# UNIVERSITY OF PETROLEUM & ENERGY STUDIES DEHRADUN

**End term Examination – December 2017** 

Program/course: BA.LL.B Energy Law (Hons) Subject: Air & Space law Code : LLBL 406 Semester – VII Max. Marks : 100 Duration : 3 hrs

#### No. of page/s: Three

Section A – Objective Type /Short Questions – 10 Marks,								
<ol> <li>What is closest in order of reference with regard to carriage of animals under the Warsaw system for many countries:         <ul> <li>a) As that of luggage</li> <li>b) Cargo that requires special treatment</li> <li>c) Has to be treated as veterinary care</li> </ul> </li> <li>Article 22 / 26 of the Warsaw convention requires written description of damage,days for luggage anddays in case of freight</li> <li>The limitation in respect of the Warsaw convention under article 29 is years</li> <li>The product liability under the aviation law concerns itself with defective</li> </ol>								
	defective and inadequate							
5.	The system developed by ICAO was named was renamed as ICAO				(FANS) and			
					<u>(CNS)</u> /			
	(ATM)	systems						
6.	Under Space Liability Convention, of 1972 claims can be made by individuals on states ( (True or False)							
7.	Registration	Convention	of	1974 _ (UNOOSA)	-	is	kept	by
8.	law shall be applied for States Parties under the space treaty							
9.	rescue is an International responsibility							

**10.** As per Article I of Space treaty : Exploration and Use of Outer Space shall be as per the investing and technologically advanced nations (True or False)

- 1. Write short notes on any two of the following:
  - a. Registration Convention of 1974 for space crafts
  - **b.** Lessons learnt from the case of satellite launch Appalachian Insurance co v Mcdonnel Douglas
  - c. Liability convention in outer space of 1972
- 2. Describe the Main guiding Principles: Outer Space Treaty 1967.

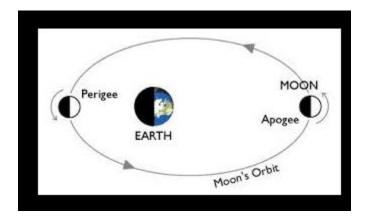
#### Section C – Analytical Type Question– 20 Marks

- 3. An aggressive country which is in a space/ arms race with the world's leading super power decides to get its supremacy over it by two means mentioned below. Assume that the country in question is a signatory to the space treaty and other multilateral treaties and also it has already done the operation given below. What are the consequences? :
  - a) Setting up a laser weapons on its space shuttle so that it could target earth based military bases and industrial hubs.
  - b) There space shuttles are nuclear powered and they have capability of probing celestial bodies for availability of nuclear fuel.

## Section D – Application based problem / Case Study – 50

- 4. Martin Marietta (Hereinafter MM) is a leading Spacecraft manufacturer for launching rockets for satellite placement in outer space. Two events presupposed the contract for supply of Rocket engines between MM and International Telecommunication Satellite Organization (Intelsat): a) The exclusive remedy provisions available to Intelsat basically underwriting the project with insurers and b) Cross waivers considering that technical knowhow was transferred from contractor and contracted. As it stands one of the MM rockets failed(There were two of which the other succeeded) thereby aborting one of the satellite missions. Intelsat is claiming damages:
  - a) What is Intelsats arguments?
  - b) Why should Intelsats arguments fail or succeed as per law?
- 5. As per news item appearing China's Tiangong -1 space lab is headed for an uncontrolled nosedive into Earth's atmosphere around April 2018, this is indicative of the space junk which is being bought up by space missions. As per the principles of the space treaty of 1967 one of the points of agreed upon

multilaterally is about the Liability convention in outer space of 1972 and the Basic orbital parameters (Nodal period, Inclination, Apogee and Perigee) under the Registration Convention of 1974 for spacecraft's. Below is the diagram showing the apogee and perigee - for simplification if the Nodal and inclination trajectories were formulated by the Chinese to land in the pacific ocean



However despite the nodal, inclination perigee and apogee as the basis of the initial Chinese calculation its satellite was disturbed due to uncontrollable events such as the vagaries of the wind velocity and entering gravitational pulls in its descent to the earth. In its wake it also damaged one of the orbiting Indian satellite and further on reentry it now lands on Mumbai. Assuming the space treaty, International law and the notable Ryland vs fletcher on strict liability, remoteness etc argue the following:

- a) What would the Chinese government's defense be in terms of liability to the Indian government?
- b) What would our governments stand be on space exploration being fault free also the space treaties for such mishaps
- c) Assuming apart from the Indian satellite, some of the buildings is destroyed due to the mishap in Mumbai. Can the building owner bring a suit on the Chinese government why or why not? Can the ISRO bring a suit against the Chinese government as a government agency?

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Section A – Objective Type /Short Questions – 10 Marks,

**1**. What is closest in order of reference with regard to carriage of animals under the Warsaw system for many countries?

- a) As that of luggage
- b) Cargo that requires special treatment
- c) Has to be treated as veterinary care
- 2. Article 22 / 26 of the Warsaw convention requires written description of damage, \_\_\_\_\_\_days for luggage and \_\_\_\_\_\_days in case of freight
- 3. The limitation in respect of the Warsaw convention under article 29 is \_\_\_\_\_ years
- 4. The product liability under the aviation law concerns itself with defective \_\_\_\_\_\_ defective \_\_\_\_\_\_ and inadequate\_\_\_\_\_\_
- 5. The system developed by ICAO was named \_\_\_\_\_\_ (FANS) and was renamed as ICAO \_\_\_\_\_\_ (CNS) / \_\_\_\_\_\_ (ATM) systems
- 6. Under Space Liability Convention, of 1972 claims can be made by individuals on states ((True or False)
- 7. Registration Convention of 1974 register is kept by UNOOSA)
- 8. \_\_\_\_\_ law shall be applied for States Parties under the space treaty

9. \_\_\_\_\_ rescue is an International responsibility

**10.** As per Article I of Space treaty : Exploration and Use of Outer Space shall be as per the investing and technologically advanced nations (True or False)

## Section B - Conceptual Questions – 20 Marks.

**1.** Write short notes on any two of the following:

**a.** Registration Convention of 1974 for space crafts

- **b**. International Cargo handling and problems
- **c.** Liability convention in outer space of 1972
- 2. Describe the Main guiding Principles: Outer Space Treaty 1967.

## Section C – Analytical Type Question– 20 Marks

- 6. A leading Aircraft manufacturer X with an equally big Aircraft manufacturer launches a new product as a joint venture. Many question rose regarding the risks involved. The two decided to have an insurance underwriter cover the risk. In view of the insurance, some of the stringent quality requirements were reduced. What would the liability be in terms of aviation law
  - a) In terms of a general conditions in contract between the two parties what would make the manufacturer not under "Strict product liability" cite case law? The presence of the underwriter insurance coverage?
  - b) If one of the manufacturers makes the exit doors and it suddenly opens due to Air depression resulting in the inside false flooring of the Aircraft collapsing (made by the other manufacturer) and consequent injury to seated passengers ? Who would be liable and why?

## Section D – Application based problem / Case Study – 50

- 7. Martin Marietta (Hereinafter MM) is a leading Spacecraft manufacturer for launching rockets for satellite placement in outer space. Two events presupposed the contract for supply of Rocket engines between MM and International Telecommunication Satellite Organization (Intelsat): a) The exclusive remedy provisions available to Intelsat basically underwriting the project with insurers and b) Cross waivers considering that technical knowhow was transferred from contractor and contracted. As it stands one of the MM rockets failed(There were two of which the other succeeded) thereby aborting one of the satellite missions. Intelsat is claiming damages:
  - a) What is Intelsats arguments?
  - b) Why should Intelsats arguments fail or succeed as per law?

- 8. Oglivy and Mather (O & M) is a New York City-based advertising, marketing and public relations agency. On the strength of an agreement with European Space agency (ESA, an artificial entity) acquired the right to use Metostat photographs based on a non exclusive and non transferable right to sell them and authorize to publish such photographs in Germany, however copyright remains with ESA. Analyze this case in terms of the decision taken by the court when a popular newspaper advertisement published the same.
- 9. An aggressive country, which is in a space race and arms race with the world's leading super power, decides to get its supremacy over it by two means mentioned below. Assume that the country in question is a signatory to the space treaty and other multilateral treaties and also it has already done the operation given below. What are the consequences?:
  - a) Setting up a laser weapons on its space shuttle so that it could target earth based military bases and industrial hubs.
  - b) There space shuttles are nuclear powered and they have capability of probing celestial bodies for availability of nuclear fuel.