

Internal Assessment Test 3 –January 2023

Sub:	CONSTRUCTION MANAGEMENT & ENTREPRENEURSHIP					Sub Code:	18CV51	Branch:	CIVIL
Date:	19.01.2023	Duration:	90 min's	Max marks:	50	Sem / sec:	5/A		OBE

Answer all questions. Assume any missing data suitably.

MARKS

1. Explain the characteristics of SSI? Explain the steps to start an SSI? [10]
2. Explain the Safety procedures followed during Explosives, Drilling and Blasting and Hot Bituminous Works? [10]
3. Enumerate the barriers for entrepreneurship? Write briefly about international entrepreneurship opportunities? [10]
4. A person has taken the loan of amount of Rs 1,00,000 from a bank for a period of 5 years. Estimate the amount of money ,the person will repay to the bank at the end of 5 years for the following cases.
(i) Considering simple interest rate of 8% per year [10]
(ii) Considering compound interest rate of 8% per year
5. Explain the scope and role of following agencies: [10]
 - (i) KIADB
 - (ii) SIDBI
 - (iii) TECKSOK
 - (iv) KSSIDC

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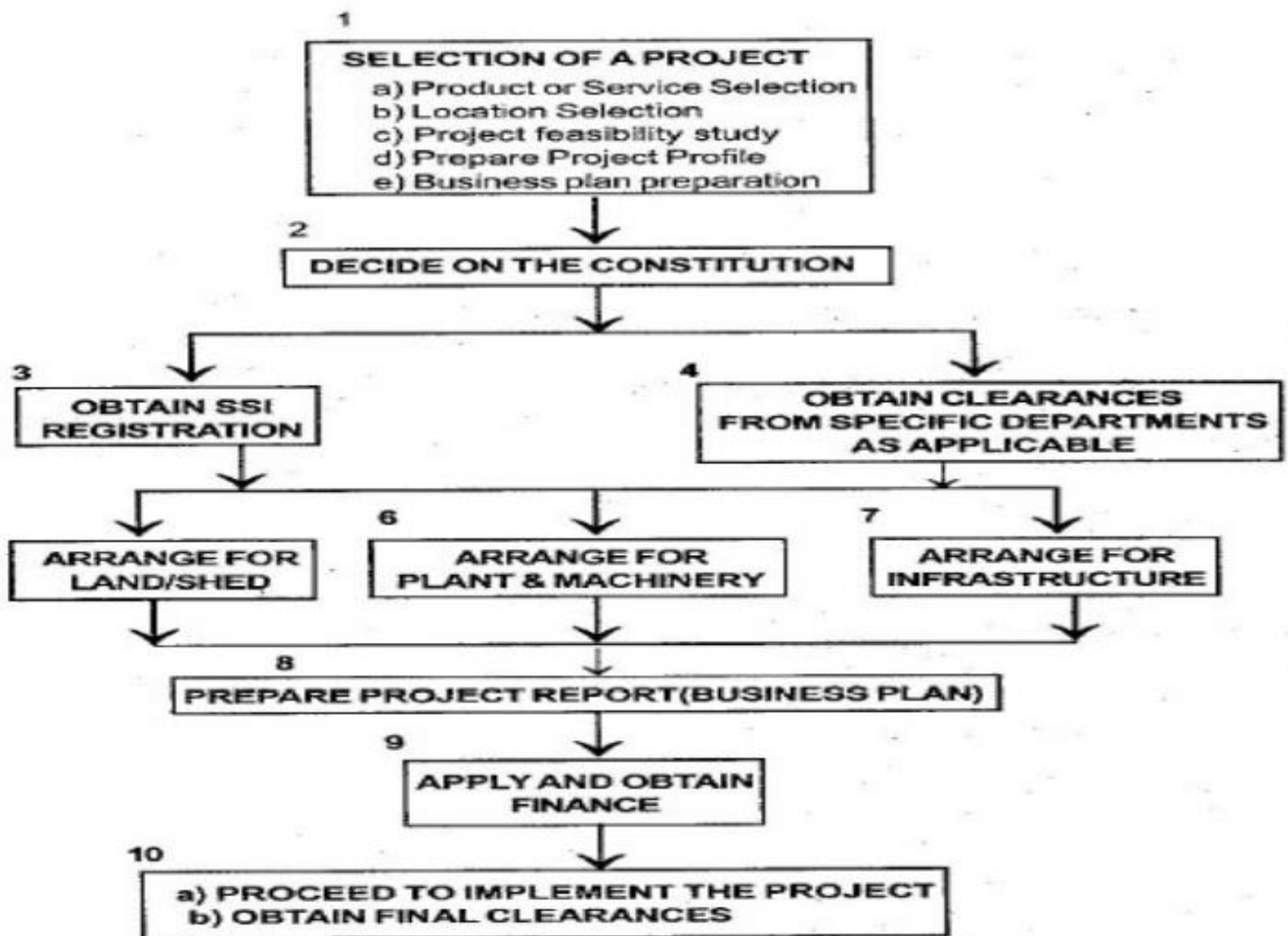
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1.Explain the characteristics of SSI? Explain the steps to start an SSI?

Ans: **Characteristics of SSI**

1. Capital investment is small and most of them have small number of workers
2. Generally owned by a single or at the most 2 persons
3. Workers are not well recognized
4. Funded by owner's saving or short term loans
5. Few of them may grow as medium scale industries
6. Innovation and risk bearing are high in SSI
7. Profit margins are less due to competition

Steps in Setting up an SSI



1. Project Selection

Entrepreneur is the Most Important person for the Success of a Project.

In order to set up a Small Enterprise, the Entrepreneur has to decide or choose a suitable project.

The Entrepreneur has also to decide on a suitable location for the project.

Based on these selections, a project feasibility study has to be conducted & then a brief project profile has to be prepared for the proposed project.

2) Decide on the Constitution

To start any Enterprise, the Promoter's have to decide on the Constitution of the Unit. There are 3 Major

Alternatives :

a) *Proprietary*

b) *Partnership*

c) *Company.*

3) Obtaining SSI Registration

Entrepreneurs desiring to start a Small Enterprise have to initially obtain a PRC(Provisional Registration Certificate).

Once the Unit goes into Production, the PRC has to be converted into a Permanent Registration Certificate (PMT).

a) **PRC** : This is the Initial Registration required for starting a Micro & Small Enterprise. The Entrepreneur has to apply & obtain a PRC after selection of the Project & deciding on the Location of the Unit. This Application is necessary for Infrastructural Facilities such as Land, Shed, Power etc. & Finance from the Financial Institutions.

b) Permanent Registration Certificate (PMT) :

A Micro or a Small Enterprise can get a Permanent Registration

Certificate when it actually commences Commercial Production / Service.

PRC would be converted to PMT when the Unit commences its Commercial Activities.

4) Specific Clearances

There are a number of Statutory Clearances required to start Micro & Small Enterprises.

5) Land or Shed Selection

- For Any Industrial Project, Suitable Industrial Site Or A Ready Industrial Shed Is Req'd.
- The Promoters Of The Unit Could Consider Taking An Industrial Site & Constructing A Shed As Per Their Requirement,
- Alternatively, Could Consider Taking A Ready Industrial Shed On Ownership Basis Also.

6) Plant & Machinery

- This requirement for a Particular Project could be purchased from recognized manufacturer's / dealers.
- This could also be taken on Hire Basis operated by National Small Industries Corporation Limited (*NSIC*).

This is a Government of India promoted Corporation

7) Infrastructure Facilities :

- For Micro or Small Enterprises the main infrastructure facilities are Land or Shed for the Project , Power Connection , Water Supply & Telephone & Internet Facility.
- As said earlier, for Land or Shed , the Entrepreneur can approach either KIADB or KSSIDC as the case may be.
- For the requirement of Power, an application may be made to the local electricity company in the region.
- For Telephone connection & Internet facilities, Entrepreneur has to approach BSNL or other operators.
- District level Single Window Agency (*SWA*) assists the Entrepreneur in getting all the above facilities.
- Hence, the Entrepreneur can forward an Application on a plain paper to the Jt. Director , District Industries Centre of the District giving his requirement of various infrastructural facilities for speedy approval & sanction.

8) Project Report : Business Plan

- For any New Project or Enterprise to be set up, Proper Planning is necessary.
- A detailed Project Report provides such a plan for the Project.
- The Report is useful to the Entrepreneur for Planning & Implementing the Project.
- This is essential for Obtaining Finance & other clearances for the Project.
- In fact, the Project Report gives a detailed insight of the *Techno – Economic Viability of the Project*.

9) Implementation of the Project

The Entrepreneurs will have to take necessary steps to physically implement the Project after obtaining the various

Licenses, Clearances, Infrastructural Facilities etc.

2) Explain the Safety procedures followed during Explosives, Drilling and Blasting and Hot Bituminous Works?

Ans: Safety procedures followed during Explosives, Drilling and Blasting

1. All operations involved in transportation, handling, storage and use of explosives should be as per Indian Explosive Act.
2. Explosive shall be handled by or under the supervision of competent and experience persons.

Transport and Handling

- i. Explosives should not be transported to the site of operation except in suitable cases or containers which are so made as to prevent any spillage of explosives and any danger of sparks or other sources of ignition during conveyance.
- ii. Following should be observed regarding vehicles used for transport:
 - a. Vehicles must have springs under the body.
 - b. Detonators and ignitors must not be carried in the same very with explosives.
 - c. The vehicle carrying the explosives must not be used to transport workmen or other materials.
 - d. Drivers should not leave the vehicle unattended.
 - e. All vehicles transporting explosives shall be marked or play carded on both sides and ends with the word "EXPLOSIVES" in white letters not less than 75 mm tall on a red background.
 - f. A motor vehicle carrying explosives should not be refuelled except in emergencies and even then only when motor is stopped and other precautions taken to prevent accidents. Such vehicles should invariably have atleast two fire extinguishers placed at convenient points.
 - g. Vehicles transporting explosives should never be taken to repair shop, or parked in congested areas, or stored overnight.
 - h. Explosives should not be transported on a public highway during hours of darkness.
 - i. Persons employed in the transport or handling of explosives should not carry with them or in the vehicles, matches, loaded fire arms, petrol etc.
 - j. Smoking should be prohibited during handling and transport of explosives.
 - k. Explosives should be protected against theft.
- iii. Vehicles used for transporting explosives should be carefully inspected daily to ensure that:
 - a. Filled and serviceable fire extinguishers are in position.
 - b. Electric wiring is well insulated and firmly secured.
 - c. Chassis, engine and body are clean and free from surplus oil and grease.
 - d. Fuel tank and feed lines are not leaking.
 - e. Lights, brakes and steering mechanism are in good working order.
- iv. Boxes of explosives should be handled carefully and not to be allowed to fall.

2. Drilling

- i. Holes should be of greater diameter than the diameter of the cartridges of explosives used.
- ii. Loading and drilling should not be carried out at the same time in the same area.
- iii. Drilling should not be resumed after blasts have been fired until and thorough examination has been made to make sure that there are no exploded charges which the drills may strike.

3. Blasting

- i. The charge should be fired successively and not simultaneously.
 - ii. Prior to the firing, all persons in the area should be warned of the blast and sent to a safe distance
 - iii. Flagmen with whistles should be posted to stop traffic at access points on each possible route of travel.
- Blasting should be done at fixed hours and displaced on a Notice Board.

iv. A loud, warning signal shall be given at a proper time before firing a blast, and all clear signal shall be given when the blasting is over.

v. After a blast has been fired and firing lines is disconnected, a careful inspection should be made by the blaster to determine if all charges have been exploded.

Safety measures for Hot Bituminous Works

The following safety measures should be adopted while dealing with hot bituminous works.

- i. An experienced foreman or supervisor should be made incharge of the work to take guard against the use defective/unsafe appliances, equipments and tools. He should keep stock of fore extinguishing devices and first aid kits.
- ii. Workers must be provided boots, gloves, goggles, helmets and other protective accessories.
- iii. Sufficient stock of clean dry sand or loose earth should be kept ready at the worksite to cope with any resultant fire. When such materials are not available, arrangement must be made for adequate supply of water to extinguish fire.
- iv. Working platform should be provided while laying the hot bitumen.
- iv. When bitumen plants are working on a public road, an adequate traffic control system must be established.

For further detailed precautions, reference may be made to IS: 5916-1970.

3.Enumerate the barriers for entrepreneurship? Write briefly about international entrepreneurship opportunities?

Ans: ENTREPRENEURIAL ENTRY INTO INTERNATIONAL BUSINESS

The key to entering into foreign markets is to understand the customer in detail first with due emphasis on issues related to language, social norms and culture. Entering into international markets mainly involves extending business internationally by adding customers, distribution channels and production facilities internationally.

After having analysed the business environment to identify business opportunities abroad, an entrepreneur needs to respond to the following challenges before deciding to operate abroad

- The key to entering into foreign markets is to understand the customer in detail first with due emphasis on issues related to language, social norms and culture.
- Entering into international markets mainly involves extending business internationally by adding customers, distribution channels and production facilities internationally.
- After having analysed the business environment to identify business opportunities abroad, an entrepreneur needs to respond to the following challenges before deciding to operate abroad

There are various ways an entrepreneur can market products internationally. The method of entry into a market and the mode of operating overseas are dependent on the goals of the entrepreneur and the company's strengths and weaknesses. The modes of entering or engaging in international business can be divided into three categories:

- Exporting,
- Non-equity arrangements, and
- Direct 'foreign investment.

Barriers to Entrepreneurship

(i)Salary: Security of a regular pay is not there

ii. Benefits: Fewer benefits during the starting off stage

- iii. Work Schedule: It is never predictable. Lots of emergency scenarios will be there and Late hours will become a norm.
- iv. Administration: All decisions are your own. The fear of Wrong decision hovers above the head.
- v. Incompetent Staff: People working under a Entrepreneur may not be competent enough which will make the entrepreneur himself do such works leading to delay or stress.
- vi. Lack of Capital
- vii. Lack of technical knowledge
- viii. Non- Availability of raw materials or other resources.
- ix: Government regulations
- x. Globalization & Entry of foreign Goods
- xi. Risk
- xii. Unstable & Predictable markets
- xiii. Obsolescence of an Idea or Technology

- 4 A person has taken the loan of amount of Rs 1,00,000 from a bank for a period of 5 years. Estimate the amount of money ,the person will repay to the bank at the end of 5 years for the following cases.
- (i) Considering simple interest rate of 8% per year
 - (ii) Considering compound interest rate of 8% per year

The interest for each year= $1,00,000 \times 1 \times 0.08 = \sim 800$

The interest for each is year is calculated only on the principal amount i.e., rs1,00,000. Thus the interest accumulated at the end of each year is constant i.e., rs 8000

Table 4.1 Payment using simple interest

End of year (EOY)	Amount of interest (₹)	Total amount owed (₹)
1	8000	1,08,000
2	8000	1,16,000
3	8000	1,24,000
4	8000	1,32,000
5	8000	1,40,000

- (ii) **Considering the compound interest @ 8 % per year**

The amount of interest and the total amount owed at the end of each year, considering compound interest are presented in Table 4.2

$$\text{Interest amount} = P \left(1 + \frac{i}{100} \right)^n$$

$$\text{End of first year} = 1,00,000 \left(1 + \frac{8}{100} \right)^1 = 1,08,000$$

$$\text{End of second year} = 1,00,000 \left(1 + \frac{8}{100} \right)^2 = 1,16,640$$

End of year (EOY)	Amount of interest (₹)	Total amount owed (₹)
1	8,000	1,08,000
2	8,640	1,16,640
3	9,331	1,25,971
4	10,078	1,36,049
5	10,883	1,46,932

From these calculations it is clear that, in case of compound interest the interest for each year is calculated on the principal amount plus the interest amount accumulated till that period.

5 Explain the scope and role of following agencies:

- (i) **KIADB**
- (ii) **SIDBI**
- (iii) **TECKSOK**
- (iv) **KSSIDC**

Ans:

KIADB

Meaning: KARNATAKA INDUSTRIAL AREA DEVELOPMENT BOARD. This is a statutory body established in 1966 by government of Karnataka. Headquarters is at Bangalore with 9 zonal offices all over Karnataka.

Objectives:

- a) To establish Industrial areas and promote rapid and orderly establishment of industries in the state of Karnataka
- b) To provide infrastructural facilities and amenities to SSIs
- c) To assist in implementation of government policies
- (d) To function on 'No profit – No loss' basis.

Functions:

- To acquire lands for industrial activity at identified and notified locations and form industrial area with all infrastructure facilities like road, electricity power, water supply
- To acquire lands in favour of single unit.

To acquire lands for single unit complexes for government organizations and to facilitate government projects

- To provide all the infrastructure facilities to such industrial areas.
- To maintain the infrastructural facilities during the contractual project.

SIDBI

Meaning; SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA. It was established in 1990 under Act of Indian Parliament as a principal financial institution. It is a subsidiary of IDBI. Its head office is in Lucknow. SIDBI is among the top 25 development banks in the world.

Nature of support: Financial services and other support services

Objectives:

- (i) To promote, finance and develop small scale sector in India.
- (ii) To co-ordinate the functions of other institutes engaged in similar activities
- (iii) To finance industrial infrastructure projects.

Functions:

- To provide finance assistance to a. new projects b. expansion/diversification projects c. modernization projects
- To initiate steps for technological upgradation and modernization of existing units.
- To promote rural industrialization
- To provide channels for marketing SSI products in India and abroad.
- To foster Human Resource Development to suit the SSI sector needs
- To disseminate appropriate information to budding and existing entrepreneurs.

KSSIDC

Meaning: KARNATAKA STATE SMALL INDUSTRIES DEVELOPMENT CORPORATION LTD. Established in 1960 by Government of Karnataka.

Nature of support: Infrastructure and industrial inputs.

Objectives:

- To assist small scale industries in the procurement of raw materials
- To take up any activity aimed at rapid development of small scale industry

Functions:

- To establish and manage industrial estates
- To procure and distribute scarce and rare raw materials to various SSIs
- To provide assistance towards marketing of products from various SSIs

- To organize national level and international level exhibition and facilitate exchange of information
- To supply machinery under hire purchase scheme
- To provide guidance to SSI entrepreneurs contributing
- To provide technical library facilities in coordination with Indian Standard Institution.

TECKSOK

TECHNICAL CONSULTANCY SERVICES OF KARNATAKA. It was established in 1976 by the government of Karnataka.

It is located in Basava Bhavan, Basaveshwara Circle, Bangalore

Nature of support: Multi-disciplinary technical, industrial and management consultancy.

Objectives:

- a) To provide reliable consultancy support for entrepreneurs to start up self employment ventures in Karnataka.
- b) To provide consultancy services to the various Departments and Agencies of state and Central Governments.

Functions:

To identify investment opportunities which are location specific.

- To assist entrepreneurs in obtaining statutory and procedural clearances.
- To carry out feasibility studies and environmental impact studies.
- To assist preparation of detailed project reports as per investment norms and financial norm.
- To carry out market survey and research specific to industry needs.
- To assist in project implementation and extend turnkey assistance.
- To help in reorganization and restructuring of employees.
- To diagnose sick units and suggest rehabilitation measures
- To provide consultancy in valuation of assets, manpower, planning and budgetary control system
- To promote consultancy for merges and take overs