1. A UK-based oil carrier owner has several long term charterparties with Middle Eastern oil producers to transport oil to Western Europe. It also trades other vessels in the spot market: these earnings are volatile but can be considerable during boom periods. One of its vessels is used to offer storage capacity to an oil producer during times when prices are low, and the oil cannot be sold into the market. The storage contract is long term and stable.

The company has previously taken out a bank loan which is secured against one of the charterparties. The company needs to raise a further loan for a significant expansion of the fleet, and as the Chief Finance Officer in the company, the Chief Executive Officer has asked you to prepare a report discussing the suitability of securitisation as a technique for raising the funds needed. In your report you should discuss, but without being limited to, the following issues:

-Requirements of cashflows before they can be securitised, and which of the company's earnings can be used for this. You should explain whether the various sources of revenue can be used together or 'repackaged' as part of a securitisation programme.

-The methods by which the basis point spread of the bonds which will be issued can be reduced.

-The legal status and location of the special purpose vehicle, bearing in mind that as a UK-based company, any bond payments may be subject to withholding tax.

-The nature of the bonds which would be issued under the arrangement.

You must provide a diagram to support your report.

Answer.

Cashflows should be: stable and predictable; homogenous; with the legal right to assign to a third party, this being the SPV. A shipowner can use charterparties as assets for securitisation if they meet these criteria. Also, it may use the vessels themselves by transferring ownership to the SPV. Spot market earnings cannot be securitised.

Students should explain that securitisation is the bundling together of future cashflows or receivables, and the issuance by the originator, now the conduit, of bonds secured upon or collateralised by those cashflows. Partial collateralisation in the form of transference of assets to the special purpose vehicle should be discussed. The process represents transference of risk from the originator to those who are prepared to accept it in return for a coupon flow. The three prerequisites for cashflows before they can be securitised should be discussed (stable, homogenous, and legally permissible to be assigned).

In the context of this problem, the spot trading earnings are not suitable since they are not stable but may be used to finance a sinking fund to reduce the basis point spread on the floating rate note. The long term charterparty earnings cannot be securitised because they are subject to a prior claim by a bank in respect of a previous loan.

The earnings from the storage facility cannot be added to the others because they are not homogenous but may be securitised in their own right.

The SPV protects the originator from legal actions by investors, for example in respect of payment default. The SPV has separate legal personality and legal actions lie against it and not the originator. It isolates risk affecting the originator via the separate legal personality of the SPV. The SPV also holds the cashflows as assets: investors are therefore protected against claims by liquidators in the event of the originator becoming insolvent. A guarantee in respect of the SPV may be given by the parent company, by cross collateralisation over assets held elsewhere in the corporate structure.

2. Identify and explain the ethical responsibilities and potential conflicts which may arise in **EACH** of the following relationships:

i. Shipowner borrower and the financial institution which it approaches for finance.

Answer. Shipowner must make full disclosure of all strengths and weaknesses, and state of assets. This may be problematic if some of these are negative and result in either a loan not being made, or at a higher rate of interest to reflect the risk. Shipowner must not put its own interests before those of the lender, for example liquidating itself to avoid the claims of the lender or to gain higher priority for the shipowner on asset distribution or payment in the pecking order.

ii. Shipowner and crew.

Answer. Duty to look after their safety and wellbeing, and to respect cultural differences. The former may result in greater costs, particularly if higher wages are required. Owner should not 'cheat' crew on a liquidation, for example leaving them stranded and unable to get home. Not to trade in dangerous waters, for example where there is piracy, even if to do this would result in higher earnings but at the risk to the lives of crew.

iii. Shipowner and insurance broker.

Answer. Duty to make full disclosure to the broker because this is a relationship of utmost good faith. But this may result in higher premiums being payable.

iv. Broker and insurance company with which it places a contract on behalf of the shipowner for which it acts.

Answer. To place all facts regarding the client's assets and business before insurers, and to enable them to calculate the premium payable accurately.

v. Shipowner active in the transportation of oil, and the natural environment.

Answer. To ensure that vessels are in good state of repair and not at risk of leaking oil or other substances into the natural environment. To ensure that there is insurance in place in respect of environmental risk. Not to trade between different waters where there is a risk of taking contamination or other species from one place into another. Not to discharge tanks in open waters. To dispose of waste responsibility.

3. With regard to **EACH** of the following forms of security for a ship loan, discuss the procedures and potential risks to lenders in taking them, and the extent to which the relevance of each is affected by the phases of the shipping cycle.

a) Ship mortgages
b) Guarantees given by a parent company in respect of a loan made to its subsidiary
c) Assignment of earnings
d) Assignment of insurances

4. Granite Shipping is publicly quoted on the New York Stock Exchange. Over the past three years the company's share price has declined significantly: the markets in which the company trades have experienced a downturn, resulting in a recession which has adversely affected prices of shipping company shares in the market. However, it is expected that a market recovery will commence soon, and although the share price has yet to show signs of improvement, the company's Chief Executive Officer (CEO) believes that this will begin over the next year.

The CEO wants to raise finance to expand the fleet and is considering issuing a convertible bond. He has asked you, as Chief Finance Officer, to prepare a briefing report addressing the following issues, but without being limited to them.

i. The characteristics of convertible bonds, the best time to issue them, and how this relates to the present state of the markets in which Granite Shipping is trading:

Answer.
Students should define the characteristics of convertibles, with discretionary marks given for identifying that the issuer may force conversion (instead of the investor being the sole holder of this right). Issues such as the trigger exercise price need to be discussed in detail, and whether they are date restricted or open in terms of conversion. Abacus has a low share price relative to asset values and is expecting a market recovery which will increase share price. This means that the conversion right can be set at a higher premium than the prevailing market price, but the risk for investors being that it will become busted because the price is never reached. The issue should be well received given the market perception that prices will improve in the short term, giving a speculative opportunity.

ii. The advantages and disadvantages to an issuer from issuing convertible bonds:

Answer. Advantages include a lower borrowing cost (lower coupon) to the issuer, and longer-term funding than a plain vanilla bond. Equity 'on tap' because the issuer may be able to force conversion, reducing coupon payments (which are mandatory) with discretionary dividend payments. This may be a short-term help during a market downturn when earnings are weak.

iii. The attractions of convertible bonds to investors

Answer. The investor is given a speculative play between debt (giving a guaranteed rate of interest) or equity (the opportunity to participate in the profits of the issuer through dividend payments in the future). Students should also discuss the dilution implications of conversion from debt into equity, and the fact that when made, this election cannot be reversed by the investor. Regarding disadvantages, students should discuss busted convertibles: when the trigger price is never reached. Also, a busted convertible can give negative market signals. Busted convertibles can also become illiquid and weigh heavily on an investor bank's capital adequacy ratio.

iv. Concerns which may be raised by existing shareholders in Granite Shipping.

Answer. Dilution of earnings and voting control.

5. Discuss the type of loan or loans which may be suitable, the typical covenants, and the risks to the lender, in **ALL** the following situations.

i. A shipowner is trading in a market in recession; asset values are low and revenues barely sufficient to meet operating expenses, but a short-term improvement is expected.

Answer. Moratorium in which interest payments are suspended for up to two years. Or back ended loan. Reduce risk by including a covenant not to dispose of assets or subsidiaries without lender's permission.

ii. A shipowner is trading in a market which has reached its peak (zenith), but it is expected that revenues will start to decline in the short term as the market cools and moves into a recession.

Answer. Front-ended loan to reduce principal in anticipation of downturn when earnings will be lower. Budgetary provision: set aside liquidity from high earnings to be able to meet OPEX and CAPEX when earnings are later lower or non-existent. Or bullet.

iii. A shipowner with a high level of debt is unable to meet loan repayments due to a downturn in the market. Asset values on which loans have been secured have declined significantly, triggering loan to value covenants.

Answer. Moratorium. Covenant not to discontinue business without lender's consent or at least being given advance notification. Covenant to inform lender of pending legal proceedings or arrest of vessels, for example in respect of non-payment to a third party.

iv. A shipowner is trading in an uncertain market: it may continue to improve or may fall back into recession. It does not want to take on additional debt because interest rates are high but would like access to loan capital should bargain purchases become available in the near future, but also to meet operating expenses should these become difficult pending an expected upturn.

Answer. Revolving credit facility or note issuance facility.

6. Answer **ALL** parts of the question.

i. Outline the reasons why shipowners use one-ship corporate structures.

Answer. To avoid arrest of assets in the same fleet, for example after an oil spill. Discuss the principle of separate legal personality of subsidiaries. Tax considerations. To conceal true beneficial ownership. To improve appearance of the balance sheet by hiving off older vessels into separate companies.

ii. Discuss in detail the methods which may be used by shipowners to legally manipulate group accounts produced for a one-ship corporate structure.

Answer. Intra group dividend payments

Intra group loans

Intra group sale of assets at an under or over valuation.

Manipulation of accounting reporting dates

Use of special purpose vehicles to conceal existing levels of debt or to relocate assets off balance sheet

iii. Discuss the loan covenants which would be included by a financial institution in a loan to the parent of a series of one-ship subsidiaries to prevent accounting manipulation.

Answer.

To relocate all assets into one company.

Not to dispose of assets.

No corporate reorganisations.

No intra group loans or dividend payments

No intra group sales

Payment of interest on the loan

Compliance with laws, including environmental.

To notify lender of arrest of any vessels.

7. Answer **ALL** parts of the question.

i. Explain the differences between an operating lease and a finance lease.

Answer. An operating lease is one in which the lease is of a shorter term than the useful life of the ship and where legal title to the ship does not pass to the lessee at maturity of the lease. In contrast, a finance lease is of longer duration and title to the ship passes to the lessee at maturity of the lease. In an operating lease, the financed vessel is recorded only in the balance sheet of the lessor, hence the arrangement being off balance sheet for the lessee with the commensurate 'invisible leveraging' effect. In contrast, in a finance lease the lessee records the vessel (the subject of the lease) in its balance sheet. At the end of an operating lease, the lessee will redeliver the leased vessel to the lessor, who will sustain any residual value risk. The lessor is responsible for the maintenance of the asset, and crewing, which reduces the autonomy of the lessee, for example to modify the vessel to accept different cargoes. In contrast, under finance lease the lessee retains control of maintenance of the vessel, including asset quality, as well as crewing.

Given these responsibilities, finance leases tend to be more cost-effective than operating leases. The disadvantages of a finance lease compared with an operating lease is that the asset must be presented in the lessee's balance sheet, increasing leverage and raising the cost of future capital to reflect the implicit increase in default risk. Residual risk in the form of a decline in asset value of the asset over the life of the lease will fall to the lessee, in contrast to an operating lease where it is assumed by the lessor at the end of the lease life.

ii. Describe the main duties of a lessee under a typical ship finance lease.

Answer.

Duty to insure

To provide information
To trade only on specific routes
To maintain asset in a good state of repair
To return vessel at the end of the lease in an acceptable pre-stipulated condition.

iii. Describe the main powers of a lessor under a typical ship finance lease.

Answer. To take possession upon non-payment by the lessee.

To take back possession of the asset upon expiry of the lease.

To sell the leased asset.

To demand documentation regarding upkeep of the asset, including insurance.

8. Discuss the main components in a shipping company's balance sheet to which a lender should pay attention when deciding whether or not to make a loan, Identifying weak points and where possible, how these may be reduced or managed.

Answer.

Students should discuss, amongst other matters:

Asset values and whether entered on market or historical value, the latter being less reliable

Levels of existing debt, and whether fixed or floating

Creditors, and when loans are due

Payments due from other parties (debtors) and whether or not these are at risk of default

Operating expenses and how these compare year on year for the past three years. Rising costs of insurance associated with increasing risks of accidents

Cost of repairs and maintenance, and whether or not these have been escalating in recent years (indicating a deteriorating fleet)

Remuneration paid to board members, and whether these have been diverging from the company's recent performance (the board plundering the company prior to its demise)

Cost reduction strategies:

Sale of underperforming assets

Sale and leaseback of assets to raise cash

Hedging of fuel costs

Reduction in number of employees

Use of a management company (outsourcing)

9. You are the Marketing Director for an Islamic bank looking to develop its client base in the shipping sector. Prepare a 'marketing pitch' to a Middle East-based oil tanker owner, explaining the principles underpinning your business model, and the specific methods of financing which may be appropriate. Identify the types of investors which may be interested in participating in products issued under such arrangements. explain the advantages and disadvantages the tanker owner may achieve from doing business with you compared with a non-Islamic bank.

Answer.

Principles.

Prohibition on speculation.

Prohibition on the payment or receipt of interest.

Capital must be used for socially productive purposes.

Risk rests with the lender and not with the borrower.

Certain activities are haram or prohibited, including alcohol, pork products, gambling.

The asset financed cannot be insured (with many exceptions).

Selling points. In shipping, loans and bonds cannot pay interest to the provider of capital. The lender must share in the risk of the venture: most ship finance deals are through joint venture vehicles jointly owned by the lender and borrower, with profits divided between the parties. Security cannot be taken by the lender in the form of a charge or mortgage over the assets being financed.

Advantages. Security over assets cannot be demanded by the lender.

Lender genuinely participates in the risk and success of the venture.

Interest on capital cannot be charged.

A higher percentage of capital is usually contributed by the lender under any joint venture arrangement.

Disadvantages.

Short term finance because lender cannot take security for a loan.

Lender is more intrusive because it has more to lose in the venture.

Borrower's secrecy cannot be assured: lender may require board appointments.

Instruments.

Ijara Leasing.

Mudarabah. The term refers to a form of business contract in which one party brings capital and the other personal effort. The proportionate share in profit is determined by mutual agreement. But the loss, if any, is borne only by the owner of the capital, in which case the entrepreneur gets nothing for his labour. The financier is known as ‘rabal-maal’ and the entrepreneur as ‘mudarib’. As a financing technique adopted by Islamic banks, it is a contract in which all the capital is provided by the Islamic bank while the business is managed by the other party. The profit is shared in pre-agreed ratios, and loss, if any, unless caused by negligence or violation of terms of the contract by the ‘mudarib’ is borne by the Islamic bank. The bank passes on this loss to the depositors.

Musharaka.

Musharakah is a joint enterprise or partnership structure in Islamic finance in which partners share in the profits and losses of an enterprise. Since Islamic does not permit profiting from interest in lending, musharakah allows for the financier of a project or company to achieve a return in the form of a portion of the actual profits according to a predetermined ratio. However, unlike a traditional creditor, the financier also will share in any losses should they occur. Musharakah is a type of shirkah al-amwal (or partnership), which in Arabic means "sharing."

Investors. Religiously driven depositors and shareholders, rather than secular. This necessarily narrows the range of potential investors to which products can be marketed.

10. Discuss any **FOUR** of the following, relating each to shipping finance.

a) Negative pledge and force majeure covenants

Answer. Negative pledge prohibits the taking on of fresh debt. A force majeure clause states that if an **extreme, unforeseeable event occurs that prevents or delays a party from performing their contractual obligations**, that party will not be in breach of contract as a result of the delay/non-performance.

b) Residual value insurance

Answer. A policy to provide a floor below which asset value cannot decline, as security for a loan, even if market fallen has declined. It is expensive and not usually taken out. The cost will be borne by the borrower. There are very few providers of this sort of loan cover.

c) Senior and subordinate debt, and the effect on insolvency

Answer. Senior debt is higher ranking on an insolvency and winding up, and accordingly pays a lower rate of interest. Subordinate or junior debt is paid after senior, and has higher risk attached. It may contain a prohibition against the taking on of fresh debt ranking in priority to or at the same level to, it.

d) Sinking fund and its affect upon the basis point spread on a bond issue

Answer. A ring-fenced account funded through regular payments by the borrower with the aim of building up a sum which can be used to repay principal on maturity. It cannot be accessed by the borrower and must be under the control of a reliable third party. It should lead to a diminution in the rate of interest payable due to the reduced risk.

e) Partly paid and cumulative preference shares

Answer. Partly paid: a percentage of the amount due is paid by the holder, who receives full voting rights and full dividend payments. The risk is that if the company enters liquidation the balance must be paid by the shareholder.Cumulative preference: If the company does not pay a dividend in a year, these are added to next year's and paid to holders before any payment to ordinary shareholders.

f) Modigliani Miller hypothesis of capital structure (debt-equity) irrelevance.

Answer. The debt-equity structure is irrelevant in terms of the ratio because investors can always reverse any reorganisation of the structure by the borrower or issuer. It is abstract since it only applies in unrealistic scenarios, such as absence of taxes or liquidation costs.