Test-2

16-07-21

Name :- Om Vyas
Std :- 12th XII
Subject :- Maths-2

Q.1]

Ans⇒ Given property value = ₹25,00,000, Rate of premium = 3%

i] When property is fully insured,
Here, Property value = Policy value
∴ policy value is ₹25,00,000
Amount of premium = 3% of policy value

$$= \frac{3}{100} \times 25,00,000$$

$$= 3 \times 25000$$

$$= ₹75000/-$$

∴ Amount of fully insured property premium is ₹75000.

ii] Insured 80% of property value.
Insured value = 80% of property value

$$= \frac{80}{100} \times 2500000$$

$$= 80 \times 25000$$

$$= ₹2000000/-$$

∴ property insured for 80% of its value is ₹2000000/-

Q.2]

Ans⇒ Given, property value = ₹360000, Rate of premium = 0.9%
since the shop is insured for 75% of its value,
∴ policy value = 75% of property value

$$\text{policy value} = \frac{75}{100} \times 360000 = ₹2,70,000/-$$

Amount of premium = 0.9% of policy value

$$= \frac{0.9}{100} \times 270000 = ₹2430/-$$

Also, agent's commission rate is 15% of the premium

∴ Agents commission = $\frac{15}{100} \times 2430 = ₹ 364.5/-$

∴ premium paid by the owner of the shop is ₹2430/- and agents commission ₹364.5/-.

Q.6]

Ans⇒ Given, stock (property value) = ₹7,00,000, policy value = ₹450000

Now, stock worth ₹3,00,000 were burnt completely due to fire.

Remaining stock = Stock value - Burnt stock

= 7,00,000 - 3,00,000

= ₹4,00,000/-

Remaining stock was damaged 75% of its value.

∴ Damaged value = 75% of value

= $\frac{75}{100} \times 400000$

= ₹3,00,000/-

∴ Total loss = Burnt stock + damaged amount

= 300000 + 300000

= ₹600000/-

claim = $\frac{\text{Policy value}}{\text{Property}} \times$ Total loss

claim = $\frac{450000}{700000} \times 600000$

= $\frac{2700000}{7}$

= ₹385714.3/-

∴ Sum of ₹385714.3 can be claimed under the policy.

8.5]

Ans) Let the property value of building be ₹x.

Since the building is insured for 75% of its value,

∴ policy value = 75% of property value

$$= \frac{75}{100} \times x$$

$$= \frac{3}{4} x$$

Now, annual premium is ₹2625 at 0.7%.

∴ Amount of premium = 0.7% of policy value

$$2625 = \frac{0.7}{100} \times \frac{3}{4} x$$

$$\frac{2625 \times 100 \times 4}{0.7 \times 3} = x$$

$$x = ₹5,00,000/-$$

∴ Property value of the building is ₹5,00,000

$$\text{policy value} = \frac{3}{4} x = \frac{3}{4} \times 500000$$

∴ policy value is ₹3,75,000/-

Fire damaged the building to the extent of 60%

∴ Loss = 60% of the property value

$$= \frac{60}{100} \times 500000 = ₹3,00,000/-$$

$$\therefore \text{Claim} = \frac{\text{Policy value}}{\text{property value}} \times \text{Loss}$$

$$= \frac{375000}{500000} \times 300000$$

$$= ₹2,25,000/-$$

∴ ₹2,25,000 can be claimed under the policy.

Q4]

Ans⇒ Given, Value of shop (property value) = ₹ 100000, Value of godown (property value) = ₹ 200000, Rate of commission = 12%

shop was insured for for 80% of its value.

Policy value = 80% of its property value

$$= \frac{80}{100} \times 100000$$

$$= ₹ 80000/-$$

Godown was insured for 60% of its value.

∴ policy value of Godwon = 60% of its value.

$$= \frac{60}{100} \times 200000$$

$$= ₹ 120000/-$$

Total policy value = policy value of shop + policy value of godown

$$= 80000 + 120000$$

$$= ₹ 200000/-$$

Rate of premium is 0.80% less 20%

i.e. 0.80 − 0.20% of 0.80 = 0.80 − 0.16 = 0.64%

∴ Amount of premium = 0.64% of total policy value.

$$= \frac{0.64}{100} \times 200000$$

$$= ₹ 1280/-$$

Commission of Agent = 12% of amount of premium

$$= \frac{12}{100} \times 1280 = ₹ 153.6/-$$

∴ Agent's commission is ₹ 153.6/-.

Test - 2

16/07/21

Name :- Om Vyas
Sub :- Maths - 2
Std :- 12th ~~XII~~

Q.3]

Ans⇒ Given, car worth (property value) = ₹540000, Car insured for = ₹450000

Now, car worth ₹240000 is damaged in an accident.

$$\text{claim} = \text{loss} \times \frac{\text{Policy value}}{\text{Property value}}$$

$$= 240000 \times \frac{450000}{540000}$$

$$= ₹200000/-$$

∴ The amount of compensation the can be claimed under the policy is ₹200000/-.