

Name:	 UPES UNIVERSITY WITH A PURPOSE
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Supply Chain Mgt. & Logistics for Power Industries

Semester: III

Program: MBA Power Management

Time: 03 Hours

Course code: LSCM 8010

Max. Marks: 100

Instructions:

SECTION A

		Marks	CO
Q 1	Explain EOQ.	2	CO 1
Q 2	What do you mean by Product Life Cycle? Explain	2	CO 3
Q 3	What is the full form of FOB & EXW?	2	CO 1
Q 4	Explain Kanban.	2	CO 2
Q 5	What is "Distribution and supply" concept in Indian Power Sector? Explain.	2	CO 2
Q 6	Why power sales and purchase agreement is called as Power Purchase Agreement not Power Sales Agreement – explain.	2	CO 2
Q 7	What do you mean by DFBOOT? Explain.	2	CO 1
Q 8	Name Ministers I/C of Ministry of Transportation in Govt. of India and state of Uttrakhand.	2	CO 1
Q 9	ABC analysis for inventory management.	2	CO 1
Q 10	What is CIP? Explain.	2	CO 1

SECTION B

Attempt any two from given questions in Section B

Q 11	What is Information System for Logistics and SCM? Explain and evaluate this with examples.	10	CO 2
Q 12	What are logistics and Supply Chain Management (SCM)? How SCM is different from Logistics? Please explain.	10	CO 4
Q 13	A manufacturing company purchases 9000 spare parts as an annual requirement, every month @ Rs. 20/- per piece. The ordering cost is Rs. 15/- and inventory carrying charges are 15% of the average inventory Per Annum. Suggest how much would it save on the part of Company (Per Annum) based upon your optimum solution.	10	CO 3 CO 4
Q 14	Inbound and Outbound transportations are major factors in SCM – critically evaluate statement with proper reasons and examples.	10	CO4 CO 5

SECTION-C

Attempt any two from given questions in Section C

Q 15	What is Warehousing in SCM? Critically evaluate the roles of efficient warehousing in SCM with examples.	15	CO2 CO 5
Q 16	What do you mean by Lean Management? Analyze case of Toyota Manufacturing System (TMS) in this regards. Critically evaluate the outcomes.	15	CO 4 CO 5
Q 17	The following information is available on 3 vendors: A, B and C. Using the data below, determine the best source of supply under weighed-point method and substantiate your solution. Vendor A: Delivered 56 lots; 3 were rejected; 2 were not according to the schedule. Vendor B: Supplied 38 lots; 2 were rejected; 3 were late. Vendor C: Finished 42 lots; 4 were defective; 5 were delayed deliveries. Given ratings are: 40 weights for quality and 30 weights for service. Please evaluate these vendors as per given data?	15	CO 5
Q 18	What are drivers for SCM? Critically evaluate them for TPP with imported coal in India.	15	CO2 CO5

Section D - 30 marks – Case study -

In the village of Aharkandhi in northeastern Bangladesh, life has changed since homeowners began installing solar panels on their roofs. At night, families gather at the local grocery store to watch TV, which boosts business. Children study longer than before.

This is due in part to a World Bank-financed electrification project to promote off-grid electricity in rural communities. This year, the project became the first renewable energy program in Bangladesh to be issued carbon credits for lowering greenhouse gas emissions and the world's first Programme of Activities for solar home systems under the UNFCCC's Clean Development Mechanism (CDM) to generate carbon credits.

With access to electricity, people are finding new ways to increase their income, and the word is spreading quickly across villages. Mujib, a shopkeeper, saw his income increase by 1,000 Tk per month (about US\$13), and his evening business grew after his solar home system was installed.

After Hajra installed solar panels, she was able to power five lights so her children could study, a TV, and a mobile phone charger that allows her to keep in touch with her husband, a laborer. Previously, she used kerosene, and she remembers the fumes that filled her house.

This is one of the fastest growing renewable energy programs in the world – to date, more than 3.5 million solar home systems have been installed in rural Bangladesh, creating 70,000 direct jobs.

Bolstering financing through carbon credits

Solar power is helping to green Bangladesh's energy mix. Renewable energy accounts for less than 1 percent of the country's energy generated, but the government aims to have 10 percent of its national grid powered by renewable energy by 2020. Adding solar panels to rural homes is an important part of the country's sustainable development strategy.

In addition to providing energy, the solar home systems are reducing greenhouse gas emissions and earning carbon credits by reducing the use of kerosene lamps for lighting and diesel generators that had been used to charge batteries. The program is projected to deliver 1.1 million Certified Emission Reductions, or carbon credits, by 2016, issued under the CDM. The carbon credits are sold to the World Bank's Community Development Carbon Fund, generating a revenue stream that is shared by the companies involved in financing, installing and servicing the solar panels to expand the program.

It is also the first solar home system Programme of Activities under the UN's Clean Development Mechanism to generate carbon credits. As an approved Programme of Activities, it is able to combine 13 similar projects under one countrywide umbrella program, lowering transaction costs and creating the possibility to add similar projects in the future in a simplified process.

The sun provides light in rural Bangladesh

Benefits of solar panels abound. Communities are reporting a significant increase in the quality of life thanks to better, safer, and cheaper lighting and the ability to power electrical appliances, cell phones, TVs, and radios. Remote and poor families can now hear weather forecasts on the radio and watch the news on small TVs, which becomes more than just a luxury in a country that frequently faces severe weather.

Night lights are improving safety in the dark, especially for women and children. Replacing conventional kerosene lamps and their toxic fumes help reduce indoor air pollution, fire hazards, and health risks such as respiratory diseases. And the solar panel industry is booming, including employing Bangladeshi women.

Solar panel subsidies help the poor

The solar panels are subsidized by the Infrastructure Development Company, Ltd. (IDCOL), a state-owned financial institution that provides families with grants and credits to pay for part of the cost and provide electricity in a country where only 60 percent of the population and about 42 percent of rural households have access to electricity. Around 13 million rural households still live without power. Even those connected to the grid experience blackouts during peak hours because the electricity supply can't keep up with demand.

Installing solar panels has become a reliable and increasingly financially viable solution for more Bangladeshis. A 20 watt-peak system costs about US\$150, which is paid by the users over three years and provides enough electricity to power two lights and one mobile charger. Bangladeshis even in the most rural areas rely on cell phones.

Overcoming the affordability barrier has been crucial in allowing for a widespread adoption of solar home systems. The cost of solar panels has come down over time, and today there is a growing trend for very small, 10 watt-peak panels, allowing poorer households gain access to electricity.

The Bangladesh program is one of the most successful solar home system programs in the world. It's a model that is bringing cheaper and more reliable electricity to remote areas of the country and has potential to go beyond Bangladesh to be scaled up in other developing countries.

Q 19	How Subsidy affects Electricity distribution for rural areas?	10	CO 5
Q 20	Will this above model applicable to Indian rural areas. Critically explain.	10	CO 5
Q 21	Give some idea on micro grid concepts.	10	CO 5