

	<b>Course Title: PROJECT MANAGEMENT AND VALUATION</b>		
	<b>Credits (L:T:P) 4:0:0</b>	<b>Total Contact Hours: 52</b>	<b>Course Code: 15CE62T</b>
	<b>Type of Course: Lecture, Case study, Mini projects</b>	<b>Credit : 4</b>	<b>Core/Elective: Core</b>
<b>CIE- 25 Marks</b>		<b>SEE- 100 Marks</b>	

**Pre-requisite:** Knowledge of Construction Technology and Estimation and Costing.

**Course Objectives:**

1. Able to understand the organisation structure in construction industries.
2. Know the activities of the project and schedule it effectively considering the duration with resources available, organising efficiently for successful completion of the project.
3. Know the process of tendering in contracts and procedure followed in the project of a construction industry
4. Know the Quality control, Safety aspects and Store management of a construction project.
5. To know the qualities of an entrepreneur.
6. Perform the valuation of buildings.

**Course outcomes**

At the end of the course, students have the ability to;

Course Outcome		CL	Linked PO	Teaching Hrs
<b>CO1</b>	Describe the process and purpose of Management in construction organization teams.	<b>R/U</b>	2,4,5,10	<b>10</b>
<b>CO2</b>	Use scheduling technique for construction project for effective utilisation of resources.	<b>R/U/Ap/An</b>	2,3,4,10	<b>10</b>
<b>CO3</b>	Demonstrate the understanding of management fundamentals and traditions followed in construction industry.	<b>U/Ap</b>	2,4	<b>15</b>
<b>CO4</b>	Employ appropriate practices to organize and manage safety and quality assurance of a construction project	<b>R/U</b>	2,4,5,7,10	<b>10</b>
<b>CO5</b>	Evaluate the value of a building.	<b>R/U</b>	1,2,3,5,10	<b>05</b>
<b>CO6</b>	Develop insight to discover and create entrepreneurial opportunities and the expertise to successfully launch, manage, and grow their own venture.	<b>R/UAp/Ay/C</b>	2,5,10	<b>02</b>
<b>CO7</b>	Manage the suggested or identified constructional management problems, formulate and solve in teams, in order to improve future problem solving ability and able to present it.	<b>R/U/A/AP</b>	1,2,3,4,5,6,7,8,9,10	<b>*</b>
		<b>Total sessions</b>		<b>52</b>



## Mapping Course Outcomes with Program Outcomes

Course	Programme Outcome									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
	Basic knowledge	Discipline knowledge	Experiments and Practice	Engineering Tools	Engineer and society	Environment & Sustainability	Ethics	Individual and Team work	Communication	Life long learning
PM & VALUATION	1	3	2	3	3	-	1	1	-	3

**Level 3- Highly Addressed, Level 2-Moderately Addressed, Level 1-Low Addressed.**

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

If  $\geq 40\%$  of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3

If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2

If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1

If  $< 5\%$  of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

s	CONTENTS	HOURS
1	<b>INTRODUCTION TO PROJECT MANAGEMENT:</b> Project Management, Professional Construction Management-Significance, objectives & functions of construction management, Classification, stages in construction. Interpersonal Behaviour in Project Organizations of construction team, Perception of- Owner, Engineer & Contractor, Job layouts, Organisation chart. Resources for construction-Men, Machine, Materials, Money & Time Management, Turnkey operation, Project Feasibility. BOT, BOOT, PPP.	10
2	<b>PLANNING &amp; SCHEDULING</b> PLANNING-Objective, principles, advantages, analysis, limitation and stages of planning for construction projects. SCHEDULING - Necessity of scheduling, Preparation of construction schedule for labour, material, machine & finance. NETWORK ANALYSIS-Introduction to network techniques, Interrelationship of events, activities.-Bar chart, Analysis of CPM, PERT with simple problems, Identifying critical activities and critical path. Scheduling software applications.	10
3	<b>CONSTRUCTION PROJECT PRACTICES</b> -Types of contract, contract agreement, Tender- Pre tender & Post tender planning.- Procedure for inviting tender-( Tender Notice & Tender documents, EMD, security deposit & Guaranties, Scrutiny of Tenders & e-Tendering). Conditions for failure of contract and its extension, Termination of contract, tender forms, comparative statements, administrative approval, technical sanction, nominal master roll, measurement book, method of recording bills, Pre measurements, check measurements, preparation of bills (Concept of RA bill- submission, scrutiny and payment.), ledger accounts, Imprest Account, Cashbook, Suspense classification -STORES-Classification of Stores. Issues, Indents & Bin cards, - maintenance and	15

	inspection- inventories – procedures adopted in P.W.D. and C.P.W.D, Site Order book, Hindrance Register, Drawing Register.	
4	<b>SAFETY AND QUALITY MANAGEMENT</b> ACCIDENTS-definition of accident terms: (Partial & total disablement, Injury frequency rate, injury severity rate). Accident- Causes, Precaution & Prevention. SAFETY- Importance of safety. Safety procedures and check list (excavation, scaffolding, form work.) Safety meetings, Safety measures for storage, handling of building material and execution. TQM-Introduction, Importance & Functions of total quality management in construction industry, Tools for quality control, Elements and requirements of quality management. Aims and ways of TQM. BIS certification of quality system,	10
5	<b>VALUATION OF BUILDINGS</b> -Definition, Methods of valuation, purpose and factors governing valuation. Scrap value, Salvage value, Market value, Book value and sinking fund. Calculation of depreciation by different methods. Rental value based on plinth area method & Rent fixation. Valuation of old buildings.	05
6	<b>ENTERPRENEURSHIP</b> Concept- Roles-Expectations of Entrepreneurship. Motivational needs, Characteristics and Requirements of an entrepreneur.- Licensed surveyor, valuer & Contractor.	02
	<b>TOTAL</b>	<b>52</b>

**COURSE DELIVERY:** The course will be delivered through lectures and Power point presentations/ Video, demonstrations etc.



### **SUGGESTED ACTIVITIES**

The topic should be related to the course in order to enhance his knowledge, practical skill & and lifelong learning, communication, modern tool usage.

1. Visit any nearby construction site & interact with the construction team regarding type of structure & its organisation structure.
2. Visit any contractor and interact about the present tendering process (e-tendering) and awarding of contract.
3. Collection of tender notices published in newspapers for various items of civil engineering works (at least 5) write salient features of them.
4. Prepare a planning schedule for the nearby on going construction activity with the help of available open source project management software.
5. Visit any nearby PWD/PERD /KIARDL/KHB office or any construction company, collect the documents (BOQ, M B, Tender, SR, lead statement) related to the project and prepare report on it.
6. Collect quality management standards pertaining to ISO 9001, ISO 14001 & OHSAS 18001 & prepare a report.
7. Drafting a tender notice for construction of a civil engineering work (W. B. M. Road, residential is building).

8. Preparation of tender document for the building.(detailed estimate prepared for R.C.C. building in estimating and costing shall be used )
9. Collection of various account forms from PWD & Prepare a report on it.
10. Prepare a report on store procedure and account producer of PWD. (For it a Guest lecture of PWD official to be arranged.)
11. Prepare detailed specifications for the following: a) Building construction system. b) Irrigation engineering system. C) Transportation engineering system. D) Environment engineering system.
12. Study the application of CPM & PERT technique in planning software.
13. Prepare a report on women entrepreneurship, rural entrepreneurship, agri-preneurship.
14. Collect the various entrepreneurship development programs.
15. Collect the details required for getting a contract license from corporation and prepare a report on it.
16. Make a case study on valuation of a existing building.
17. Collect safety procedures (Do's and Dont's) of each and every construction activities.
18. Collect or Prepare the various stages of inspection and quality control for construction activities

**NOTE:**

1. Guest lectures to be arranged by inviting engineers from PWD or from construction industry.
  2. Students should select any one of the above or other topics relevant to the subject approved by the concerned faculty, individually or in a group of 3 to 5.
  3. Students should mandatorily submit a written report and make a presentation on the topic. The task should not be repeated among students.
  4. Report will be evaluated by the faculty as per rubrics. Weightage for 5 marks Internal Assessment shall be as follows:  
Unsatisfactory **1**, Developing **2**, Satisfactory **3**, Good **4**, Exemplary **5**.
2. Reports should be made available along with bluebooks to IA verification officer

**Example of model of rubrics / criteria for assessing student activity**

Dimension	Students score				
	(Group of five students)				
	STUDENT 1	STUDENT 2	STUDENT 3	STUDENT 4	STUDENT 5
Rubric Scale	Unsatisfactory <b>1</b> , Developing <b>2</b> , Satisfactory <b>3</b> , Good <b>4</b> , Exemplary <b>5</b>				
1.Literature	3				
2.Fulfill team's roles & duties	2				
3.Conclusion	4				
4.Conversions	5				
<b>Total</b>	14				
Average=(Total /4)	3.5=4				
<b>Note: Concerned faculty (Course coordinator) must devise appropriate rubrics/criteria for assessing Student activity for 5 marks One activity to attain last CO (course outcome) may be given to a group of FIVE students</b>					

Note: Dimension should be chosen related to activity and evaluated by the course faculty.

Dimension	Rubric Scale				
	1 Unsatisfactory	2 Developing	3 Satisfactory	4 Good	5 Exemplary
1.Literature	Has not included relevant info	Has included few relevant info	Has included some relevant info	Has included many relevant info	Has included all relevant info needed
2. Fulfill team's roles & duties	Does not perform any duties assigned	Performs very little duties	Performs partial duties	Performs nearly all duties	Performs all duties of assigned team roles
3.Communication	Poor	Less Effective	Partially effective	Effective	Most Effective
4.Convensions	Frequent Error	More Error	Some Error	Occasional Error	No Error

### Course Assessment and Evaluation Scheme:

	What		To whom	When/Where (Frequency in the course)		Max Marks	Evidence collected	Course outcomes
Direct Assessment meth	CIE	IA	Students	Thrice test (Average of three tests)	Test 1	20	Blue books	CO1, CO2
					Test 2			CO3
					Test 3			CO4, CO5, CO6
				Student Activities	05	Written Report	CO7	
	SEE	End Exam		End of the course	100	Answer scripts at BTE	1,2,3,4,5,6	
Indirect Assessment	Student Feedback on course		Students	Middle of the course			Feedback forms	1,2 & 3 Delivery of course
	End of Course Survey			End of the course			Questionnaires	1,2,3, 4,5, 6, 7 Effectiveness of Delivery of instructions & Assessment Methods

\*CIE – Continuous Internal Evaluation

\*SEE – Semester End Examination

**Note:** I.A. test shall be conducted for 20 marks. Average marks of three tests shall be rounded off to the next higher digit.

**Note to IA verifier:** The following documents to be verified by CIE verifier at the end of semester

1. Blue books ( 20 marks)
2. Student suggested activities report for 5 marks evaluated through appropriate rubrics.
3. Student feedback on course regarding Effectiveness of Delivery of instructions & Assessment Methods

### Weightage of Marks and blue print of marks for SEE

Unit	Major Topics	Hours Allotted	Questions to be set for SEE				Marks Weightage	Weightage (%)	A*	B*
			Cognitive Levels							
			R	U	Ap	Ay				
1	Introduction to project management	10	33%	67%	0%	0%	25	18	3	1
			<b>15</b>	<b>10</b>	<b>0</b>	<b>0</b>				
2	Planning & scheduling	10	17%	27%	29%	27%	35	25	1	3 <sup>#</sup>
			<b>05</b>	<b>10</b>	<b>10</b>	<b>10</b>				
3	Construction project practices	15	25%	50%	25%	0%	40	27	2	3
			<b>10</b>	<b>20</b>	<b>10</b>	<b>0</b>				
4	Safety & quality management	10	20%	40%	40%	0%	25	17	1	2
			<b>05</b>	<b>10</b>	<b>10</b>	<b>0</b>				
5	Valuation of buildings	05	13%	20 %	67%	0%	15	10	1	1 <sup>#</sup>
			<b>02</b>	<b>03</b>	<b>10</b>	<b>0</b>				
6	Entrepreneurship	02	0%	100%	0%	0%	05	3	1	0
			<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>				
<b>Total</b>		<b>52</b>	<b>25%</b>	<b>40%</b>	<b>27%</b>	<b>8%</b>	145	100	9	10
			<b>37</b>	<b>58</b>	<b>40</b>	<b>10</b>				

Legend- R; Remember U: Understand Ap: Application Ay: Analysis C: Creation E: Evaluation

A\*-SEE questions to be set for (05 marks ) in Part – A

B\*- SEE questions to be set for (10marks) in Part – B

# One compulsory question must be given.

Questions for CIE and SEE will be designed to evaluate the various educational components such as:

Sl. No	Bloom's taxonomy	% in Weightage
1	Remembering and Understanding	<b>65</b>
2	Applying the knowledge acquired from the course	<b>27</b>
3	Analysis	<b>8</b>
4	Synthesis ( Creating new knowledge)	<b>0</b>
5	Evaluation	<b>0</b>

## MODEL QUESTION PAPER FOR CIE

Test/Date and Time	Semester/year	Course/Course Code	Max Marks			
Ex: I test/ 6 <sup>th</sup> week of sem 10-11 Am	VI SEM	PROJECT MANAGEMENT & VALUATION	20			
	Year:	Course code: 15CE63T				
Name of Course coordinator :		Course Outcomes : 1 & 2				
Note: Answer all questions						
Questions		M	CL	CO	PO	
1	List any five objectives of construction management (or) What is Job lay out? Mention the factors affecting Job layout.	05	R	1	2,4,5	
2	What are the necessity of scheduling in construction project?	05	U	2	2,3,4	
3	Explain Project Feasibility.	05	U	1	2,4,5,6	
4	Draw a network diagram for the following , B follows A, C follows A, D and E follows B, F follows C and D, G follows E and F. Determine the critical path for the network diagram if the duration of activities A,B,C,D,E,F and G are 2,6,3,1,6,3 and 6 days respectively. Find the Critical path.	05	Ap	2	2,3,4	

Note: Internal choice may be given in each CO at the same cognitive level (CL).



### TEXT BOOKS & REFERENCES

1. Sanga Reddy. S, "Construction Management",Kumaran Publications, Coimbatore.
2. Rangwala.S.C., "Construction of Structures and Management of Works", Charotar Publishing House,Anand-388001,3rd Edition,2000.
3. Construction management by NITTTR, Chennai.
4. Chitkara, "Construction Project Management", Mc Graw Hill Publications,
5. Construction Management – Prof Dhir, Eastren Publications.
6. Estimating and costing By B. N. Datta.
7. Entrepreneurial development – Dr.S.S.Khanka by S.Chand publishers

**Model Question Paper**  
**Diploma in Civil Engineering**  
6<sup>TH</sup> semester

Course title: **PROJECT MANAGEMENT & VALUATION**

**Time: 3Hrs.**

**Max. marks :100**

**Part –A**

**Answer any six questions of the following, each question carries 5 marks**

1. What is construction management? What is its significance?
2. What is Job Layout? Write the Job Layout for construction of a Multi storey building.
3. Explain BOT.
4. Prepare a Material schedule for any project.
5. List the requirements to be furnished in contract agreement.
6. What is Site order book? Write the specimen of a site order book.
7. Write the functions of Total Quality management in a Construction industry.
8. What are the purpose and factors governing valuation?
9. Write note on Entrepreneurial motivation.

**Part –B**

**Answer any seven questions from the following. (Question no4 & no10 are compulsory)**

**Each question carries 10 marks.**

1. What is Construction organisation? Write the Organisation chart for a Multi storey building project.
2. What is Construction Scheduling? Explain CPM & PERT with example.
3. Briefly explain the Stages of a construction project.
4. Draw a network diagram for the following , B follows A, C follows A, D and E follows B, F follows C and D, G follows E and F. Determine the critical path for the network diagram if the duration of activities A,B,C,D,E,F and G are 2,6,3,1,6,3 and 6 days respectively. Find the Critical path.
5. What is a contract? What are the types of contract? Explain Item rate contract.
6. List the steps involved in RA bill submission, scrutiny and payment.
7. Briefly explain the following,
  - a. ledger accounts.
  - b. Imprest Account.
  - c. Cashbook.
  - d. Suspense classification.
8. Write the precautions and Preventive measures for accident in construction industry.
9. Explain the various stages of inspection and quality control for RCC work and Excavation in Foundation.
10. A building costing Rs. 15lakhs has been constructed on a open land measuring 100sqm. The prevailing rate of land in the neighbourhood is Rs. 4500 per sqm. Determine the net rent of the property if the expenditure on outgoing expenses including sinking fund is Rs. 42000 per annum. Also work out the gross rent of the property per month.



## MODEL QUESTION BANK

### Unit-1 INTRODUCTION TO PROJECT MANAGEMENT

#### Cognitive level –Remember

1. What are the objects of construction management?
2. State the purpose of Job layout.
3. Write the organization chart for medium construction firm.
4. What is Construction organisation? Write the relationship between Owners, Engineer & Contractor.
5. Write a short note on the resources of a construction project.
6. Write a short note on Project feasibility.

#### Cognitive level -Understand

1. Define organization? Explain the different types of organization
2. Write the Organisation chart for a Multi storey building project.
3. List the principles of organization.
4. Explain the need of organization in construction.
5. Explain Line (or) military organization.
6. Compare line organization with staff organization.
7. Explain the various stages in construction of a project from concept to realization.
8. Describe the duties of Chief Engineer.
9. Write a short note on construction team.
10. What is Job layout? Write the Job layout for construction of a building.
11. What are the factors affecting Job layout.
12. Explain BOT, BOOT, PPP.

### Unit-2-PLANNING & SCHEDULING

#### Cognitive level –Remember

1. What is Construction planning? What are its Objectives?
2. What is Construction planning? What are its Advantages?
3. What is Construction Scheduling? Explain CPM & PERT with example.
4. Mention advantages of construction scheduling?
5. What is Pre-tender planning & Post-tender planning?
6. What are the advantages of Scheduling?
7. List the types of schedules used in construction industry.
8. List the duties of contractor.
- 9.

#### Cognitive level –Understanding

1. Brief the Stages of a construction project.
2. Prepare a Labour schedule for any construction project.
3. What is construction planning? List the objectives of construction planning
4. What is construction schedule? Mention the details required for preparing schedule.

5. Explain i ) Material Schedule ii) Labour schedule iii) Equipment schedule iv) expenditure scheduling
6. What are the features of network planning.
7. Define i) Event ii) Activity iii)float iv) Total float v) Duration vi)Successor vii) Predecessor
8. What is CPM? What is its importance?
9. Define i) EST ii) Early finish iii)Late start iv)Late finish v)Critical activity v) Critical path
10. Explain CPM & PERT.

### **Cognitive level –Application**

1. Draw a network diagram for the following , B follows A, C follows A, D and E follows B, F follows C and D, G follows E and F. Determine the critical path for the network diagram if the duration of activities A,B,C,D,E,F and G are 2,6,3,1,6,3 and 6 days respectively. Find the Critical path.
2. Explain Network analysis for a project using any open source software.
3. Distinguish between CPM & PERT.
4. Draw a network diagram for the following logic  
B follows A, C follows A, D and E follows B, F follows C and D, G follows E and F  
Determine the critical path for the network diagram if the duration of activities A,B,C,D,E,F and G are 2,6,3,1,6,3 and 6 days respectively.
11. Draw the Network. Determine the critical path and critical time for the following activities.

Activity	Event No	Duration (days)
A	1-2	4
B	2-3	2
C	3-4	10
D	2-4	4
E	4-5	10
F	2-5	5
G	5-8	15
H	5-6	10
I	6-8	8
J	5-7	6
K	7-8	4
L	8-9	6
M	9-10	3

## **Unit-3- CONSTRUCTION PROJECT PRACTICES**

### **Cognitive level –Remember**

1. Define contract & Contractor.
2. List the types of contract.
3. What are the details to be contained in a contract agreement?
4. Mention the conditions of contract.

5. Explain i) Piece work contract ii) Labour contract iii) Item rate contract iv) Cost plus percentage contract v) Negotiated contract.
6. Explain briefly Lump sum contract.
7. List the steps involved in RA bill submission, scrutiny and payment.

### **Cognitive level –Understanding**

1. How an Engineer can achieve economy in construction work.
2. What are the advantages of e-tendering?
3. What is tender document?
4. Explain the procedure of calling, opening & acceptance of a tender.
5. What is EMD? State the objectives of EMD.
6. Explain Scrutiny of tenders.
7. What is a contract? What are the types of contract?
8. Write short note on.
  - a. Pre-tender & Post-tender.
  - b. Contract agreement.
  - c. E-Tendering
9. Write the procedure for inviting a tender for a construction project.
10. Explain the documents requirement for issuing a tender document.
11. Write a typical comparative statement format.
12. Briefly explain the following,
  - a. ledger accounts.
  - b. Imprest Account.
  - c. Cashbook.
  - d. Suspense classification
13. Write the Classification of Stores in a construction project
14. Define site order book, Hindrance register & Drawing register.
15. Write a short note on Termination of contract.

### **Cognitive level –Application**

16. Distinguish between Engineer & Contractor.
17. Distinguish between Schedule rate contract & Percentage rate contract.
18. Explain departmental execution of work.
19. State the need for departmental execution of work. How it is executed.
20. List the information to be given in tender notice.
21. Explain term tender & tender notice.
22. Explain e- tendering.
23. Write short note on work order & site order book.
24. Distinguish between Earnest money deposit & Security deposit.
25. What are the conditions for failure of contract and on what condition contract can be extended.
26. Explain administrative approval, technical sanction and nominal master roll.
27. Explain Issues, Indents & Bin cards forms in Stores.
28. Explain the rules to be followed in recording measurement in M-book.
29. Explain Scrutiny of Tenders.
30. Discuss the importance of site order book, drawing register & Hindrance register in a construction work.

## **Unit-4- SAFETY & QUALITY MANAGEMENT**

### **Cognitive level –Remember**

1. Define Accident?
2. What are the effects of accidents in construction industry
3. What are the causes of Accidents in a construction Project?
4. List the important safety factors to be considered in construction industry.

### **Cognitive level –Understanding**

1. Explain the causes & effects of accidents and mention the preventive steps to be taken to avoid the accidents
2. Write a short note on accidents in construction industry.
3. Write the precautions and Preventive measures for accident in construction industry.
4. Write the safety measures and check list for the following activities,
  - a. Excavation
  - b. Scaffolding
  - c. Form work
5. Write the functions of Total Quality management in a Construction industry.
6. What are the benefits of BIS and ISO9000 certification?
7. State the need for Pre-measurements & Check measurements.
8. Write a short note on standard measurement book.
9. Write a short note on check measurements.
10. Write a short note on TQM.
11. What are the benefits of ISO9000 certification.

### **Cognitive level –Application**

1. Brief the safety regulations provided in legislation through Acts and Code of practice.
2. Describe the safety measures to be undertaken in i)Excavation ii) Demolition
3. Write a short note occupational health hazards in construction industry.
4. Brief the safety measures for storage of materials in a construction site.
5. Explain the various stages of inspection and quality control for Excavation.
6. Describe safety measures to be adopted for i)Fabrication ii) Scaffolding iii)Formwork
7. Differentiate Pre-measurements & check Measurements.
8. “Measurement Book is an important account record,” justify the statement.
9. What is measurement book? Explain the rules to be followed in recording measurements in measurement book.
10. Explain briefly the stages of inspection & Quality control for RCC work.
11. Explain briefly need for inspection of works.
12. Explain how quality of construction is maintained.
13. Explain in brief the various stages of inspection to control the quality of work.
14. Explain briefly the general principles of inspection in construction work.

## **Unit-5- VALUATION OF BUILDINGS**

### **Cognitive level –Remember**

1. What are the purpose and factors governing valuation?
2. Write the necessity of valuation.

3. Write the various methods of valuation

### **Cognitive level –Understanding**

1. Write a short note on Mobilization advance.
2. Brief sinking fund.

### **Cognitive level –Application**

1. Differentiate between Market value and Book value.
2. Differentiate between Scrap value and Salvage value.
3. A building costing Rs. 15lakhs has been constructed on a free hold land measuring 100sqm. Recently in big city prevailing rate of land is the neighbourhood of Rs. 4500 per sqm. Determine the net rent of the property if the expenditure on an outgoing including sinking fund is Rs. 42000 per annum. Work out also the gross rent of the property per month.
4. Differentiate between depreciation and Obsolescence.
5. A pumping set with a motor has been installed in a building at a cost Rs.2500.00.Assuming the life of the pump as 15 years, workout the amount of annual instalment of sinking fund to be deposited to accumulate the whole amount of 4% compound interest
6. Define the following terms (i) Value (ii) cost (iii) gross income (iv) Net income (v) obsolescence
7. Define the following terms (i) Scrap Value (ii) Salvage value (iii) Capitalized value
8. Define the following terms (i) Market value (ii) Book value
9. .The estimated value of a building is Rs.5,00,000. The carpet area of the building is 70 sq.m If the plinth area is 20% more than this, what is the plinth rate of the building?
10. Calculate the annual rent of a building with the following data. Cost of land = Rs.20000/- Cost of building = Rs.80000/- Ess expected to be 0.7% of the cost construction and other out goings will be 25% of the gross rent. There is no proposal to set up a sinking fund.

## **Unit-6- ENTREPRENEURSHIP**

### **Cognitive level –Remember**

1. Define Entrepreneur & Entrepreneurship.
2. List the advantages & disadvantages of an Entrepreneur.
3. State any six important qualities of entrepreneur.
4. What do you understand by the Entrepreneurial competency

### **Cognitive level –Understanding**

1. Write note on Entrepreneurial motivation.
2. List the contents of a project report.
3. Write note on Entrepreneurial motivation.
4. Define Entrepreneurial culture.
5. What is the significance of promoting women Entrepreneurship in India?

### **Cognitive level –Application**

1. Explain the concept of Entrepreneurship.
2. Explain the characteristics of an Entrepreneur.
3. Explain the characteristics of an Entrepreneur.
4. Explain the concept of Entrepreneurship.
5. Explain the characteristics of licensed surveyor, valuer and Contractor.
6. Explain Entrepreneurship Discuss its functions. Also explain the problems faced by them.
7. What is entrepreneurship Development .Explain Entrepreneur v/s Manager?
8. How important is the role of Government in promoting Entrepreneurship. Support your answer with example.
9. Explain the Women Entrepreneurship also explain the major role played by them in improving the economy of India.

