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SUGGESTED ANSWERS - MAY 2005

PAPER-1 PRINCIPLES AND PRACTICE OF INSURANCE

1. a) Distinguish between Risk Management and Insurance Management.

ANS:

Risk Management	Insurance Management
Makes a systematic study of all risks an Organization is exposed to, evaluates them and identifies the best and most economical method of handling the risk.	Believes exclusively in insurance as the risk management tool
Has a better understanding of risks in the company as a professional in risk management	Expertise is in the area of insurance and tends to look at risk solely from an insurance angle
Looks at risk management from the cost angle and considers various options including insurance for the management of risks. Hence cost effective.	Covers all or most of the risk through insurance, resulting in heavy cost for the company.
Handles risks for the company by adopting integrated risk management or enterprise risk management practices.	Insurance management is of limited use to an enterprise in managing risks

b) What in your opinion is the appropriate risk management technique to be adopted by a risk manager in the following risk situations ?

- i) Frequency may be more but severity less
- ii) Frequency and severity more
- iii) Frequency less but severity more
- iv) Frequency and severity less

ANS:

Appropriate risk management techniques should be as below for the following situations :

- i. Frequency may be more but severity less - Risk retention
- ii. Frequency and severity more - Risk avoidance
- iii. Frequency less but severity more - Risk transfer
- iv. Frequency and severity less - Risk avoidance

2a) Describe all the perils that are covered under the Standard Fire and Allied Perils Policy.

ANS:

Perils covered under the Standard Fire and Allied Perils Policy :

- i) Fire**
- ii) Explosion / implosion**
- iii) Damage caused by aircraft and other aerial or space devices and articles dropped there from**
- iv) Riot, strike, malicious and terrorist acts**
- v) Storm, tempest, flood and inundation**
- vi) Impact damage by any rail/road vehicle or any animal not belonging to or owned by the insured**
- vii) Landslide, rockslide and subsidence**
- viii) Bursting and/or overflowing of water tanks, apparatus and pipes**
- ix) Missile testing operations**
- x) Leakage from automatic sprinkler installation**
- xi) Bush fire excluding destruction caused by forest fire**
- xii) Lightning**

2b) Mr. Ram took a Standard Fire and Allied Perils Policy from his insurer for his factory building, machinery, furniture, fixtures and fittings and stocks, providing separate values for each category of the items.

Arising out of a fire that took place, when many of the insured items were destroyed, Mr. Ram filed a claim with the insurance company as below:

- (i) Fire damage to building : Claim for repairs to building
- (ii) Fire damage to machinery: Repairs to machinery
- (iii) Destruction of a portion of stocks by fire : Market value of stocks
- (iv) Damage caused to a portion of stocks by water used to extinguish the fire : Market value of stocks which were destroyed by water
- (v) Smoke damage to some sensitive equipments : Cleaning charges for some of the said equipments and market value of some other equipment which became a total loss because of smoke damage
- (vi) Damage by heat and scorching to the Sofa set in the conference room: Repair of the set with replacement of the affected parts.

His insurer while admitting the claim for items (i), (ii) and (iii) disallowed the others claiming that the damages have not been caused by an insured peril.

How far do you agree or disagree with the stand of the insurer?

ANS:

The decision of the insurer in denying the claim covered by items (iv), (v) and (vi) is wrong. The following are the pre-requisites to a claim to be admitted under a fire policy:

- i) there must be an ignition (presence of flames);
- ii) the ignition must be incidental - fortuitous and not deliberate
- iii) the ignition must be of property that is not or ought not to be on fire

Fire within its normal confines is not included in an accident. Hence if anything is spoilt due to over-heating, the loss is not incidental to fire. It is not significant that the fire spreads to an insured property or the latter is in the vicinity of the fire - as far as the result is the same.

Once the fire is within the scope of the policy, the damage caused by smoke, heat, scorching, falling walls, roof or damage caused by the fire brigade in the discharge of their duties, even damage to a property removed from a burning building caused by exposure to weather (provided the removal was made in our endeavour to mitigate the loss) all these are covered by the fire policy and the claim is payable.

In the present case, the proximate cause for the damage is the fire - covered under the policy. Damages caused to stocks due to dousing to save them from destruction, smoke damage to instruments and damage to furniture due to heat - all these claims are caused under the policy and one thus payable by the insurer - subject to fulfillment of other policy conditions.

3a) Explain briefly the scope of cover, exclusions, sum insured and basis of settlement under a Machinery Breakdown Insurance Policy.

ANS:

Policy covers all sorts of events that cause breakdown of the insured machinery. All accidental, electrical, mechanical breakdowns due to internal causes, external causes, operational deficiencies or human errors are covered under the policy.

Policy excludes all the perils that are being covered under the standard fire and special perils policy. Further it excludes any loss or damage for which the manufacturer and/or the supplier himself are responsible. Further overloading operations as well as gradually developing flaws, defects, cracks etc are also excluded. Any consequential loss is also exclusion.

Irrespective of the depreciated or the market value of the machinery the machinery is to be insured for the value, which would represent its reinstatement cost for similar new machinery.

In case of partial loss the insurer will pay the actual cost of repairs without any deduction for depreciation except for parts of limited life.

In case of total loss or if the cost of repairs for a partial loss exceeds the market value of the insured machinery claims will be settled for the depreciated cost of the machinery as on the date of loss.

Policy will contain a compulsory excess to be deducted from each claim.

3b)Mr. Ram insured his company generator, bought three years ago for a sum of Rs.30,00,000, for a value of Rs.24,00,000, for the period 1.4.2005 to 31.3.2006. The policy contained an excess of 1% of sum insured.

Due to a breakdown the machinery had to be repaired for a cost of Rs.6,00,000. The surveyors fixed the depreciation sustained by the machine as a whole at 30% as on the date of loss. The reinstatement value of the machine as on the date of loss was confirmed by the surveyor as Rs.32,00,000.

Insurer refused to admit the claim of Mr. Ram for Rs.6, 00,000 but offered to settle the claim for Rs.2, 83,000 as per the calculations below:

Cost of Repair	:	Rs.6, 00,000
Depreciation for 3 years as per surveyor	:	30%
Net amount after depreciation	:	Rs.4, 20,000
Reinstatement value of generator as on date of loss	:	Rs.32, 00,000
Sum Insured	:	Rs.24, 00,000
Hence Gross Claim payable $24,00,000/32,00,000 \times 4,20,000$	=	Rs. 3, 15,000
Less excess at 1% on the value of the machine on The date of loss	:	Rs. 32,000
Net claim payable	:	<u>Rs. 2,83,000</u>

Discuss the correctness or otherwise of the insurer's offer duly explaining the policy provisions.

ANS:

In case of partial loss question of deduction for depreciation does not arise unless in respect of parts of limited life. Hence cost of repairs incurred by Mr. Ram is to be considered without any deduction for depreciation.

Policy is however subject to condition of average and if the sum insured of the machinery falls short of the reinstatement value of similar machinery by new one

under insurance will apply. The claim for Mr. Ram is accordingly to be adjusted under the policy as below:

Cost of Repair (Assuming that no parts of limited life are involved)	:	Rs.6,00,000
Reinstatement value of generator as on date of loss	:	Rs.32,00,000
Sum Insured	:	Rs.24,00,000
Hence Gross Claim payable $24,00,000/32,00,000 \times 6,00,000 =$:	R.4,50,000
Less excess of 1% on sum insured	:	Rs. 24,000
Net Claim payable	:	<u>Rs.4,26,000</u>

4) Write short notes on the following (in relation to life insurance) :

(a) Suicide Clause

ANS:

As per the provisions of this clause the policy shall be void and the insurers shall not pay death benefits if the assured commits suicide within one year of commencement of insurance policy except to the extent of third party's bonafide beneficial interest acquired in the policy for valuable consideration of which notice had been given to the insurer in writing. In some countries the stipulated time is two years.

(b) Reinstatement Clause

ANS:

The clause refers to the restoration of the lapsed policy to in-force status. Reinstatement is only after the end of a grace period. The essential requirement of reinstatement is as under :

- Proof of insurability and if the health status has changed, the reinstatement can be denied**
- All premiums plus their interest are duly paid**

(c) With Profit Policies

ANS:

With profit policies are participating plans in which the policyholder is entitled to participate in the profits or surplus of the insurer, which is determined through the periodical valuation of assets and liabilities of the insurer as per statutory

requirements. The surplus is usually distributed in the form of bonus, declared after such a valuation and is paid at the time of final settlement.

The bonus is in addition to the usual savings accumulation and risk cover and is paid at maturity or during claims. The premium rates are charged for these policies are higher than those for without profit policies.

(d) Immediate Annuity Scheme

ANS:

An Annuity Scheme where the annuity payment made to the policyholder, starts as soon as the first premium is paid, i.e, immediately after the purchase of the policy. The premium amount for such policy is higher than other schemes but high tax savings are also availed.

5) Explain the salient features of Group Life Insurance Schemes availed by the employers for the benefits of their employees.

ANS:

Group insurance policies are specially designed policies, which are issued to a large group of people through a single policy known as master policy.

- Insurance coverage is provided in the name of the employer for the benefit of all his employees.
- Group insurance schemes provide death benefits to the employees and also provide for funding of gratuity and pension liability of the employers. The extent of coverage is uniform for all the covered persons and is determined by the terms and conditions of the contract.
- The cost of insurance is mostly borne by the employer
- In most cases the cover is granted for one year renewable year after year
- Policy is taken at inception for all the employees listed by the employer. Policy provides for new entrants coming into the group at regular periodical intervals and also exits from the group
- Receipts and claims of the policy are verified and rate of premium is decided according to the category accorded to the group.
- Tax benefits are available for both the employer and employee
- Normally no medical examination is required.
- The contract is between the employer and the insurer. The employer takes the responsibility for payment of premium. Likewise the claims payments are made to the employer who in turn passes on the same to the beneficiaries.

- 6) (a) What are the primary objectives as per the IRDA (General Insurance – Reinsurance) Regulations that the Reinsurance Business of an insurer shall be based.?

ANS:

The objectives are :

- i) To ensure maximization of retention within the country**
- ii) To develop adequate capacity**
- iii) To secure best possible protection for the reinsurance cost incurred**
- iv) To simplify the administration of business**

(b) A newly licensed non-life insurance company has decided not to provide cover for manufacturers of hazardous goods for sum insured beyond Rs.50 lacs. But for business reasons it has been forced to accept number of such proposals where sum insured often exceeds Rs.50 lacs and go upto the level of Rs.5 crores and on very rare occasions go upto Rs.10 crores. What appropriate reinsurance you would suggest to this company so that they are able to accept these proposals for their full value.

ANS:

In view of the fact that the number of proposals for values upto Rs.5 Crores will be too many the insurance company can go in for a treaty reinsurance arrangement where it can cede to the treaty reinsurers upto Rs.5 crores in excess of its retention. In case of the stray proposals wherein the value would exceed Rs.5 crores the company can go in for facultative reinsurance on a case-to-case basis.

By the above reinsurance arrangements the company can give immediate cover to most of the proposals and get automatic reinsurance protection and in respect of the stray proposals it can assume cover after getting adequate reinsurance protection in excess of its retention.

Essentially the capacity to grant a reinsurance cover depends on the financial strength of the insurer and its solvency position.

- 7) State whether the following statements in relation to life insurance business are right or wrong :

- a) Reserves are made out of Policyholders' funds

ANS: Right

- b) Mathematical reserve shall be determined separately for each insurance contract.

ANS: Right

- c) Policy maintenance expenses do not include variable expenses.

ANS: Wrong

- d) The Gross Premium method of valuation does not take into account future cash flows.

ANS: Wrong

- e) "Segregated Funds" means funds earmarked in respect of non-linked business.

ANS: Wrong

- f) Solvency Margin is the excess of asset value over the value of liabilities.

ANS: Right

- g) Assignee of a policy cannot effect assignment.

ANS: Wrong

- h) An assignment can be cancelled at the option of the assignor.

ANS: Wrong

- i) Risk arising out of regulatory change is called Operational Risk

ANS: Wrong

- j) Level premium means the premium rate reviewed periodically on previous loss experience.

ANS: Right

- 8) Highlight the provisions contained in the following IRDA regulations for the issues mentioned against each one of them :

- (i) IRDA (Appointed Actuary) Regulations, 2000 - Eligibility criteria for appointment as an appointed actuary in a general insurance company.

ANS:

In order to be appointed as an appointed actuary for a general insurer a person shall satisfy the following :

- a) **Must be ordinarily a resident of India**
- b) **Must be a fellow member of the Actuarial Society of India**
- c) **Must be an employee of the Insurer or a consulting actuary**
- d) **Must not have committed any breach of professional conduct**
- e) **There must not be any disciplinary action against him by the Actuarial Society of India**
- f) **Must not be an appointed actuary of another person**
- g) **Must possess a Certificate of Practice issued by the Actuarial Society of India**

h) Must not be over seventy years

- (ii) IRDA (Obligations of Insurers to Rural Social Sectors) Regulation, 2000 – Definition for Rural and Social Sector.

ANS:

Rural Sector means any place as per the latest census, which has

- a) A population of not more than five thousand**
- b) A density of population of not more than four hundred per square kilometer and**
- c) At least seventy five percent of the male working population is engaged on agriculture**

Social sector includes unorganized sector, informal sector and economically vulnerable or backward classes and other categories of persons both in rural and urban areas.

- (iii) IRDA (Protection of Policyholders' Interest) Regulation, 2002 – Period for settlement of claim by insurers.

ANS:

On receipt of the survey report or the additional survey report as the case may be an insurer shall within a period of 30 days offer a settlement of the claim to the insured.

Upon acceptance of an offer of settlement by the insured the payment of the amount due shall be made within 7 days from the date of acceptance of the offer by the insured. In case of delay in the payment the insurer shall be liable to pay interest at a rate which is 2% above the prevailing bank rate.

In all these cases, the insured must have discharged his obligations to the insurers by filing appropriate statements, documentary and other evidence to support the claim and nothing must be wanting from his end.

9. In the course of the audit of the investments of a General Insurance company, you observe the following percentage of investible funds having been invested by the company :

Investment Category	Percentage
10 year Central Government Securities	20%

10 year State Government Securities	10%
Central Government Guaranteed Securities	5%
AAA rated bonds	30%
BBB Bonds	20%
Money Market Mutual Funds	5%
Equity Shares - Approved	5%
Equity Shares - Other than Approved	5%

From your analysis of the investment details of the company, you find that :

- (i) Exposure to Power Industry (out of the AAA bonds and approved Equities) was 12.5%.
- (ii) The AAA bonds investments include bonds issued by one of the companies in the promoters' group and 7% of the funds were invested in these bonds.
- (iii) Exposures to Housing and Infrastructure sector have been maintained as required.

Examine the above pattern of investment and state whether the requirements of the IRDA (Investment) Regulations have been met.

ANS:

Exposure to single industry shall not exceed 10% of the exposure to industrial sector, while the power industry exposure is more than that.

Exposure to promoter group has been violated by having in excess of 5% to a company in the same group.

Approved investments fall short of 70% and other than approved investments (BBB Bonds plus Money Market MFs plus Equity - other than approved) is 30% which is higher than the regulatory limit of 25%.

The pattern of investment followed by the insurer does not meet with the specifications of the investment Regulations and hence the regulator can call to question the conduct of the insurer.

By following the procedure that the insurer has done, it has jeopardized its solvency margin. The regulator can require the insurer to bring an additional capital and correct the solvency problem.

Investment in the sectors beyond the prescribed limits will not be recognized for regulatory and solvency purposes.