CDS 2 2024

LIVE

MATHS

REVISION

CLASS 2

NAVJYOTI SIR

SSBCrack EXAMS

06 August 2024 Live Classes Schedule

8:00AM	06 AUGUST 2024 DAILY CURRENT AFFAIRS	RUBY MA'AM
9:00AM	06 AUGUST 2024 DAILY DEFENCE UPDATES	DIVYANSHU SIR

SSB INTERVIEW LIVE CLASSES

9:00AM	INTRODUCTION OF PPDT & PRACTICE	ANURADHA MA'AM

AFCAT 2 2024 LIVE CLASSES

1:00PM	MAHA MARATHON SESSION - PART 2	

NDA 2 2024 LIVE CLASSES

11:00AM	GK - HISTORY REVISION - CLASS 2	RUBY MA'AM
12:00PM	PHYSICS REVISION - CLASS 2	NAVJYOTI SIR
1:00PM	MATHS REVISION - CLASS 2	NAVJYOTI SIR
2:00PM	BIOLOGY REVISION - CLASS 2	SHIVANGI MA'AM

CDS 2 2024 LIVE CLASSES

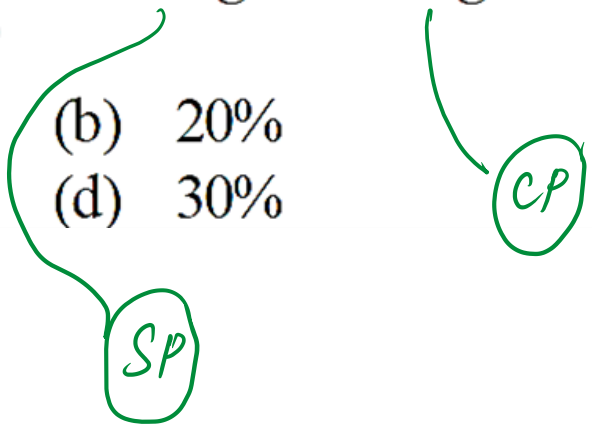
11:00AM	GK - HISTORY REVISION - CLASS 2	RUBY MA'AM
12:00PM	PHYSICS REVISION - CLASS 2	NAVJYOTI SIR
2:00PM	BIOLOGY REVISION - CLASS 2	SHIVANGI MA'AM
3:00PM	MATHS REVISION - CLASS 2	NAVJYOTI SIR

REVISION TOPIC :

- **Profit and Loss**

Q) A shopkeeper sells his articles at their cost price but uses a faulty balance which reads 1000g for 800g. What is his actual profit percentage ?

(a) 25%
(b) 20%
(c) 40%
(d) 30%



$$\frac{SP - CP}{CP} \times 100 = \frac{200}{800} \times 100 = 25\%$$

Q) A shopkeeper sells his articles at their cost price but uses a faulty balance which reads 1000g for 800g. What is his actual profit percentage ?

(a) 25%
(b) 20%
(c) 40%
(d) 30%

Ans: (a)

Q) Two lots of onions with equal quantity, one costing ₹ 10 per kg and the other costing ₹15 per kg, are mixed together and whole lot is sold at ₹ 15 per kg. What is the profit or loss?

(a) 10% loss
(b) 10% profit
(c) 20% profit
(d) 20% loss

Let the quantity be x kg for each lot.

$CP = 10x + 15x = ₹25x$

$SP = 15(x + x) = ₹30x$) profit

$\frac{5x}{25x} \times 100 = 20\%$

Q) Two lots of onions with equal quantity, one costing ₹ 10 per kg and the other costing ₹15 per kg, are mixed together and whole lot is sold at ₹ 15 per kg. What is the profit or loss?

(a) 10% loss
(b) 10% profit
(c) 20% profit
(d) 20% loss

Ans: (c)

Q) A milk vendor bought 28 *l* of milk at the cost of ₹ 8.50 per *l*. After adding some water, he sold the mixture at the same price. If he gains 12.5%, how much water did he add?

(a) 5.5 *l* (b) 4.5 *l*
(c) 3.5 *l* (d) 2.5 *l*

Let x l.

$CP = 28 \times ₹\ 8.50$

$SP = (28 + x)\ 8.50$

$12.5 = \dfrac{8.50 \times x}{28 \times 8.50} \times 100$

$x = \dfrac{12.5 \times 28}{100} ₹\ 2$

$x = 3.5\ l$

Q) A milk vendor bought 28 *l* of milk at the cost of ₹ 8.50 per *l*. After adding some water, he sold the mixture at the same price. If he gains 12.5%, how much water did he add?

(a) 5.5 *l*
(b) 4.5 *l*
(c) 3.5 *l*
(d) 2.5 *l*

Ans: (c)

Q) Anu sold an article for ₹480 at some profit. Had she sold it for ₹400, then there would have been a loss equal to one-third of the initial profit. What was the cost price of the article?

(a) ₹450 (b) ₹430 (c) ₹425 (d) ₹420

CP

$SP_1 = ₹480$

profit = $480 - CP$

$SP_2 = ₹400$

Loss = $CP - 400$

$$CP - 400 = \frac{1}{3}(480 - CP)$$

$$\frac{4}{3}CP = 560$$

$$CP = \frac{560 \times 3}{4} = 420$$

Q) Anu sold an article for ₹480 at some profit. Had she sold it for ₹400, then there would have been a loss equal to one-third of the initial profit. What was the cost price of the article?

(a) ₹450 (b) ₹430 (c) ₹425 (d) ₹420

Ans: (d)

Q) A man buys 4 tables and 5 chairs for ₹ 1000. If he sells the tables at 10% profit and chairs 20% profit, he earns a profit of ₹ 120. What is the cost of one table?

(a) ₹ 200
(b) ₹ 220
(c) ₹ 240
(d) ₹ 260

CP of x tables $\longrightarrow$ $?x$

" " 5 chairs $\longrightarrow$ ₹ $1000 - x$

$$x \times \frac{110}{100} + (1000 - x)\frac{120}{100} = 120$$

$$\frac{11}{10}x + 1200 - \frac{12x}{10} = 120$$

$$-\frac{x}{10} = -1080$$

$$x = 1080 \times 10$$

$$\frac{x}{4} = \frac{1080 \times 10}{270}$$

Q) A man buys 4 tables and 5 chairs for ₹ 1000. If he sells the tables at 10% profit and chairs 20% profit, he earns a profit of ₹ 120. What is the cost of one table?

(a) ₹ 200
(b) ₹ 220
(c) ₹ 240
(d) ₹ 260

Ans: (a)

Q) A trader marked a watch 40% above the cost price and then gave a discount of 10%. He made a net profit of ₹ 468 after paying a tax of 10% on the gross profit. What is the cost price of the watch?

(a) ₹ 1200 (b) ₹ 1800

(c) ₹ 2000 (d) ₹ 2340

CP

$MP = \frac{7}{5} CP$

$Discount = \frac{1}{10} \times \frac{7}{5} CP$

$SP = \frac{7}{5} CP \times \left(1 - \frac{1}{10}\right) = \frac{63}{50} CP$

$gross\ profit = \frac{63}{50} CP - CP = \frac{13}{50} CP$

$net\ profit = \frac{13}{50} CP \left(1 - \frac{1}{10}\right)$

$= \frac{9}{10} \times \frac{13}{50} CP = 468$

$\Rightarrow CP = \frac{468 \times 10 \times 50}{9 \times 18} = 2000$

Q) A trader marked a watch 40% above the cost price and then gave a discount of 10%. He made a net profit of ₹ 468 after paying a tax of 10% on the gross profit. What is the cost price of the watch?

(a) ₹ 1200 (b) ₹ 1800

(c) ₹ 2000 (d) ₹ 2340

Ans: (c)

Q) One saree was purchased for ₹ 564 after getting a discount of 6% and another saree was purchased for ₹ 396 after getting a discount of 1%. Taking both the items as a single transaction, what is the percentage of discount?

(a) 3.5 (b) 4

(c) 7 (d) 7.5

MP − 6% on MP = 564 — (SP)

$\frac{94}{100}$ MP = 564

$MP = \frac{564 \times 100}{94} = \frac{28200}{47} = 600$

$MP = \frac{396 \times 100}{99} = 400$

Total discount = (600 − 564) + (400 − 396)

= 36 + 4 = 40

$\frac{40}{1000} \times 100$ ($\frac{\text{discount}}{MP} \times 100$

= 4%

Q) One saree was purchased for ₹ 564 after getting a discount of 6% and another saree was purchased for ₹ 396 after getting a discount of 1%. Taking both the items as a single transaction, what is the percentage of discount?

(a) 3.5
(b) 4
(c) 7
(d) 7.5

Ans: (b)

Q) A shopkeeper buys a product of ₹ 150 per kg. 15% of product was damaged. At what price (per kg) should he sell the remaining so as to earn a profit of 20%?

(a) $₹\ 205\frac{13}{17}$

(b) $₹\ 207\frac{13}{17}$

(c) $₹\ 209\frac{13}{17}$

(d) $₹\ 211\frac{13}{17}$

Q) A shopkeeper buys a product of ₹ 150 per kg. 15% of product was damaged. At what price (per kg) should he sell the remaining so as to earn a profit of 20%?

(a) $₹\,205\frac{13}{17}$

(b) $₹\,207\frac{13}{17}$

(c) $₹\,209\frac{13}{17}$

(d) $₹\,211\frac{13}{17}$

Ans: (d)

Q) An article is sold at a certain price. If it is sold at $33\frac{1}{3}\%$ of this price, there is a loss of $33\frac{1}{3}\%$. What is the percentage profit when it is sold at 60% of the original selling price?

(a) 20 (b) 30 (c) $33\frac{1}{3}$ (d) $17\frac{1}{3}$

Q) An article is sold at a certain price. If it is sold at $33\frac{1}{3}\%$ of this price, there is a loss of $33\frac{1}{3}\%$. What is the percentage profit when it is sold at 60% of the original selling price?

(a) 20 (b) 30 (c) $33\frac{1}{3}$ (d) $17\frac{1}{3}$

Ans: (a)

Q) A cloth merchant buys cloth from a weaver and cheats him by using a scale which is 10 cm longer than a normal metre scale. He claims to sell cloth at the cost price to his customers, but while selling uses a scale which is 10 cm shorter than a normal metre scale. What is his gains?

(a) 20%

(b) 21%

(c) $22\frac{2}{9}\%$

(d) $23\frac{1}{3}\%$

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(a) 20%

(b) 21%

(c) $22\frac{2}{9}\%$

(d) $23\frac{1}{3}\%$

Ans: (c)

Q) By giving 25% discount a trader earns 25% profit. If he sells the item at 10% discount, what is his profit?

(a) 10%
(b) 40%
(c) 45%
(d) 50%

Q) By giving 25% discount a trader earns 25% profit. If he sells the item at 10% discount, what is his profit?

(a) 10%
(b) 40%
(c) 45%
(d) 50%

Ans: (d)

Q) A man bought 500 metres of electronic wire at 50 paise per metre. He sold 50% of it at a profit of 5%. At what percent should he sell the remainder so as to gain 10% on the whole transaction?

(a) 13% (b) 12.5% (c) 15% (d) 20%

Q) A man bought 500 metres of electronic wire at 50 paise per metre. He sold 50% of it at a profit of 5%. At what percent should he sell the remainder so as to gain 10% on the whole transaction?

(a) 13% (b) 12.5% (c) 15% (d) 20%

Ans: (c)

Q) A shopkeeper gets a loss of 28 (4/7)% on CP, find percentage loss on SP.

(a) 30%

(b) $\frac{200\%}{3}$

(c) 40%

(d) None of these

Q) A shopkeeper gets a loss of 28 (4/7)% on CP, find percentage loss on SP.

(a) 30%

(b) $\frac{200\%}{3}$

(c) 40%

(d) None of these

Ans: (c)

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CLASS 3

NAVJYOTI SIR

SSBCrack EXAMS

REVISION TOPICS :

(07/08/24)

- **Speed, Time and Distance**