



Programme: PGDM (Ins. Business Mgmt.)

Batch: 2015-17

Trimester: 4th

PGDM (IBM) 2015-2017
Property- II (Engineering Insurance)
INS 401

Trimester – IV, End-Term Examination: September 2016

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.

Explain giving logical reasons:

(2+ 1+ 2)

- a. A prudent underwriter would like to incorporate "section warranty " under a CAR policy covering roads
- b. Crane hiring charges might form a part of the policies issued to cover wind mills (mainly during operational phase)
- c. Single time excess is applied during assessment of a loss under ALOP policy

Q2.

(2 + 1 + 2)

A broker slip sent to your insurance company requires that you quote for a Boiler explosion policy. The sum insured for the 29 year old recovery boiler is INR 10,000,000. The insured does not have a "Boiler inspector's certificate "

- a. Calculate the premium with the help of the data given considering the base rate as 1.8% and the safe age as "20"
- b. Can you think of some value addition to reduce the premium (other than any good features discount)?
- c. What would be the warranties to be attached under the policy?

Q3.

In order to have better control on a risk for which Advanced Loss of profit (ALOP) policy has been issued, the underwriters adopt a particular method. Identify the method and explain its importance.

Q4.

Answer briefly (in few words to a sentence), each of the following:

- a. The trigger for a claim to be paid under any Business Interruption policy.
- b. Two factors leading to compulsory deductions from the claim under a DOS policy
- c. Two factors which affect the rating under "Increased cost of working" section of the Electronic equipment policy.
- d. How is the comprehensive Machinery insurance of Munich Re different from the traditional Machinery breakdown policy?
- e. Minimum hours of power supply required to offer FOES extension under a DOS policy following breakdown, for stocks kept in cold storage

Q5.

(3 + 2)

As a broker you are going for a discussion with a contractor who is seeking a CAR policy for the **civil portion of the hydroelectric project** which he is going to construct.

- a. What is the minimum information which you would like to take from the client to enable you to get a competitive quote from the market?
- b. The contractor also wants to insure his various equipments to be used for the work. Considering the typical risks involved, do you have any specific suggestions?

SECTION- B

Q6.

(2* 5)

Machinery breakdown loss of profit rate is arrived at based on several factors. Based on your understanding answer the following

- a. How would the "Quantity discount" be arrived at? Explain with the help of an example
- b. Which is the last step in the calculation of the MLOP rate? What is its importance?
- c. The concept of relative importance plays an important role in the assessment of MLOP risk. Why?
- d. What is the different surcharge factors used for MLOP rate computation?
- e. What are the roles of time excess and indemnity period in the MLOP rate computation?

Q7.

(5+ 2 + 3)

(a) A broker has asked for a quote for an Erection all risk policy involving installation of machines in an engineering workshop. The total project period as per the contract between the Contractor and the Principal is **24 months** including two months of testing which they require. The total project value is 75 crores. As per the contract, the contractor also has to take an extended maintenance cover for 12 months. The broker has also suggested the following extensions...Third party liability (10 crores), Removal of debris (10 crores), Expediting cost (5 crores), Escalation 10%. STFI and Earthquake cover will be required.

Based on the following data, calculate the premium (you need not consider any good features discount)

Engineering workshop	2.00	0.05	0.025	0.30
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The risk is located in Ghaziabad (Zone – II)

(b) Is it possible to provide installment facility for the above risk? If yes, give reasons and compute the same

(c) The client has taken a cushion of 3 months in the project period i.e. even though it was expected that project would be completed in 21 months, he is taking the cover for 24 months. Is it a wise decision? In case the project is completed 20 months, will the client be eligible for a refund? Explain with computation and reasons

Q8.

(7 + 3)

A client has insured stocks of seasonal fruits kept in a cold storage under a DOS policy following breakdown of refrigeration machinery. He has also opted for a FOES extension. The capacity of the cold chambers taken on rent by the insured allows storage of 50,000 kg of fruits. The market rate on the date of loading of the stocks into the cold chambers was Rs 25/ kg .The policy carried a time franchise of 24 hours in addition to the normal excess There was a loss reported arising out of breakdown of a key refrigeration machinery in the cold storage. This led to deterioration of 20,000 kg of stocks of fruits

The market rate of fruits on the date of loss was Rs 30 / kg

- As per the contract with the cold storage owner acceptable % of rottage and shrinkage was 3% and 9% respectively
 - Out of the damaged stocks (20,000 kgs), 2000 kgs could be sold off at lower rate of Rs 2/ kg
 - The compressor could be repaired only after 7 days from its breakdown and there were no spares of this compressor available with the cold storage owner along with that of the diffusers
- (i) **Determine the loss amount payable after considering all the factors including deductible applicable**
- (ii) **In a DOS Policy will the time franchise differ from policy to policy? How will an underwriter decide on the time franchise under the policy?**

SECTION- C

Q9.

(8 + 4 + 3)

A reputed contractor has been awarded a contract for constructing a commercial building complex.(completely RCC) The risk information provided by the broker includes the facts that there are three towers and the height of the towers are as under :

- Tower A: 30 floors plus 3 basements, Tower B: 16 floors including 2 basements, Tower C: 24 floors plus 2 basements, which are detached from each other with independent basements. Construction would start simultaneously.
- The total project cost is 650 crores, which also **includes** installation of DG sets, sub-stations, air conditioning plant and some other machinery and equipment, the total cost of which is around 80 crores.
- The total project is expected to be completed in around 42 months, which would include one month testing for the machinery

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

- Third party liability with cross liability for 20 crores (falls under category B up to sum insured of 25 crores)
- Removal of debris cover for 2 crores (Falls under category A for sum insured up to 10 crores)
- Extended maintenance cover for 12 months (Falls under category A)
- Escalation of 10% (Falls under category A)
- Earthquake (site is in Delhi)
- Design defect cover as per DE- 4 (falls under Category- D)

The relevant extract from rate computation table is given below:

RCC Framed structure above 15 storey and up to 25 storey	3.00	0.05	50,000/-	2,00,000/-
RCC Framed structure above 25 storey and up to 30 storey	3.25	0.05	50,000/-	2,00,000/-
RCC Framed structure above 30 storey and up to 40 storey	3.50	0.05	50,000/-	2,00,000/-

- Prepare a comprehensive **quotation** (premium and deductible) ensuring that the broker gets **the optimum cover**. The competition in the market would require that you give 80% discount. You are in direct competition with several other insurers
- As value addition can you advise the client to give some additional information to reduce the impact of premium? You have to mathematically explain the benefits which he is likely to get by giving the information
- The excavation work of the project had started 5 months before the actual construction started there was no work after excavation was carried out for 5 months the broker also wants an option for covering the project for **37 months, ignoring the excavation work**