SSC CPO 2019]

- a. 12.5%
- b. 16.67%
- c. 18.33%
- d. 14.28%

01:00

If compound interests for 2 years and 3 years are Rs. 1575 and Rs. 2535 respectively then find rate of interest?

यदि किसी निश्चित धनराशि पर 2 वर्षों और 3 वर्षों के लिए चक्रवृद्धि ब्याज क्रमशः रु 1575 और रु 2535 तो ब्याज दर ज्ञात करें?

[SSC CHSL 2018]

01:00



- a. 16.66%
- b. 20%
- c. 12.5%
- d. 14.28%

On a certain sum of money, compound interest earned at the end of two years is Rs.1320. Compound interest at the end of three years is Rs.2184. Find the principal?

एक निश्चित धनराशि पर, दो साल के अंत में अर्जित चक्रवृद्धि ब्याज 1320 रु है। तीन वर्षों के अंत में चक्रवृद्धि ब्याज 2184 रु है। मूलधन ज्ञात करें?

[SSC CGL 2017]

01:00

- a. Rs.3000
- b. Rs.3200
- c. Rs.3600
- d. Rs.2400

A sum of Rs. 6600 was taken as a loan. This is to be repaid in two annual installments. The rate of interest is 20%, which compound annually. Find the value of each installment.

6600 रुपये की राशि ऋण के रूप में की गई थी। इसे दो वार्षिक किस्तों में चुकाना होगा। चक्रवृद्धि ब्याज की दर 20% वार्षिक है। प्रत्येक किस्त का मूल्य ज्ञात कीजिए?

[SSC CGL 2020]

(a) Rs. 4320

(b) Rs 2220

(c) Rs 4400

(d) Rs 4420

01:00

A sum of Rs. 8,400 was taken as a loan. This is to be paid in two equal instalments. If the rate of interest is 10% per annum, compounded annually, then the value of each instalment is

कर्ज के रूप में 8,400 रुपये लिए गए। यह दो समान किश्तों में भुगतान किया जाना है। यदि ब्याज की दर सालाना 10% है, जो कि सालाना है, तो प्रत्येक किश्त का मूल्य है:

[SSC CHSL 2020]

(a) Rs. 4200

(b) Rs 4480

(c) Rs 4840

(d) Rs 4420

01:00

A certain loan was returned in two equal half yearly instalments each of Rs 6,760. If the rate of interest was 8% p.a., compounded yearly, how much was the interest paid on the loan?

ऋण की कोई निश्चित राशि रू. 6, 760 की दो एकसमान अर्ध-वार्षिक किस्तों में लौटाई जाती है। यदि वार्षिक रूप से चक्रवृद्धि ब्याज दर 8% प्रति वर्ष थी, तो ऋण पर ब्याज के रूप में कितनी राशि का भुगतान किया गया?

[SSC CGL MAINS 2018]

01:00

(a) Rs 810

(b) Rs 790

(c) Rs 750

»» (d) Rs 770

What is the difference (in Rs) between the compound interests on Rs 12,500 for 1 year at 8% per annum compounded yearly and half-yearly?

12,500 रू पर 1 वर्ष के लिए 8% की दर से वार्षिक और छमाही करने पर प्रति वर्ष चक्रवृद्धि ब्याज के बीच में क्या अंतर (रू में) होगा?

[SSC CGL MAINS 2017]

(a) 16

(b) 25

(c) 20

»» (d) 40

01:00

What is the difference (in Rs) in Compound interest earned in 1 year on a sum of 10,000 at 40% per annum compounded quarterly and annually?

यदि 10,000 रू. पर 40% वार्षिक ब्याज की दर से 1 वर्ष तक तिमाही और वार्षिक चक्रवृद्धि ब्याज मिलता है तो उन दोनों में कितना अंतर (रू में) होगा?

[SSC CGL MAINS 2017]

01:00

(a) 461

(b) 346

(c) 463

»» (d) 641

A man borrows Rs.6000 at 10% compound rate of interest. At the end of each he pays back Rs.2000. How much amount should he pay at the end of the third year to clear all his dues?

एक व्यक्ति ने वार्षिक चक्रवृद्धि ब्याज की 10% दर पर 6000 रुपये उधार लिए । प्रत्येक वर्ष के अंत में व्यक्ति 2000 रुपये अदा करता है ज्ञात कीजिये तीसरे वर्ष के अंत में वह अपने उधार को खत्म करने के लिए कितने रुपये का भुगतान करेगा?

[SSC CGL MAINS 2018]

- a) Rs.3360
- b)Rs.3366
- c) Rs.1366
- d) Rs.4366

01:00



A person deposited a certain money in bank. Bank offers him 10% per annum compounded annually. If he deposits Rs.3500 at the end of 1st year and withdraws Rs.5000 at the end of 2nd year. Finally, at the end of 3rd year the amount, he gets Rs.18700. Then find his initial investment.

एक व्यक्ति ने किसी निश्चित धनराशि को बैंक में निवेश किया। बैंक उसे 10% वार्षिक चक्रदूधि ब्याज प्रदान करता है। यदि वह 1 वर्ष के अंत में 3500 रु निवेश करता है और दूसरे वर्ष के अंत में 5000 रु निकाल लेता है, तीसरे वर्ष के अंत में, उसे रु 18700 मिलता है। तो उसका प्रारंभिक निवेश ज्ञात करें?

[SSC CGL MAINS 2017]

01:00

- a) Rs. 13700
- b) Rs.16000
- c) Rs.17200
- d) Rs.15000