Professor Vishwanathan Iyer's

# HERAMB COACHING CLASSES

Yogeshwar Towers, Katemanivali, Kalyan (East)

**XII/Mathematics/22.12.17** **Marks:20** **Duration:40 Minutes**

**ATTEMPT ANY 4:**

Q.1 Find the premium on property worth Rs.1250000 at @3% if (i) the property is fully insured (ii) the property is insured to the extent of 80% of its value.

Q.2 A building is insured for 80% of its value. The annual premium at 70 paise percent amounts to Rs.2800. Fire damaged the building to the extent of 60% of its value. How much can be claimed under the policy?

Q.3 A cargo of rice was insured at $\frac{5}{8}\%$ to cover 80% of its value. The premium paid was Rs.5250. If the rice was worth Rs.21 per kilo, how many kilos of rice did the cargo contain?

Q.4 For what amount should a cargo worth Rs.87525 be insured so that in the event of total loss, its value as well as the cost of insurance may be recovered, the rate of premium being Rs.2 percent and other expenses 75 paise percent.

Q.5. A person takes a life policy for Rs 80,000 for a period of 20 years. He pays premium for 10 years during which bonus was declared at the average rate of Rs 20 per year per thousand. Find the paid up value of the policy, if he discontinues paying the premium after 10 years.

Q.6. Find the accumulated (future) value of annuity of Rs 400 made annually for 3 years at interest rate 8% compounded annually. [Given that $(1.08)^3 = 1.2597$)

Q.7. Find the accumulated value after 1 year of an annuity immediate in which Rs 20,000 are invested every quarter, at 16% p.a. compounded quarterly. [Given $(1.04)^4=1.1699$]

Q.8. Mrs. Menon plans to save for her daughter's marriage. She wants to accumulate a sum of Rs 4,00,000 at the end of 4 years. How much should she invest at the end of each year from now, if she can get interest compounded at 10% p.a.? [Given $(1.1)^4=1.4641$]

Q.9. Find the accumulated value of annuity due of Rs 500 p.a. for 3 years at 10% p.a. compounded annually [Given $(1.1)^3=1.331$]