



SASURIE COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi. Affiliated to Anna University, Chennai

Near NH544, Coimbatore Bypass, Near Vijayamangalam Tollgate, Tirupur 638056

NAAC DOCUMENTS

QUALITY INDICATOR FRAME WORK

CRITERION - 1

CURRICULAR ASPECTS

SUBMITTED BY

IQAC

INTERNAL QUALITY ASSURANCE CELL

SASURIE COLLEGE OF ENGINEERING



1.2 Academic Flexibility(30)

1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

AND

1.2.2 Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

VAC Title:	CONSTRUCTION COST ESTIMATING AND ANALYSIS				
Resource Person:	Er.S.Sankar Prasath, Managing Director, Venkateshwara Constructions, Tirupur – 641604.		Er.R.Mohan, CEO, Venkateshwara Constructions Tirupur – 641604.		
Date of conduct from:	24.06.2019	To:	28.06.2019	Duration:	30Hours
Organized Department:	CIVIL ENGINEERING				
Participant Year:	3/4	Semester:	ODD	No. of Students Registered:	39
Venue:	Lecture hall of II & III year CIVIL				

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DEPARTMENT OF CIVIL ENGINEERING

Ref: SCE / CIVIL /Students / VAC / 2019 – 2020 / ODD

17.06.2019

CIRCULAR

In order to bridge the curricular gap between the Academic Syllabus and Industry requirements, Department of Civil Engineering and IQAC of our Institution in association with Venkateshwara Constructions, is organizing a **Value Added Course (VAC)** for the students of II, III and IV year of CIVIL on the title “**Construction Cost Estimating and Analysis**” from **24.06.2019** to **28.06.2019**. At the end of the VAC, course completion certificates will be issued to the eligible participants as per the following norms.

- Students, who are securing **more than 70% on total score in the VAC test** and secured more than 75% in VAC attendance is eligible to receive the course completion certificate for the VAC attended.

Resource Person Details	Er.S.Sankar Prasath, Managing Director, Venkateshwara Constructions, Tirupur – 641604.	Er.R.Mohan, CEO, Venkateshwara Constructions, Tirupur – 641604.
Venue	Lecture hall of II & III year CIVIL	

R. Venkatesh
HoD/CIVIL

U. Vijay Kumar
17/6/19
PRINCIPAL

Copy to:

1. Chairman & Secretary for information
2. Principal office
3. IQAC Co-Ordinator
4. Class In charges - II, III & IV-Year CIVIL
5. II, III & IV-Year CIVIL Students
6. CIVIL Notice Board
7. Department File

U. Vijay Kumar
Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).

DEPARTMENT OF CIVIL ENGINEERING

Ref: SCE / CIVIL / Students / VAC / 2019 – 2020 / ODD

17.06.2019

SYLLABUS - VALUE ADDED COURSE

“Construction Cost Estimating and Analysis”

From 24.06.2019 to 28.06.2019 (5 days)

Duration : 30 Hours

Academic Year : 2019 -2020 / ODD

S.No.	Topics Covered	Duration (In Hours)	Date
1	Introduction to Construction Cost Estimating	3	24.06.2019
2	Types of Construction Costs	3	24.06.2019
3	Cost Estimation Methods	3	25.06.2019
4	Quantity Takeoff	3	25.06.2019
5	Cost Data Sources	3	26.06.2019
6	Risk Assessment and Contingency Planning	3	26.06.2019
7	Value Engineering	3	27.06.2019
8	Cost Analysis and Control	3	27.06.2019
9	Legal and Regulatory Considerations	3	28.06.2019
10	Emerging Trends in Construction Cost Estimating	3	28.06.2019
Total Hours		30	-


After successful completion of 30 Hours VAC, the assessment test for the VAC titled “Construction Cost Estimating and Analysis” will be conducted on 28.06.2019.

R. D. Gopal
12/6/19

VAC Coordinator

R. Periyasami

HoD/CIVIL


Dr. M. VIJAYAKUMAR ME., Ph.D.,
 PRINCIPAL
 SASURIE COLLEGE OF ENGINEERING,
 Vijayamangalam - 638 056, Tirupur (Dt).

DEPARTMENT OF CIVIL ENGINEERING

STUDENTS PARTICIPATION LIST - VALUE ADDED COURSE


“Construction Cost Estimating and Analysis”

From 24.06.2019 to 28.06.2019 (5 days)

Duration : 30 Hours

Academic Year : 2019 -2020 / ODD

S.No.	Reg No.	Name of the Student	Year / Branch
1.	732417103001	BASKARAN K	III/CIVIL
2.	732417103002	GAYATHRI N	III/CIVIL
3.	732417103003	GOWTHIAM P	III/CIVIL
4.	732417103004	I.AVANYA M	III/CIVIL
5.	732417103005	NAVEENA S	III/CIVIL
6.	732417103006	NIVETHA S	III/CIVIL
7.	732417103007	SANGAR G	III/CIVIL
8.	732417103008	SURYA N	III/CIVIL
9.	732417103009	THARUNKUMAR J	III/CIVIL
10.	732417103010	VAISHNAVI P	III/CIVIL
11.	732417103011	VALLARASU M	III/CIVIL
12.	732416103003	ARUN KUMAR B	IV/CIVIL
13.	732416103004	BHARATHI S K	IV/CIVIL
14.	732416103005	BISMIYA BASHEER	IV/CIVIL
15.	732416103006	CHANDHRU L	IV/CIVIL
16.	732416103007	CHANDRU K M	IV/CIVIL
17.	732416103008	ELLAPPARAJ P	IV/CIVIL
18.	732416103009	HARISH P	IV/CIVIL
19.	732416103010	KURALARASAN S	IV/CIVIL
20.	732416103011	MAGESHWARAN M	IV/CIVIL
21.	732416103012	MAHENDIRAN P	IV/CIVIL
22.	732416103013	MANIMARAN V	IV/CIVIL
23.	732416103015	PRAVEENA T	IV/CIVIL
24.	732416103016	RANJITHKUMAR G	IV/CIVIL
25.	732416103017	RINSHA K P	IV/CIVIL
26.	732416103018	SAKTHISUBRAMANI K	IV/CIVIL
27.	732416103019	SENTHILNATHAN G	IV/CIVIL
28.	732416103020	SIVARAMACHANDRAN N	IV/CIVIL
29.	732416103021	SOUNDARYA S	IV/CIVIL
30.	732416103022	SUBASH P	IV/CIVIL


Dr.M.VIJAYAKUMAR ME., Ph.D.,
 PRINCIPAL

STUDENTS PARTICIPATION LIST - VALUE ADDED COURSE

S.No.	Reg No.	Name of the Student	Year / Branch
31.	732416103023	VIGNESH V NAIR	IV/CIVIL
32.	732416103024	VIJAYAPANDI V	IV/CIVIL
33.	732416103025	VIKRAMAN C	IV/CIVIL
34.	732416103301	SATHISH KUMAR S	IV/CIVIL
35.	732416103501	PRIYANKA J	IV/CIVIL
36.	732416103503	PRAVEEN KUMAR A	IV/CIVIL
37.	732416103701	MAYAKARUPPU K	IV/CIVIL
38.	732416103702	ANADHA RAJ K	IV/CIVIL
39.	732416103703	MANIKANDAN T	IV/CIVIL

Wadhya

VAC Coordinator

R. Periy

HoD/CIVIL

Dr. M. Vijayakumar

Dr. M. VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).

DEPARTMENT OF CIVIL ENGINEERING

STUDENTS ATTENDANCE LIST - VALUE ADDED COURSE

“Construction Cost Estimating and Analysis”

From 24.06.2019 to 28.06.2019 (5 days)

Duration : 30 Hours

Academic Year : 2019 -2020/ ODD

S.No	Reg No.	Name of the Student	Year/ Branch	24.06.2019		25.06.2019		26.06.2019		27.06.2019		28.06.2019		No. of Hours Attended	Signature of the Student
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
1.	732417103001	BASKARAN K	III/CIVIL	/	/	/	/	/	/	/	/	/	/	30	K. Baskaran
2.	732417103002	GAYATHRI N	III/CIVIL	/	/	/	/	/	/	a	/	/	/	27	N. Gayathri
3.	732417103003	GOWTHAM P	III/CIVIL	/	/	/	a	/	a	/	/	/	/	24	P. Gowtham
4.	732417103004	LAVANYA M	III/CIVIL	/	/	/	/	/	/	/	/	/	/	30	M. Lavanya
5.	732417103005	NAVEENA S	III/CIVIL	/	/	a	/	a	/	/	/	/	/	24	G. Naveena
6.	732417103006	NIVETHA S	III/CIVIL	/	/	/	/	/	/	/	/	/	/	30	S. Nivetha
7.	732417103007	SANGAR G	III/CIVIL	/	/	/	/	/	/	/	/	/	/	30	Sangar
8.	732417103008	SURYA N	III/CIVIL	/	/	/	/	/	/	/	/	/	/	30	Surya
9.	732417103009	THARUNKUMAR J	III/CIVIL	/	/	/	/	/	a	/	/	/	/	27	J. Tharun
10.	732417103010	VAISHNAVI P	III/CIVIL	/	/	/	/	/	/	/	/	/	/	30	Vaishnavi
11.	732417103011	VALLARASU M	III/CIVIL	/	/	a	/	a	/	/	/	/	/	24	V. Vallarasu
12.	732416103003	ARUN KUMAR B	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	Arun
13.	732416103004	BHARATHI S K	IV/CIVIL	/	a	/	/	a	/	/	/	/	/	24	Bharathi

STUDENTS ATTENDANCE LIST - VALUE ADDED COURSE

S.No	Reg No.	Name of the Student	Year/ Branch	24.06.2019		25.06.2019		26.06.2019		27.06.2019		28.06.2019		No. of Hours Attended	Signature of the Student
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
14.	732416103005	BISMIYA BASHEER	IV/CIVIL	/	a	/	/	/	/	/	/	/	/	27	<i>[Signature]</i>
15.	732416103006	CHANDHRU L	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	<i>[Signature]</i>
16.	732416103007	CHANDRU K M	IV/CIVIL	/	a	/	/	a	/	/	/	/	/	24	<i>[Signature]</i>
17.	732416103008	ELLAPPARAJ P	IV/CIVIL	/	/	/	/	/	a	/	/	/	/	27	<i>[Signature]</i>
18.	732416103009	HARISH P	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	<i>[Signature]</i>
19.	732416103010	KURALARASAN S	IV/CIVIL	/	/	a	/	/	/	/	/	/	/	27	<i>[Signature]</i>
20.	732416103011	MAGESHWARAN M	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	<i>[Signature]</i>
21.	732416103012	MAHENDIRAN P	IV/CIVIL	/	a	/	/	/	/	/	/	/	/	27	<i>[Signature]</i>
22.	732416103013	MANIMARAN V	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	<i>[Signature]</i>
23.	732416103015	PRAVEENA T	IV/CIVIL	/	a	/	/	/	/	a	/	/	/	24	<i>[Signature]</i>
24.	732416103016	RANJITHKUMAR G	IV/CIVIL	/	/	/	a	/	/	/	/	/	/	27	<i>[Signature]</i>
25.	732416103017	RINSHA K P	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	<i>[Signature]</i>
26.	732416103018	SAKTHISUBRAMANI K	IV/CIVIL	/	/	/	/	a	/	/	/	/	/	27	<i>[Signature]</i>
27.	732416103019	SENTHILNATHAN G	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	<i>[Signature]</i>
28.	732416103020	SIVARAMACHANDRAN N	IV/CIVIL	/	/	/	/	a	/	/	/	/	/	27	<i>[Signature]</i>
29.	732416103021	SOUNDARYA S	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	<i>[Signature]</i>
30.	732416103022	SUBASH P	IV/CIVIL	/	/	/	/	a	/	a	/	/	/	24	<i>[Signature]</i>
31.	732416103023	VIGNESH V NAIR	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	<i>[Signature]</i>
32.	732416103024	VIJAYAPANDI V	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	<i>[Signature]</i>

STUDENTS ATTENDANCE LIST - VALUE ADDED COURSE

S.No	Reg No.	Name of the Student	Year/ Branch	24.06.2019		25.06.2019		26.06.2019		27.06.2019		28.06.2019		No. of Hours Attended	Signature of the Student
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
33.	732416103025	VIKRAMAN C	IV/CIVIL	/	/	a	/	/	/	/	/	/	/	27	V. Mani
34.	732416103301	SATHISH KUMAR S	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	Sathish
35.	732416103501	PRIYANKA J	IV/CIVIL	/	/	a	/	a	/	/	/	/	/	24	Priyanka
36.	732416103503	PRAVEEN KUMAR A	IV/CIVIL	/	/	/	/	/	/	/	a	/	/	27	A. Praveen Kumar
37.	732416103701	MAYAKARUPPU K	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	K. Mayakaruppu
38.	732416103702	ANADHA RAJ K	IV/CIVIL	/	a	/	/	/	/	/	/	/	/	27	A. Anadha Raj
39.	732416103703	MANIKANDAN T	IV/CIVIL	/	/	/	/	/	/	/	/	/	/	30	

D. D. Jagtap
28/06/19

VAC Coordinator

R. P. Senthil
06/06

HoD/CIVIL



Dr. M. VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).

Report on Value Added Course

Title:	Construction Cost Estimating and Analysis				
Resource Person:	Er.S.Sankar Prasath, Managing Director, Venkateshwara Constructions, Tirupur – 641604.		Er.R.Mohan, CEO, Venkateshwara Constructions, Tirupur – 641604.		
Date of conduct from :	24.06.2019	To:	28.06.2019	Duration:	30 Hours
Organized by :	CIVIL ENGINEERING and IQAC in association with Venkateshwara Constructions				
Academic Year:	2019 – 2020		Semester:	ODD	
Participant Year:	II, III, IV Year CIVIL		No. of Students Participated :	39	
Venue:	Lecture hall of II & III year CIVIL.				

Outcome of Value Added Course (VAC)

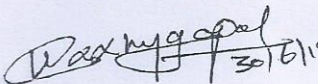
At the end of the Course, Students can be able to

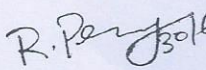
- Apply various cost estimation methods to accurately assess the overall cost of construction projects.
- Source, validate, and adjust cost data from various sources, including historical data, industry benchmarks, and databases.
- Analyze and control construction costs throughout the project lifecycle, using appropriate tools and methodologies.
- Apply their knowledge and skills to real-world construction projects.
- Demonstrating the ability to create accurate cost estimates and analyze costs effectively.

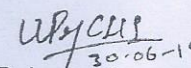
Assessment Process

- Students, who are securing **more than 70% on total score in the VAC test** and secured more than 75% in VAC attendance is eligible to receive the course completion certificate for the VAC attended
- Total Score = $(0.5 * \text{Attendance in VAC out of 100 percentage} + 0.5 * \text{Test mark in VAC out of 100 marks})$

No. of students successfully completed the VAC course is 39 Students based on the above assessment process.


 VAC Co-ordinator


 HoD/ CIVIL

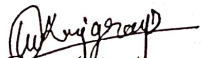

 Principal



DEPARTMENT OF CIVIL ENGINEERING


Certificate of Participation

This is to certify that Mr./Ms SURYAN, III/CIVIL has successfully completed the Value Added Course titled "Construction Cost Estimating and Analysis" Organized by the *Department of Civil Engineering* in association with IQAC of Sasurie College of Engineering and Venkateshwara Constructions from 24-06-2019 to 28-06-2019 (5 Days).


Co-ordinator


Head of the Department

 
Principal

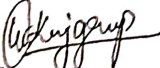

Dr.M.VIJAYAKUMAR ME., Ph.D.,
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SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam, Tiruppur (Dt).



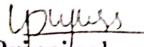
DEPARTMENT OF CIVIL ENGINEERING

Certificate of Participation


This is to certify that Mr./Ms VAISHNAVI P. III/CIVIL has
successfully completed the Value Added Course titled "Construction Cost Estimating and Analysis" Organized by
the *Department of Civil Engineering* in association with IQAC of Sasurie College of Engineering and
Venkateshwara Constructions from 24-06-2019 to 28-06-2019 (5 Days).


Co-ordinator


Head of the Department


Principal


Dr.M.VIJAYAKUMAR M.E., Ph.D.,
PRINCIPAL

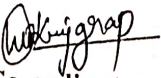

SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).



DEPARTMENT OF CIVIL ENGINEERING

Certificate of Participation

This is to certify that Mr./Ms..... **HARISH P. IV/CIVIL**..... has successfully completed the Value Added Course titled “Construction Cost Estimating and Analysis” Organized by the *Department of Civil Engineering* in association with IQAC of Sasurie College of Engineering and Venkateshwara Constructions from 24-06-2019 to 28-06-2019 (5 Days).


Co-ordinator


Head of the Department



Principal
Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).



DEPARTMENT OF CIVIL ENGINEERING

Certificate of Participation

This is to certify that Mr./Ms **MANIMARAN V, IV/CIVIL** has successfully completed the Value Added Course titled "Construction Cost Estimating and Analysis" Organized by the *Department of Civil Engineering* in association with IQAC of Sasurie College of Engineering and Venkateshwara Constructions from 24-06-2019 to 28-06-2019 (5 Days).


Co-ordinator


Head of the Department


Principal


Dr.M.VIJAYAKUMAR M.E., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056 Tiruppur, TN.

DEPARTMENT OF CIVIL ENGINEERING

TEST QUESTION PAPER - VALUE ADDED COURSE

“Construction Cost Estimating and Analysis”

From 24.06.2019 to 28.06.2019 (5 days)

Duration : 30 Hours

Academic Year : 2019 -2020 / ODD

Date of Test : 28.06.2019

MULTIPLE CHOICE QUESTIONS (25 X 1 = 25 Marks)

Name of the Student:

Year/Sem:

AU Register Number:

Answer all the questions:

1. What is the primary purpose of construction cost estimation?
 - a) Aesthetic design
 - b) Project scheduling
 - c) Budget planning
 - d) Risk management


2. Which type of cost is associated with labor, materials, and equipment?
 - a) Indirect cost
 - b) Variable cost
 - c) Overhead cost
 - d) Direct cost

3. What is the main goal of quantity takeoff in construction cost estimation?
 - a) Project scheduling
 - b) Quality control
 - c) Material quantification
 - d) Budget analysis

4. Which cost estimation method involves calculating costs based on the unit price of specific components?
 - a) Square foot
 - b) Unit-in-place
 - c) Assembly
 - d) Lump sum

5. How can historical data be used in construction cost estimation?
 - a) To predict future costs
 - b) To create project schedules
 - c) To analyze environmental impact
 - d) To assess legal compliance


Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL

 **SASURIE COLLEGE OF ENGINEERING,**
Vijayamangalam - 638 056, Tirupur (Dt).

6. What is the purpose of contingency planning in construction cost estimation?
 - a) To increase project scope
 - b) To reduce project risks
 - c) To eliminate overhead costs
 - d) To accelerate project timelines

7. Value engineering in construction aims to:
 - a) Increase project costs
 - b) Reduce project duration
 - c) Optimize costs without compromising quality
 - d) Minimize project scope

8. What does BIM stand for in the context of construction cost estimation?
 - a) Building Information Modeling
 - b) Budgeting and Implementation Management
 - c) Basic Infrastructure Mapping
 - d) Business Integration Methodology

9. Which tool is commonly used for monitoring and controlling construction costs during a project?
 - a) Critical Path Method (CPM)
 - b) Earned Value Analysis (EVA)
 - c) Gantt chart
 - d) Risk Matrix

10. In construction cost analysis, what is the purpose of the payback period?
 - a) To assess the profitability of a project
 - b) To calculate the total project cost
 - c) To estimate the project completion time
 - d) To measure the return on investment

11. What is the significance of compliance with building codes in construction cost estimation?
 - a) Reducing construction costs
 - b) Ensuring safety and regulatory adherence
 - c) Accelerating project timelines
 - d) Minimizing project risks

12. What role does artificial intelligence (AI) play in construction cost estimation?
 - a) Enhancing creativity in design
 - b) Automating repetitive tasks
 - c) Decreasing project complexity
 - d) Managing project stakeholders

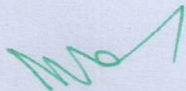
13. Which of the following is considered an indirect cost in construction?
 - a) Labor
 - b) Materials
 - c) Overhead
 - d) Equipment


Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL

14. How can industry benchmarks be useful in construction cost estimation?
- Assessing legal compliance
 - Setting project schedules
 - Providing reference points for cost comparison
 - Analyzing environmental impact
15. What is the purpose of the project schedule in construction cost estimation?
- To identify project risks
 - To determine the project's duration
 - To allocate overhead costs
 - To assess legal compliance
16. What is the primary goal of cost analysis in construction projects?
- To increase project scope
 - To monitor and control costs
 - To eliminate variable costs
 - To accelerate project timelines
17. How does sustainable construction impact cost estimation?
- It increases costs without benefits
 - It reduces project risks
 - It optimizes costs and promotes environmental responsibility
 - It accelerates project timelines
18. Which term refers to the process of adjusting cost data to account for specific project conditions?
- Cost validation
 - Cost adjustment
 - Cost allocation
 - Cost integration
19. In construction cost estimation, what does the term "lump sum" refer to?
- A fixed, total project cost
 - Variable costs
 - Direct costs
 - Overhead costs
20. What is the primary purpose of the critical path method (CPM) in construction projects?
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21. How can technology aid in efficient quantity takeoff in construction cost estimation?
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22. What does the term "unit-in-place" refer to in construction cost estimation?
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23. What is the purpose of a risk matrix in construction cost estimation?
- a) To assess environmental impact
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24. Which of the following is an example of an overhead cost in construction?
- a) Labor
 - b) Materials
 - c) Insurance
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25. How can construction cost estimation contribute to sustainable development?
- a) By increasing project scope
 - b) By reducing project duration
 - c) By optimizing costs and minimizing environmental impact
 - d) By eliminating variable costs


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DEPARTMENT OF CIVIL ENGINEERING

TEST QUESTION ANSWER KEY - VALUE ADDED COURSE

“Construction Cost Estimating and Analysis”

From 24.06.2019 to 28.06.2019 (5 days)

Duration : 30 Hours

Academic Year : 2019 -2020 / ODD

Date of Test : 28.06.2019

1	c	6	b	11	b	16	b	21	a
2	d	7	c	12	b	17	c	22	a
3	c	8	a	13	c	18	b	23	b
4	b	9	b	14	c	19	a	24	c
5	a	10	a	15	c	20	c	25	c

Dr. M. Vijayakumar
17/06/19

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DEPARTMENT OF CIVIL ENGINEERING

TEST QUESTION PAPER - VALUE ADDED COURSE

“Construction Cost Estimating and Analysis”

From 24.06.2019 to 28.06.2019 (5 days)

Duration : 30 Hours

Academic Year : 2019 -2020 / ODD

Date of Test : 28.06.2019

MULTIPLE CHOICE QUESTIONS (25 X 1 = 25 Marks)

Name of the Student: **GOKTHAM. P**

Year/Sem: **III - CIVIL**

AU Register Number: **732417103003**

(21 / 25)
8-1

Answer all the questions:

1. What is the primary purpose of construction cost estimation?
 - a) Aesthetic design
 - b) Project scheduling
 - c) Budget planning
 - d) Risk management

2. Which type of cost is associated with labor, materials, and equipment?
 - a) Indirect cost
 - b) Variable cost
 - c) Overhead cost
 - d) Direct cost

3. What is the main goal of quantity takeoff in construction cost estimation?
 - a) Project scheduling
 - b) Quality control
 - c) Material quantification
 - d) Budget analysis

4. Which cost estimation method involves calculating costs based on the unit price of specific components?
 - a) Square foot
 - b) Unit-in-place
 - c) Assembly
 - d) Lump sum

5. How can historical data be used in construction cost estimation?
 - a) To predict future costs
 - b) To create project schedules
 - c) To analyze environmental impact
 - d) To assess legal compliance

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6. What is the purpose of contingency planning in construction cost estimation?

- a) To increase project scope
- b) To reduce project risks
- c) To eliminate overhead costs
- d) To accelerate project timelines

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7. Value engineering in construction aims to:

- a) Increase project costs
- b) Reduce project duration
- c) Optimize costs without compromising quality
- d) Minimize project scope

8. What does BIM stand for in the context of construction cost estimation?

- a) Building Information Modeling
- b) Budgeting and Implementation Management
- c) Basic Infrastructure Mapping
- d) Business Integration Methodology

9. Which tool is commonly used for monitoring and controlling construction costs during a project?

- a) Critical Path Method (CPM)
- b) Earned Value Analysis (EVA)
- c) Gantt chart
- d) Risk Matrix

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10. In construction cost analysis, what is the purpose of the payback period?

- a) To assess the profitability of a project
- b) To calculate the total project cost
- c) To estimate the project completion time
- d) To measure the return on investment

11. What is the significance of compliance with building codes in construction cost estimation?

- a) Reducing construction costs
- b) Ensuring safety and regulatory adherence
- c) Accelerating project timelines
- d) Minimizing project risks

12. What role does artificial intelligence (AI) play in construction cost estimation?

- a) Enhancing creativity in design
- b) Automating repetitive tasks
- c) Decreasing project complexity
- d) Managing project stakeholders

13. Which of the following is considered an indirect cost in construction?

- a) Labor
- b) Materials
- c) Overhead
- d) Equipment

14. How can industry benchmarks be useful in construction cost estimation?
a) Assessing legal compliance
b) Setting project schedules
c) Providing reference points for cost comparison
 d) Analyzing environmental impact
15. What is the purpose of the project schedule in construction cost estimation?
a) To identify project risks
b) To determine the project's duration
 c) To allocate overhead costs
d) To assess legal compliance
16. What is the primary goal of cost analysis in construction projects?
a) To increase project scope
 b) To monitor and control costs
c) To eliminate variable costs
d) To accelerate project timelines
17. How does sustainable construction impact cost estimation?
a) It increases costs without benefits
b) It reduces project risks
 c) It optimizes costs and promotes environmental responsibility
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18. Which term refers to the process of adjusting cost data to account for specific project conditions?
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DEPARTMENT OF CIVIL ENGINEERING

ASSESSMENT SHEET - VALUE ADDED COURSE

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S.No	Reg No.	Name of the Student	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL Score (100) (50% of A + 50% of B)
				No. of Hours Attended	Attendance Score (100) (A)	No. of Correct Answers	MCQ Score (100) (B)	
1.	732417103001	BASKARANK	III/CIVIL	30	100	19	76	88
2.	732417103002	GAYATHRIN	III/CIVIL	27	90	19	76	83
3.	732417103003	GOWTHAM P	III/CIVIL	24	80	21	84	82
4.	732417103004	LAVANYA M	III/CIVIL	30	100	18	72	86
5.	732417103005	NAVEENA S	III/CIVIL	24	80	20	80	80
6.	732417103006	NIVETHA S	III/CIVIL	30	100	19	76	88
7.	732417103007	SANGAR G	III/CIVIL	30	100	19	76	88
8.	732417103008	SURYA N	III/CIVIL	30	100	18	72	86
9.	732417103009	THARUNKUMAR J	III/CIVIL	27	90	19	76	83
10.	732417103010	VAISHNAVI P	III/CIVIL	30	100	19	76	88
11.	732417103011	VALLARASU M	III/CIVIL	24	80	20	80	80
12.	732416103003	ARUN KUMAR B	IV/CIVIL	30	100	19	76	88
13.	732416103004	BHARATHI S K	IV/CIVIL	24	80	21	84	82

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14.	732416103005	BIŞMIYA BASHEER	IV/CIVIL	27	90	19	76	83
15.	732416103006	CHANDHRU L	IV/CIVIL	30	100	20	80	90
16.	732416103007	CHANDRU K M	IV/CIVIL	24	80	21	84	82
17.	732416103008	ELLAPPARAJ P	IV/CIVIL	27	90	18	72	81
18.	732416103009	HARISH P	IV/CIVIL	30	100	21	84	92
19.	732416103010	KURALARASAN S	IV/CIVIL	27	90	19	76	83
20.	732416103011	MAGESHWARAN M	IV/CIVIL	30	100	19	76	88
21.	732416103012	MAHENDIRAN P	IV/CIVIL	27	90	19	76	83
22.	732416103013	MANIMARAN V	IV/CIVIL	30	100	20	80	90
23.	732416103015	PRAVEENA T	IV/CIVIL	24	80	21	84	82
24.	732416103016	RANJITHKUMAR G	IV/CIVIL	27	90	18	72	81
25.	732416103017	RINSHA K P	IV/CIVIL	30	100	21	84	92
26.	732416103018	SAKTHISUBRAMANI K	IV/CIVIL	27	90	19	76	83
27.	732416103019	SENTHILNATHAN G	IV/CIVIL	30	100	19	76	88
28.	732416103020	SIVARAMACHANDRAN N	IV/CIVIL	27	90	19	76	83
29.	732416103021	SOUNDARYA S	IV/CIVIL	30	100	20	80	90
30.	732416103022	SUBASH P	IV/CIVIL	24	80	21	84	82
31.	732416103023	VIGNESH V NAIR	IV/CIVIL	30	100	21	84	92
32.	732416103024	VIJAYAPANDI V	IV/CIVIL	30	100	21	84	92

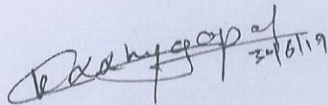
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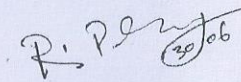


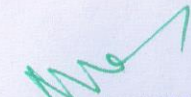
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33.	732416103025	VIKRAMAN C	IV/CIVIL	27	90	19	76	83
34.	732416103301	SATHISH KUMAR S	IV/CIVIL	30	100	20	80	90
35.	732416103501	PRIYANKA J	IV/CIVIL	24	80	21	84	82
36.	732416103503	PRAVEEN KUMAR A	IV/CIVIL	27	90	18	72	81
37.	732416103701	MAYAKARUPPU K	IV/CIVIL	30	100	21	84	92
38.	732416103702	ANADHA RAJ K	IV/CIVIL	27	90	19	76	83
39.	732416103703	MANIKANDAN T	IV/CIVIL	30	100	19	76	88


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