PGDM (IBM) 2014-2016

Property- II (Engineering Insurance)

INS 401

Trimester – IV, End-Term Examination: September 2015

Time allowed: 2 hrs 30 min Max Marks: 50

Roll No: ___________

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means.** In case of rough work please use answer sheet.

Sections	No. of Questions to attempt	Marks	Marks
A	3 out of 5 (Short Questions)	5 Marks each	3*5 = 15
B	2 out of 3 (Long Questions)	10 Marks each	2*10 = 20
C	Compulsory Case Study	15 Marks	15
		Total Marks	**50**

SECTION- A

Q1.

The construction of a chemical factory has been covered under EAR policy for a period of 20 months **including 1 month testing** .The policy period is **01.01.2014 to 31.08.2015**. The testing activity started on 15th of July, 2015. However while the testing activity was on, there was a small loss due to an accident on 25th of July, 2015, in another part of the site. The testing operation had to be stopped and could be resumed only on 16th of August, 2015. The contractor is confident of completing the testing in another 12 days i.e. before the expiry of the policy.

a. Does he require taking an extension of the testing period or the policy period? Justify your answer with reasons and relevant policy provision
b. Which category of excess would apply for the loss mentioned?

Q2.

A factory owner wants to insure his boiler under Boiler explosion policy. The sum insured proposed is INR 15,000,000. The basic rate for this boiler is 1.8%o. The boiler is 32 years old which is 12 years more than the safe age. The boiler does not have a boiler inspector's certificate

a. With the help of the data given above , calculate the premium chargeable
b. Would you suggest any add- on perils relevant to the risk exposure?
c. The proposer does not want to cover his boiler under his fire policy which is also due for renewal. What would be your suggestion to the client?

Q3.

A client wants to take storage cum erection policy for the construction of a pharmaceutical I factory for a period of **25 months** including **two months** testing. **The total project cost is**

90 crores. During the testing the client would involve catalyst valued at 5 crores and he requires the cover for catalyst also (both during storage & erection as well as testing)

Calculate the premium (after taking into account all the aspects) he has to pay considering the fact that rate for first two months is 2.00%o , subsequent 10 months 0.05%o per month and period beyond 12 months 0.025%o per month .
Additional testing period attracts rate of 0.3%o per month. Catalyst rate for testing would be 20%o.

The client would also like to take STFI and Earthquake cover, but not terrorism.
The market competition might force you to allow 90% discount, as per norms

Q4.

A client has approached you for insurance terms for his project insurance involving installation of various machineries in the factory premises which **are a mix of new as well as second hand**. The total value of the project is 75 crores.

As a broker you are required to design the most comprehensive cover under an EAR policy

a. List out the critical risk information which you would seek from the client, so that the underwriters are satisfied and provide the terms
b. Suggest the ideal insurance cover(s) which can include any additional coverage, which you deem fit.

Q5.

As a broker, you may face the following situations where you need to explain to the client as well as take the right coverage from underwriters. Please explain logically the approach which you need to follow, keeping in mind the provisions:

a. Insurance of glass under a CAR policy involving construction of a 15 storey building with front glass façade.
b. A contractor has CPM equipments operating in various sites all over India. Since the equipments keep moving within the sites, it is difficult to specify which equipment is operating in which site.

SECTION- B

Q6. **(2* 5)**

Answer the following with logical reasoning, explaining any provision which may be relevant.

a. Explain with an example what would be the **trigger** for paying a machinery breakdown loss of profit claim.
b. Why relative importance of a particular machine is an important consideration for arriving at the rate under Machinery breakdown loss of profit policy?
c. How can we say that reserve facilities and availability of spares are factors which reduce the risks' exposure, rather than increasing the same?
d. What do you mean by **"Total risk factor "**? At what step of rate computation under Machinery breakdown loss of profit policy, does this factor come into play?
e. With the help of an example, explain how one can arrive at the **"quantity discount"** while computing the rate to be charged under a MLOP policy?

Q7. (5+ 5)

(a) What are the conditions for getting a refund due to standstill period under machinery breakdown policy? Why can't 100% refund be given in case the machines are standstill for the full year?

(b) Machinery breakdown policy of an insured covering a DG set gives the sum insured as follows: **Engine 1,500,000; Alternator 1,200,000; Control panel 300,000**. There is a breakdown loss affecting certain parts of the engine which is payable under the policy. The loss involves the following items and cost of replacement is as under:

Crankshaft	80,000
Piston assembly	45,000
Other parts with unlimited life	25,000
Labour charges for carrying out the repair	20,000

Surveyor while assessing the loss found out that the **new replacement cost** of the complete DG set as on date of loss is Rs 40,00,000. Salvage value of parts amount to Rs 8,000.

Calculate the final loss payable after taking into account the various terms and conditions, **deductibles of the Machinery breakdown policy**

Q8. (1+7+2)

A client has insured his stocks of potatoes kept in a cold storage. Total capacity of the cold storage chamber which he has hired for keeping stocks of potatoes is 40,00,000 kg The rate of potatoes at the time of loading is Rs 15 /kg . **What should be the sum insured under the policy?**

The policy has been taken for 12 months. At the end of the third month the client reported a Claim arising out of breakdown of a compressor of the refrigeration unit. Deterioration of 25,000 kgs of potatoes had taken place. The following data has been collected by the loss Assessor:

- The rate of potato on the date of loss was Rs 18/ kg
- As per the contract with the cold storage owner acceptable % of rottage and shrinkage was **4% and 8%** respectively
- Out of the damaged stocks of potatoes, 10,000 kgs could be sold off at lower rate of Rs 2/ kg
- The compressor could be repaired only after 3 days from its breakdown and there were no spares of this compressor available with the cold storage owner. However spares for other critical machines was available

(i) Determine the loss amount payable after considering all the factors including deductible

(ii) What do you understand by the FOES extension under a DOS policy?

SECTION- C

Q9. **(8 + 2 +2 + 3)**

A reputed contractor has been awarded a contract for constructing a road from Rampur to Nainital. The road will be completed in 18 months. The total project cost for the construction is **200 crores**. There will be some temporary civil constructions to be used for storage for 10 crores. Part of the risk falls under earthquake zone-3 and part under Zone-2. The road will be constructed on plain land partly and partly will have hilly terrain.

The contractor has approached you for a CAR policy. He also requires the following Add on covers:

- Third party liability with cross liability for 15 crores (falls under category B)
- Removal of debris cover for 2 crores (Falls under category A)
- Extended maintenance cover for 12 months (Falls under category A)
- Escalation of 10% (Falls under category A)
- Terrorism, earthquake

The relevant extract from rate computation table is given below:

1. Roads –					
a)	In townships only	2.00	0.025	5,000/-	20,000/-
b)	In Plain Areas	2.50	0.03	5,000/-	20,000/-
c)	In Hilly/Ghat areas	3.00	0.04	10,000/-	40,000/-

(a) Compute the **rate and the premium using the table and information provided and prepare a quotation to be submitted to the broker**. You may consider discount of 70% for rate computation...Broker cannot provide any further information. To make it competitive the quote **must contain the free covers allowed as per erstwhile tariff.**

(b) As value addition can you advise the client to give some additional information to reduce the premium?

(c) Please also calculate the installments which you can provide to the client and the premium payable against the installments

(d) The client also wants you to give a brief report on the **risk exposures which he may** face and some **loss prevention measures too.**