

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI
SECOND SEMESTER – 2022-23

ECON F417 FIN F413: RISK MANAGEMENT AND INSURANCE
Date: 06 MAY 2023

TIME: 180 min
Marks: 40

COMPREHENSIVE EXAMINATION (REGULAR)

PART-A (CLOSED BOOK)

40 x ½ = 20 MARKS

NOTE: For the following multiple choice questions, choose the correct best answer and put a tick (✓) against that letter (A/B/C/D). Corrections/overwriting/illegible answers are strictly invalid and carries zero weightage.

A1. When should a risk be avoided?

- A. When the risk event has a low probability of occurrence and low impact
- B. When the risk event is unacceptable -- generally one with a very high probability of occurrence and high impact
- C. When it can be transferred by purchasing insurance
- D. A risk event can never be avoided

A2. All of the following are burdens of risk on society EXCEPT

- A. risk forces individuals to practice loss control.
- B. risk requires funds to be set aside in case a loss occurs.
- C. risk deprives society of certain goods and services.
- D. risk creates fear and worry

A3. Kyle opened a sporting goods store. After a fire damaged the store, Kyle was forced to close the business for four weeks while repairs were completed. The loss of profits that could have been earned if the business had remained open is best described as a(n)

- A. indirect (consequential) loss.
- B. hazard.
- C. Peril
- D. Direct loss

A4. For the given following, the principle of indemnity is applicable to _____ only

- A Life Insurance
- B Personal accident insurance
- C Proximate Cause
- D Property insurance

A5. Which of the following statements is (are) true with respect to hazards?

- I. Many physical hazards can be reduced through risk control measures.
 - II. Attitudinal hazard is more serious than moral hazard.
- A. Neither I nor II
 - B. I only
 - C. II only
 - D. Both I and II

ID. NO:

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- A6. The installation of heat or smoke activated sprinkler systems that are designed to minimize fire damage in the outbreak of a fire is an example of _____.
- A Loss prevention
 - B Loss reduction
 - C Hedging
 - D Insurance
- A7. A large manufacturing organization has renewed an insurance policy and has accepted a significant increase in the policy deductible. What is this most likely to indicate?
- A Decreased risk avoidance.
 - B Decreased risk tolerance.
 - C Increased risk elimination.
 - D Increased risk retention.
- A8. The principle of utmost good faith:
- A Holds only the insurer to a high standard of honesty in executing insurance policies
 - B Generally, does not apply to health insurance
 - C Holds both the insured and insurer to a high standard of honesty throughout the duration of the insurance policy
 - D is a tool used to defraud policyholders.
- A9. Rajan sold his house to Sailaja for Rs.1400,000 in cash. Rajan "threw in" insurance on the house as part of the deal and did not bother telling the insurer that there was a new owner. Four months after Sailaja purchased the home, a windstorm damaged the roof. Which of the following legal characteristics of insurance contracts could the insurer use to legally deny payment for the damage to the roof?
- A Insurance contracts are unilateral contracts.
 - B Insurance contracts are contracts of adhesion.
 - C Insurance contracts are aleatory contracts.
 - D Insurance contracts are personal contracts.
- A10. Why can an insurer refuse to pay a claim if an insured fail to abide by the policy provisions?
- A because insurance contracts are aleatory
 - B because insurance contracts are unilateral
 - C because insurance contracts are conditional
 - D because insurance contracts are contracts of adhesion
- A11. Madan's car was damaged when another driver ran a stop sign and hit her car. Madan decided to collect from his own insurer and to let her insurer recoup the loss payment from the negligent driver who hit his car. What fundamental legal principle is illustrated in this scenario?
- A the principle of utmost good faith
 - B the principle of insurable interest
 - C the principle of subrogation
 - D the principle of reasonable expectations

A12. A misrepresentation that can make an insurance policy voidable occurs only:

- A if it is known at the time of loss
- B if it is material in terms of the way the insurance is underwritten
- C in the absence of an offer, acceptance and consideration
- D if it violates the principle of indemnity

A13. When Suresh applied for life insurance, he was asked on the application if he smoked or used tobacco products. Suresh answered "No." In reality, Suresh smokes two packs of cigarettes a day. The policy was issued at the "preferred, nonsmoker rate." If Suresh dies 6 months after the policy is issued, upon what grounds will the insurer be able to legally deny the claim?

- A warranty
- B misrepresentation
- C waiver
- D concealment

A14. Satish's insurance claim was denied by ALEXMACRO Insurance Company. When Satish inquired why the claim was denied, he was told to, "Read the exclusion on page 5 of the policy." Satish read the exclusion. In his opinion, the exclusion was poorly worded and vague. If a court of law agrees with Satish's assessment of the exclusion, Satish may still be able to have his claim paid by the insurer because insurance contracts are

- A personal contracts.
- B unilateral contracts.
- C aleatory contracts.
- D contracts of adhesion

A15. Which part of the insurance contract personalizes the coverage to the individual's exposure?

- A the policy application
- B the insuring agreements portion of the insurance policy
- C the declarations page that accompanies the contract
- D the conditions section

A16. In this hypothetical case, an insured with a Rs.100 deductible collision coverage, sustains an accident with a wild deer named Bambi. The auto suffers Rs.600 damage. In addition to the collision coverage, he also has Rs.0 deductible on non-collision coverage. The amount of coverage on collision/non collision insurance is Rs.5,000. The insured can recover from the insurer:

- A Full loss, less Rs.100
- B Full loss
- C Nothing, this damage is not covered
- D Rs.600 less the Rs.100 deductibles under the uninsured motorist physical damage coverage

A17. David owns a bar. The bar has a back room where David has some slot machines. David lets some of his patrons play the machines, and David keeps any profits. This type of gambling is illegal where David lives. David wanted to purchase insurance in case his slot machines were confiscated by the police. Such an insurance contract would not be enforceable. Which requirement needed to form a valid insurance contract is missing?

- A consideration
- B offer and acceptance
- C legal purpose
- D competent parties

A18. For a life insurance policy, insurable interest needs to be shown:

- A at the inception of the contract
- B at the time of loss
- C anytime within the policy period
- D shortly after loss as occurred but before filing proof of loss

A19. Which of the following statements about offer and acceptance for insurance contracts is true?

- A In property and liability insurance, agents typically do not have the authority to bind coverage.
- B In life insurance, the agent can usually accept an offer by immediately binding coverage.
- C In property insurance, the offer and acceptance are usually in writing but may be oral.
- D In life insurance, the offer is merely the promise to pay the first premium.

A20. Which distinct legal characteristic of insurance contracts states that only the insurer's promise to perform is legally enforceable?

- A contracts of adhesion
- B unilateral contracts
- C aleatory contracts
- D personal contracts

A21. The general rule that ambiguity in insurance contracts is construed against the insurer is reinforced by an important legal principle. This principle states the insured is entitled to coverage under a policy that he or she would assume the policy would provide, and exclusions must be conspicuous, plain, and clear. This principle is known as

- A the principle of utmost good faith.
- B the principle of reasonable expectations.
- C the principle of subrogation.
- D the principle of indemnity.

A22. What is the practical effect of an insurance policy being a contract of adhesion?

- A The insurer can refuse to pay claims unless the insured has complied with all policy provisions.
- B The insured can assign the policy only with the insurer's consent.
- C The insurer can sue the insured for failure to pay any premiums.
- D The policy is interpreted in the insured's favor if the policy contains any ambiguities or uncertainties.

A23. Which of the following statements about offer and acceptance for insurance contracts is true?

- A In property and liability insurance, agents typically do not have the authority to bind coverage.
- B In life insurance, the agent can usually accept an offer by immediately binding coverage.
- C In property insurance, the offer and acceptance are usually in writing but may be oral.
- D In life insurance, the offer is merely the promise to pay the first premium.

A24. Charita applied for life insurance and paid the first premium on Monday. She was given an insurability premium receipt which specified that coverage was effective on the date of the application or the date of the medical exam, whichever is later. She took the medical exam the following Thursday. She was found to be in perfect health. On which day was her coverage effective?

- A on Monday, when she completed the application and paid the first premium
- B on Wednesday, two days after completing the application and paying the first premium
- C on Thursday when she passed the medical exam
- D on Saturday, two days after passing the medical exam

A25. A permanent life insurance policy where by the cash value is invested for the benefit of the insured and accumulates over time in order to reduce the cost of insurance is:

- A whole life insurance
- B term insurance
- C variable life insurance
- D all of the above except B

A26. A 45-year-old male purchases Rs. 5,00,000 worth of whole life insurance naming his wife beneficiary. During the course of the application process he misstates his medical health claiming he never was a smoker and did not have high cholesterol readings, both of which were false statements. Three years later he dies of a heart attack while attending an RCB/Chennai Super Kings IPL cricket that Chennai Super Kings miraculously won [he went out a winner]. Under these circumstances:

- A the insurer will pay Rs. 500,000 to his wife as beneficiary
- B the insurer will deny the claim saying it was null and void due to false statements made by the insured
- C the insurer will deny the claim saying the policy is voidable based on material misrepresentation
- D the insurer will pay past premiums claiming that the policy came into existence but on false information

A27. At the age of 55, you receive an inheritance of Rs.10,00,000. You decide to place those funds with an insurer who agrees to pay you an annual payment as long as you live 10 years later when you reach age 65. Such a transaction is an example of a:

- A cash refund annuity
- B single premium deferred annuity
- C single premium immediate annuity
- D endowment life annuity

A28. How is the purchase price of a deferred annuity plan paid?

- A. Through a lump sum amount
- B. Through instalments over a period of time
- C. Either through a lump sum amount or through instalments
- D. By waiving of the payment of premiums.

A29. What is meant by a claim under an insurance policy?

- A. A demand made by the policy holder on the insurer
- B. A demand to fulfil assignee's obligations
- C. A demand to fulfil the insurer's obligation
- D. A demand to fulfill self-obligation

A30. In one type of property and casualty insurance rate making, exposures with similar characteristics are placed in the same underwriting category, and each is charged the same rate. This type of rate making is called

- A. Judgement rating
- B. Experience rating
- C. Schedule rating
- D. Class rating

A31. Which of the following statements is (are) true regarding annuities?

- I. Insurers pool the risk of excessive longevity when offering life annuities.
 - II. An annuity can provide a lifetime income that cannot be outlived.
- A. Neither I nor II
 - B. I only
 - C. II only
 - D. Both I and II

A32. Which of the following statements is (are) true with respect to the Roth IRA?

- I. Roth IRA contributions are tax deductible.
 - II. Roth IRA contributions accumulate income tax free and qualified distributions are not taxable if certain requirements are met.
- A. Neither I nor II
 - B. I only
 - C. II only
 - D. Both I and II

A33. All of the following statements about traditional IRAs are true EXCEPT:

- A. Even if an individual is covered by an employer-sponsored pension plan, his or her traditional IRA contribution may be tax deductible if his or her modified adjusted gross income is below a specified level.
- B. Traditional IRA contributions are always tax deductible
- C. Distributions from traditional IRAs funded exclusively with pre-tax dollars are taxed as ordinary income.
- D. A participant must have taxable income during the year in order to make a traditional IRA contribution.

A34. Which of the following statements is (are) true with respect to group life insurance?

- I. Most group life insurance in force is term insurance.
- II. Evidence of insurability is required, especially if the group is large.

- A. Neither I nor II
- B. I only
- C. II only
- D. Both I and II

A35. Which of the following statements is (are) true with respect to the characteristics of social insurance programs?

- I. Social insurance benefits are based on individual equity rather than social adequacy.
- II. Social insurance benefits are available only if a means (needs) test is satisfied.

- A. Neither I nor II
- B. I only
- C. II only
- D. Both I and II

A36. All of the following statements regarding flood insurance are true EXCEPT:

- A. adverse selection is likely to develop in the market for flood insurance.
- B. without assistance from the federal government, premiums for flood insurance in flood-prone areas would be too high for most insureds to pay.
- C. private insurance companies that choose to insure the flood risk must bear any underwriting losses that occur.
- D. flood insurance is sold with a waiting period that must be satisfied before the coverage is in force.

A37. Which of the following statements is (are) true with respect to Workers Compensation and Employers Liability Insurance?

- I. Workers compensation insurance is characterized by deductibles and coinsurance.
- II. Workers compensation provides coverage for occupational injury and disease.

- A. Neither I nor II
- B. I only
- C. II only
- D. Both I and II

A38. The difference between an insurer's assets and its liabilities is called the

- A. admitted assets
- B. loss reserves
- C. risk based capital
- D. policy holder's surplus

A39. Which of the following statements is (are) true with respect to endorsements and riders?

- I. Endorsements and riders are used to amend provisions of insurance contracts.
 - II. If the endorsement or rider conflicts with terms in the underlying contract, the endorsement or rider takes precedence unless it conflicts with the law.
- A. Neither I nor II
 - B. I only
 - C. II only
 - D. Both I and II

A40. Which of the following statements is (are) true about the insuring agreement?

- I. The insuring agreement provides a description of the property or activity to be insured.
 - II. The insuring agreement can be written on an “open-perils” basis or on a “named-perils” basis.
- A. Neither I nor II
 - B. I only
 - C. II only
 - D. Both I and II

After completing this PART-A, start answering PART – B (OPEN BOOK) in a separate answer sheet.

COMPREHENSIVE EXAMINATION (REGULAR)

PART –B (OPEN BOOK)

NOTE: Attempt all questions. Answer to the point. Attempt all parts of the question at one place. WRITE ALL ANSWERS IN THE EXAM BOOK. Please write legibly (If I can't read it, it's wrong). NO PARTIAL CREDITS FOR ANSWERS

PART –B: This is OPEN BOOK examination.

Total Marks: 20.0

B1 For the following questions answer to the point. To get credit provide correct explanation.

(8.0 Marks)

I. You are completing a universal life application for your client Rangan. He has chosen guaranteed investment accounts as his investment option. He is going to minimally fund the policy. He asks you if there is any difference if he pays monthly or annually. *Which of the following option is the correct best answer? Briefly Explain your answer.*

- a) Universal life has no modal factor and the long term cash value is the same, whether paid monthly or annually.
- b) Universal life has modal factor and long-term cash value will be higher if paid annually.
- c) Universal life has modal factor and long-term cash value will be higher if paid monthly.
- d) Universal life has no modal factor and long-term cash value will be higher if paid annually.

II. Madhu and Dhanya have been married for 10 years, are childless and have no desire to have children. Madhu's annual net income is \$120,000, and he has group life insurance for the same amount. Dhanya's net income is \$45,000 and she has no group insurance. Their home is valued at \$320,000, and they currently have 20 years left on their \$250,000 mortgage. Madhu would like to bequeath an amount of \$100,000 to the hospice that cared for his parents. Dhanya inherited \$250,000 recently upon the death of her father, which they are using to maximize their registered retirement savings plan (RRSP) contributions and use all unused contribution room. In the event of his own death, Madhu would like to leave the house to Dhanya mortgage-free.

To meet Madhu's needs, what is the minimum amount of life insurance coverage he should buy?

- III. Venkatesh is turning 63 this year and has already retired. He has sizable non-registered assets with large unrealized capital gains and is concerned about the tax consequences upon the sale of the assets. He comes to you for risk management advice. *Which of the following statements is correct best advice regarding Venkatesh's next action?*
- a) Under the risk avoidance technique, he can immediately apply capital losses.
 - b) Under the risk retention technique, he can choose to do nothing.
 - c) Under the risk transfer technique, he can transfer ownership to his son upon his death.
 - d) Under the risk reduction technique, he can invest aggressively to achieve a higher rate of return.

- IV. Nitya applied for a health insurance policy. She has a chronic liver condition and other health problems. She disclosed this information to the insurance agent when she applied for the policy. However, the agent did not include these facts in the applications, telling Nitya that he would include them in a separate letter to the insurance company's underwriting department. The agent never sent to letter to the insurance company. Nitya's health insurance policy was issued as a standard policy. Shortly after the policy was issued, Nitya filed a claim. After investigating the claim, the insurance company denied the claim. Nitya contends that the insurance company should pay the claim because she honestly answered all if the agent asked.
- a) On what basis can the insurance company argue it can deny the claims?
 - b) What legal doctrines can Nitya use to support her argument that the claim should be paid

B2 Read the following situation and answer the given questions based on that. Don't write general answer and should reflect the concepts covered.

Mahesh Sharma, a dealer in timber, supplied timber to companies on a contractual basis. He insured his business with New Insurance Company. Mahesh Sharma had different payment arrangements with each of his clients. While some clients were asked to pay in cash, others were allowed credit. Orange Private Ltd was one of the companies that purchased timber from Mahesh Sharma. Mahesh Sharma received fully paid shares of the company as payment for the timber sold to it. By financing the company during its time of need, Mahesh Sharma had also become an unsecured creditor of the company.

On 10 April 2018, Mahesh Sharma and Orange Private Ltd. signed a deal for 1000 teak wood logs. The delivery of the timber was to take place the next day. Unfortunately, that night there was a short circuit at the godown where the timber was stored, and the entire consignment was destroyed in the fire. Mahesh Sharma filed a claim with the insurance company for the loss he had incurred. New Insurance Company however, rejected his claim and refused to pay for the loss, alleging that the timber which was destroyed was sold by the insured to Orange Private Ltd and, therefore, Mahesh Sharma no longer had any claim over it.

- a) Is Mahesh Sharma entitled to receive compensation from the insurance company for the loss caused by the fire?
- b) What is insurable interest? What are the policy requirements for an insurance interest?

(5.0 Marks)

B3 Carefully read the situation given below. The questions are also provided at the end of the description.

Sahil is a student and studying in an engineering college. He owns a high-mileage bike that has a current market value of Rs. 80,000. The current replacement value of his clothes, television set, stereo set and other personal property in a rented apartment totaled to Rs. 1 lakh.

He wears disposable contact lenses costs Rs.6000 for a six months' supply. He also has a waterbed in his rented apartment that has leaked water in the past. Sahil is an avid runner and in a nearby park he runs eight miles a day. The park has a reputation for being extremely dangerous with drug thieves, numerous assaults, robberies, muggings, and throwing stones from cars. Sahil's parents both work to help him pay his tuition fees.

For each of the following given risks or loss exposures, identify an appropriate risk management technique that could be used to deal with these exposures. Briefly explain your answer.

- a) Physical damage to the bike because of a collision with another motorist.
- b) Liability lawsuit against Sahil arising out of the negligent operation of his bike.
- c) Total loss of clothes, television, stereo and personal property because of a lubricant fire in the kitchen of his rented apartment.
- d) Disappearance of one contact lens.
- e) Water-bed leak that causes property damage to the apartment.
- f) Physical assault on Sahil by gang members who are dealing drugs in the park where he runs.
- g) Loss of tuition from Sahil's father who is killed by a drunk driver in an auto accident

(3.0 Marks)

B4 A reinsurance contract stipulates that the primary insurer shall retain the first Rs.1,00,000 of every loss for every risk, where after the reinsurer will assume liability for the remaining portion of the loss. However, the reinsurer's liability per loss per risk cannot exceed Rs.5,00,000 and the reinsurer's liability per loss occurrence cannot exceed Rs. 7,00,000.

Determine the loss and liabilities of the respective parties in the following situations:

Occurrence 1:

- (a) Risk 1 suffered Rs. 4,71,000 in bodily injury losses and Rs. 3,28,000 in property damage losses.
- (b) Risk 2 suffered Rs. 50,000 in bodily injury losses and Rs.1,50,000 in property damage losses.

Occurrence 2:

- (a) Risk 3 suffered Rs. 51,000 in bodily injury losses and Rs. 20,000 in property damage losses.
- (b) Risk 4 suffered Rs.3,60,000 in bodily injury losses and Rs. 10,000 in property damage losses.
- (c) Risk 5 suffered Rs.1,00,000 in bodily injury losses and Rs.1,00,000 losses

(4.0 Marks)

