Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, May 2021

Course : Aviation Regulatory Management **Semester: IV**
Programme : MBA (AVM) **Time: 03 hrs.**
Course Code: TRAV 8007 **Max. Marks: 100**

Instructions: All questions are compulsory

SECTION A (30 Marks)

1. Each Question will carry 5 Marks
2. Answer the following questions pointwise strictly.

S. No.	Questions	Marks	CO
Q 1	The capacity at each category of routes in Route Dispersal Guidelines is measured in _____.	**5**	**CO3**
Q 2	Match the opportunities and challenges in various sub-sectors covered in the NCAP 2016	**5**	**CO1**
Q 3	Which condition in RCS ensures that RCS flights are equally spread across all regions of India?	**5**	**CO3**

Column 1: Opportunities	**Column 2: Challenges**
A. Regional connectivity: Revival of unserved and underserved airports	A. Development of airports, attracting airlines to start operations on non-profitable regional routes
B. 5/20 to 0/20 rule: Fair competition for new entrant airlines	B. Benefit to only one airline
C. Airports developed by State Govt, Private sector or in PPP mode: Promotion of various ownership models for airport development	C. Development of sound concession agreements for every ownership model
D. Maintenance, Repair and Overhaul: MRO business in India is nearly 5000 crore, 90% of which is spent outside	D. Development of technology, knowledge base and business environment

A. A cap of 25 per cent of RCS flights in each region
B. A minimum of 3 and a maximum 7 regional connectivity scheme flights per week per route
C. RCS is applicable on route length between 200 to 800 km with no lower limit set for hilly, remote, island and security sensitive regions.
D. The RCS will be in operation for ten years with individual route contracts to be for three years

Q 4	Arrange the types of economic regulation in DESCENDING order of government control 1. Deregulation 2. Government provision 3. Heavy-handed regulation 4. Light-handed regulation 5. Economic oversight	**5**	**CO1**
Q 5	Which of the following type of regulation requires a comparison between a groups of similar airports? A. Rate of return regulation B. Yardstick regulation C. Light-handed regulation D. Price-cap regulation	**5**	**CO2**
Q 6	Which of the following type regulation incorporates an efficiency factor in price control? A. Price-cap regulation B. Rate-of-return regulation C. Yardstick regulation D. Light-handed regulation	**5**	**CO2**
SECTION B (50 Marks) **1. Each question will carry 10 marks** **2. Instruction: Answer precisely, write legibly and stepwise.**			
Q 7	What are the characteristics of a natural monopoly? Why do natural monopolies require economic regulation?	**10**	**CO1**
Q 8	Outline the steps involved in aeronautical tariff setting for Indian airports by AERA	**10**	**CO1**
Q 9	Define the various categories of routes under the Route Dispersal Guidelines with examples of each category.	**10**	**CO3**
Q 10	What do you mean by single till and dual till model? Which till model is advantageous from the perspective to airports and airlines? Describe the till model used for Indian airports.	**10**	**CO2**
Q 11	The bidding process of Delhi and Mumbai international airports consisted of four phases given below. Explain any ONE phase in detail. Phase I Mandatory Requirements Phase II Financial Commitment Phase III Technical Pre-qualification Phase IV Financial Consideration	**10**	**CO4**

SECTION-C (20 marks)

1. Read the following caselet carefully.

2. Instruction: Solve systematically showing sample calculations and write legibly.

Q 12

Considering the aeronautical tariff order of an international airport for the control period (2016-17 to 2020-21), calculate the Aggregate Revenue Requirement (ARR) as per the AERA philosophy using the data given in the table below:

Particulars/ Financial year	2016-17	2017-18	2018-19	2019-20	2020-21
Average RAB (Rs Cr)	163.0	132.4	98.0	105.6	125.4
FRoR (%)	14%	14%	14%	14%	14%
Return on Avg RAB (Rs Cr)	22.8	?	?	?	?
Depreciation (Rs Cr)	41.9	36.3	32.6	30.8	32.0
OPEX (Rs Cr)	131.5	108.9	115.5	122.7	130.5
Tax (Rs Cr)	0.0	32.9	43.8	55.7	65.1
Less 30% NAR (Rs Cr)	18.3	19.9	21.7	23.6	26.7
ARR per year (Rs Cr)	177.9	?	?	?	?
Discount rate	0%	14%	?	?	?
Discount factor	1	0.8772	?	?	?
PV of ARR (Rs Cr)	177.9	?	?	?	?

RAB = Regulatory Asset Base

FRoR = Fair Rate of Return

OPEX = Operational Expenses

NAR = Non-aeronautical Revenue

PV = Present value

Calculate the missing values in the table (all values for FY 2016-17 are already given for reference).

20

CO3, CO4