UNIVERSITY OF PETROLEUM & ENERGY STUDIES
SCHOOL OF BUSINESS
KANDHOLI, DEHRADUN
**End Semester Examination –May 2018**

**Name of the Program: BBA(CORE)** | **Semester – IV**
**Subject Name : Project Finance** | **Max. Marks : 100**
**Subject Code : BBCF234** | **Duration : 3 Hrs**

## SECTION – A (20 Marks)
**Attempt all the questions. Each question carries 2 marks.**

**Ques.** Write short notes:

a) Program
b) Green Project
c) BOLT
d) IRR
e) Interest Coverage Ratio
f) SPV
g) D/E Ratio
h) PESTLE
i) ECB
j) PI

## SECTION – B (20 Marks)
**Attempt all questions. Each question carries 10 marks.**

Ques.1. Explain the concept of EXIM and its role in the Indian Economy.

OR

What are the sources of funds available to meet the demand of current assets and pay the current liabilities? Also identify the demerits of such sources.

Ques.2. Project finance is the financing of long-term infrastructure, industrial projects and public services based upon a non-recourse or limited recourse financial structure. In the light of above statement, explain project finance and its features.

## SECTION – C (30 marks)
**Attempt any five questions out of six. Each question carries 6 marks.**

Ques.1. "An interim financing option used by companies and other entities to solidify their short-term position until a long-term financing option can be arranged." In the light of above statement explains the concept.

Ques.2. What you mean by GDRs and how they are different from ADRs?

Ques.3. Explain VUCA as framework to structure for project risk.

Ques.4. How seed capital is funded and by whom?

Ques.5. Identify the parties to the project finance and their agreement role in project finance.

Ques.6. Because of the project size, it's very difficult for a single bank to sanction the entire amount. What is the alternative way banks apply to finance a project? Highlight its salient features.

## SECTION-D
## Case study analysis. 30 marks

MUMBAI METRO: FIRST PPP METRO PROJECT

Mumbai Metro is a rapid transit system which is under construction in Mumbai. The system is designed to address both present and future needs of public transportation. The project was implemented under Built, Own, Operate and Transfer method and has been India's first PPP metro project in which all three phases (construction, operation and maintenance) were given to private players. The project involved an elevated 11 KM Light Rail Transit (LRT) system linking Andheri and Ghatkopar, via Asalpha, Marol, Chakala and Saki Naka. The construction of Mumbai Metro involved building up of a total of 146 KM of track, of which 32 KM is underground.

The project was approved by the Government of Maharashtra in August 2004 and global bids were invited through an Expression of Interest (EoI). Almost 150 bidders responded to the EoI and a pre-bid meeting was held in November 2004 and final tender was given to Reliance Energy and Connex France. Veolia Transport and Hong Kong MRT were the other members of the consortium providing technical know-how. The construction of first phase of Mumbai Metro commenced on February 2008 and is expected to enter into operation in December 2013.

PPP Structure of the project The Mumbai Metro project was developed by means of constituting a special purpose vehicle - Mumbai Metro One Private Ltd. (MMOPL), a joint venture of Reliance Infrastructure, Veolia transport (France) and Mumbai Metropolitan Region Development Authority (MMRDA) holding 69 per cent, 5 per cent and 26 per cent of equity share capital respectively. MMOPL entered into a concession agreement with Maharashtra government to design, finance, build, operate, maintain and transfer the ownership and assets at the end of the concession period of 35 years.

The cost of the project was estimated at Rs 2,356 crores, but due to delays in completion of project the cost has swelled by Rs. 1,935 crores. The total cost was financed on the basis of viability grant amounting to Rs 650 crores from Government of India and Government of Maharashtra. The remainder being financed by 70 per cent debt and 30 per cent equity. The private operators also raised debt of Rs 1,240 crores through consortium of banks- IDBI, Corporation Bank, Karur Vysya Bank, Canara Bank, Indian Bank and Oriental Bank of Commerce. The project's master plan execution has been planned in three phases. Phase I covers a total length of 62.68 KM including 11.07 KM Versova-Andheri-Ghatkopar route, the 20 KM Colaba-Bandra section and 31.8 KM CharkopBandra-Mankhurd route. Phase II has been planned to cover the 7.5 KM Charkop-Dahisar route, the 12.5 KM GhatkoparMulund route and 19.5 KM BKC Kanjurmarg via Mumbai Airport sections. Phase II will be executed in 2012-2017. Phase III will include the development of the 18 KM Andheri East-Dahisar East route, the 21.8 KM Flora Fountain and Ghatkopar and an underground section route and is expected to be executed in 2016-2021.

One of the key features of Mumbai Metro is latest signalling technology, including automatic train protection (ATP) and automated signalling to control the high-volume of train movements on the 11.07 KM route. For this, Siemens will supply the signalling systems required for the project,

while Thales will supply the required communication systems. Additionally, the project has been focusing on development of an environmental friendly system to become Asia's first Green Metro, right from construction stage. The actual construction began in 2008, and the corridor was supposed to be operational by 2010-end, according to the original deadline. However, the project missed 10 deadlines. The main reason was the unavailability of land for construction of the Metro corridor.

Although Mumbai Metropolitan Region Development Authority (MMRDA), the nodal agency for the project, was supposed to make 59% of land available to developer MMOPL, it could hand over not more than 45% when actual construction was started. MMRDA could manage to make available the entire land needed for the project to MMOPL only in 2012. Issues with removal of encroachments and religious structures also stalled the construction progress at several locations. In addition, unavailability or poor records of underground utilities forced MMOPL to change the design of the corridor on numerous occasions, which added to the delay significantly. While the time taken in getting various clearances contributed to missed deadlines, the slow pace of civil construction by MMOPL is also to blame. Although the safety certification process took significant time, MMOPL also failed to construct the corridor, especially the Metro stations, on time. The no-objection certificate for a few stations from the fire department was delayed after authorities could not acquire land to construct staircases.
Even though work is progressing on the first line of Mumbai Metro, ambitious plans are in place to establish the system into nine line network by 2021.

Ques.1. What you mean by SPV? Identify SPV in the case. 10 marks
Ques.2. Explain types of PPP structures and identify the structure in the case. 10 marks
Ques.3.
a) Explain the financing structure of the project, highlighting the instruments used. 5 marks
b) Identify the reasons for delay in the project. 5 marks