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FOURTH SEMESTER

EMBA

SUPPLEMENTARY END- SEMESTER EXAMINATION

SEP -2019

EMBA-401 PROJECT MANAGEMENT

Questions Each question carry equal marks. Out of 5, attempt any 4 questions.

Time: 3:00 Hours *Max. Marks: 60*

Q. 1 Newcastle Nursing and Rehabilitation Residence

The Newcastle Nursing and Rehabilitation Residence (NNRR) is a 135-bed skilled nursing home. NNRR is considering converting a 36-bed wing of their main building for use by patients who require ventilator-assisted breathing. The rooms will be slightly smaller than optimum for ventilator patients, but just exceed the recommended minimum square footage. Enlarging the rooms is not an economic option. In the main, the conversion will require the addition of electrical wiring to power oxygen-concentrators that extract 95 percent pure oxygen from room air portable ventilators that supply the oxygen under pressure to assist breathing, and small, motor-driven suction devices to remove excess mucus from a patient's airway. These rooms must also be connected to an emergency generator that automatically starts and supplies electrical current if the main electrical supply fails. Finally, pressure sensors must be connected from each ventilator unit to a sound device located in the hallway of the ventilator wing. These units sound a strident signal and cause a hallway light to flash if there is a sharp drop in the airway pressure of a ventilator patient. In addition to these power needs associated with ventilator patients, power outlets are also needed for several machines that dispense tube feedings of medicines and nutrition, and for IVs, radios, and similar entertainment devices. Each bed itself needs a power outlet as does the air mattress pump. Because all rooms are double occupancy, each room needs two full sets of the outlets. The equipment noted above is normally plugged in at all times when the patient is in his or her room. Otherwise well patients, however, are moved daily into a "day room" equipped with a large screen TV and chairs and tables. Most patients must be moved with their portable ventilators and concentrators or bottled oxygen. Patients who are well enough, eat their meals in the day room and socialize with each other and with visitors. (The socialization is a quiet process because a large majority of the patients breathe through a tube inserted in their trachea and are unable to speak aloud.) The Senior Administrator, Steve Murphy, has decided to set up the conversion process as a project. Mr. Murphy is considering the choice of a project manager. He is trained in business, not hospital design. He feels a Registered Nurse or Licensed Practical Nurse might be an appropriate PM. He also feels that a Respiratory Therapist (RT) might be a good choice because RTs are responsible for using the major electrical equipment. Finally, he thinks that the installation and placing of all the outlets might be better handled by a representative of the electrical contractor who must carry out the major part of the room conversion.

Who should Mr. Murphy choose? Defend your choice. **15 Marks**

Q. 2 Discuss Real Option model and window of opportunity model for selection of projects? Give example. **15 Marks**

P.T.O.

Q. 3 **Case: Blanka Transport, Inc.**

After several years of driving long-haul trucks, Joe Blanka founded his own trucking company, Blanka Transport Inc. (BTI), which specialized in less-than-carload shipments in the midwestern part of the United States. Joe developed a successful method for scheduling BTI's runs that met or exceeded the delivery expectations of its customers. As a result, BTI shipments were growing at a rate between 15 and 20 percent per year. The growth, however, was not evenly distributed across BTI's territory. On some routes, capacity was overloaded in one direction and underloaded in the other.

Joe noticed that the imbalance problem was not stable across time. In some months capacity was short in one direction, and in other months it was short in another direction. He thought that one way of solving the problem would be through marketing, by offering incentives to customers whose shipments would improve load balance. Another approach to the problem was to analyze and restructure the route–equipment combinations. He also thought that it might be possible to warehouse some less-urgent shipments for short periods in order to help the balance.

Joe's son, the first member of the Blanka family to attend college, was a senior in engineering school. He had just completed a course in project management, and after briefly describing some of the basic concepts to his father, he suggested that a project might be a good way to deal with the balance problem. He thought that the Marketing Manager and the Route Manager could serve as project co-managers. He also felt that some of the older, more experienced drivers might be helpful. The objective of the project would be to decrease the size of the route imbalances by 75 percent in a 1-year period.

Is this a proper approach to the problem? What, if any, helpful suggestions would you make to Joe? **15 Marks**

Q.4 Discuss Numeric Profitability Models and Numeric Scoring Models. **15 Marks**

Q.5 **L & M Power**

In the next two years, a large municipal gas company must begin constructing new gas storage facilities to accommodate the Federal Energy Regulatory Commission's Order 636 deregulating the gas industry. The vice-president in charge of the new project believes there are two options. One option is an underground deep storage facility (UDSF) and the other is a liquefied natural gas facility (LNGF). The vice-president has developed a project selection model and will use it in presenting the project to the president. For the models she has gathered the following information:

	Initial Cost	Operating Cost/ Cu. Ft.	Expected Life	Salvage Value
UDSF	$10,000,000	$0.004	20 years	10%
LNGF	25,000,000	0.002	15	5

Since the vice-president's background is in finance, she believes the best model to use is a financial one, net present value analysis.

Would you use this model? Why or why not? Base your answer on the five criteria developed by Souder and evaluate this model in terms of the criteria. **15 Marks**