

Decode these problems for police exams

1,90,253 applications received for TSPSC Group-I



To land a police job, it is important to master arithmetic questions of different chapters — like those on profit and loss.

This article is in continuation to the last article on preparation for the Sub-Inspector of Police recruitment exam. Here are some practice questions, answers and explanations on the Profit and Loss topic.

Profit and Loss

Profit and loss problems involve various terms like cost price, selling price, marked price, etc. Basically, it is a difference between selling price and cost price. Cost price is the price paid to purchase an article or a product or we can say it is a cost incurred in manufacturing an article. Selling price is the price at which a product is sold. Various profit and loss formulas used in profit and loss:

- 1) Generally, profit is calculated as: Profit or gain = Selling price(S.P) - Cost price (C.P)
- 2) Similarly, Loss = Cost price - Selling price
- 3) Gain percentage(%) = (Gain)/(C.P.) × 100
- 4) Loss percentage(%) = (Loss)/(C.P.) × 100
- 5) There is a direct relation-

ship between selling price and cost price:
S.P. = (100 + Gain percent - age)/(100) × C.P. (In case of gain)
S.P. = (100 - Loss percentage)/(100) × C.P. (In case of loss)

Example 1:

If an article is sold at a gain of 27%, then by using first formula, you can find that S.P. is 127% of C.P.

Similarly, if an article is sold at a loss of 18%, then by using the second formula, you can find that S.P. is 82% of C.P.

Problem 1: A dishonest dealer professes to sell his goods at cost price but uses a weight 960 gram for 1 kg. How to calculate gain percentage?

Solution:

Gain percentage = (Error)/(True value - Error) × 100
= 40/960 × 100%
= 4(1/6) % (Ans in %)

Practice Questions:

1. A man buys an item for Rs 30 and sells it at for Rs 36. Find his gain percent.

- A. 25% B. 20%
C. 30% D. 25.5%
Ans: B

Explanation:

Cost price = 30,
Selling price = 36
Profit = 36 - 30 = 6
Gain% = (profit/cost price) × 100
= 6/30 × 100 = 20%

2. If a shopkeeper is selling an item for Rs 350 and at a gain of 25% find the cost price.
A. Rs 325 B. Rs 240
C. Rs 280 D. Rs 320
Ans: C

Explanation:

Selling price = 350
Gain% = 25%
CP = 100/(100 + gain%) × SP
= 100/(100 + 25) × 350 = 280

3. A man buys an article for 10% less than its value and sells it for 10% more than its value. His gain or loss percent is:
A. 20 % profit
B. 15 % profit
C. more than 20% profit
D. less than 20 % profit
Ans: C

Explanation:

Assume that the value of article = 100
Then, a man buys an article for 10% less than its value
i.e. 100 - 10% of 100
= 100 - 10 = 90
Selling price = 100 + 10% of 100 = 110
Selling price > cost price
=> means gain
Gain% = profit/costprice × 100
Profit = 110 - 90 = 20
Cost Price = 90
Gain% = 20/90 × 100
= 22.2% > 20%

4. Rahim buys mangoes at the rate of Rs 21 for 3 kg and sells them at Rs 50 for 5 kg. To earn Rs 102 as profit, he must sell?
A. 26 kg B. 34 kg
C. 32 kg D. 56 kg
Ans: B

Explanation:

Rate of buying for 1 kg = 21/3 = 7
Rate of selling for 1 kg = 50/5 = 10
Therefore, to gain Rs 3, he must sell 1 kg
To gain Rs 102 as profit he must sell = (102/3) = 34 kg.



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TO BE CONTINUED...

The Group-I notification issued by the Telangana State Public Service Commission (TSPSC) has received 1,90,253 applications till the last count on Monday. Candidates wishing to appear for recruitment to 503 Group-I posts can apply online on the website www.tspsc.gov.in up to May 31.

Prior to applying, candidates must fill the One Time Registration (OTR) form of the TSPSC which is made available on its website. The OTR is a web-based service that enables job seekers to register their details with the Commission prior to the issuance of job notification.

The government job seekers should provide their personal details like Aadhaar card number, name, father's and mother's name, date of birth, place of birth, gender, community, religion, mother tongue, nature of employment, post held, residential address, email ID, and phone number.

This apart, the aspirants need to give their Class I to VII study details- study class/residence, academic year/resided year, type of study, districts/State, mandal, village/ward number/town and school name along with details of Class X, intermediate, graduation, integrated degree PG, post-graduation, MPhil, PhD and additional qualifications, if any.

Those who already filled the OTR form must edit the same as per the Presidential Order 2018. The local candidature of the candidates will be decided as per the Presidential Order 2018. So, candidates must edit or update their basic study details (Class I to VII) as per the Presidential Order 2018. A total of 2,84,211 candidates edited their OTR form and 1,36,714 new OTRs were received by the TSPSC till the last count on Monday.

Why is it important to dream big?

Being humans we all have some dream or the other — some small and some big. But for TSPSC aspirants, it is very important to dream big — about what you want to achieve from attempting the exams and about the life you want to lead post your success. Most importantly, don't forget to dream about what difference you want to make to the society through your profession. And, beyond all, dream big about the person you want to be after achieving the success.

When you hear about the competition, the toughness of the exam and the hopes that the people around you might have on you — it may lead to fear and anxiety. But, despite all this turmoil in your head, it is very important to have that self-confidence and develop a go-getter attitude. So, don't think of stopping somewhere, dream big and give your best as you might surprise yourselves with the results one day.

When you know what your big dream is, the path to achieve it becomes an easier task. As the adage goes, "Shoot for the moon. Even if you miss it you will land among the stars."

So, are you ready to achieve your big dream?