

(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambura Nader - C.Nagemmal Cemplis

S.P.G.C. Nager, K.Vellekulam — 625 701 (Near VIRUDHUNAGAR).

### DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2023-2024 Odd semester

### **VALUE ADDED COURSE**

On

## BUILDING ESTIMATION, COSTING AND SIMULATION USING NAVISWORKS

2021-2025 Batch Students

III CIVIL

Number of Participants: 20

COURSE COORDINATOR

Dr.P.Ganeshprabhu, AP - CIVIL

HOD - CIVIL
Dr. N.JEGANDURAI



DEPARTMENT OF CIVIL, ENGINEERING

## Academic Year 2023-2024 Odd semester

<b>Guidelines for Value</b>	Added	Courses
-----------------------------	-------	---------

Academic Year 1 :R2021 Regulations

Department Name 3

2

0

: Building Estimation, Costing And Name of the Value - Added Course **Simulation Using** 

Navisworks : 2

:2023-2024

: Civil Engineering

**SKP Engineering** 

Services, Chennai Mr.Renganathan,

**SKP Engineering** Services, Chennai Dr.P.Ganeshprabhu

No of Credits 5

+Hands- on Category

Name and Details of the Joint -Organization (Industry/NGO etc) if any

**Resource Person Details:** 8

**VAC Coordinator Details** 9

Duration (30H Mandatory) 10

Period(From-To) 11

12 Venue 35 Hours

01.08.23 to 05.08.23

Civil CADD lab

Course Coordinator

**DEAN Academics** 



S.P.G.C. Nagar, K Vellakulam – 625 701 (Near VIRUDHUNAGAR).

**DEPARTMENT OF Civil Engineering** 

**Industry Certified Value Added Course** 

### RIIII.DING ESTIMATION, COSTING AND SIMULATION USING **NAVISWORKS**

01.08.23 to 05.08.23

#### **Enclosures**:

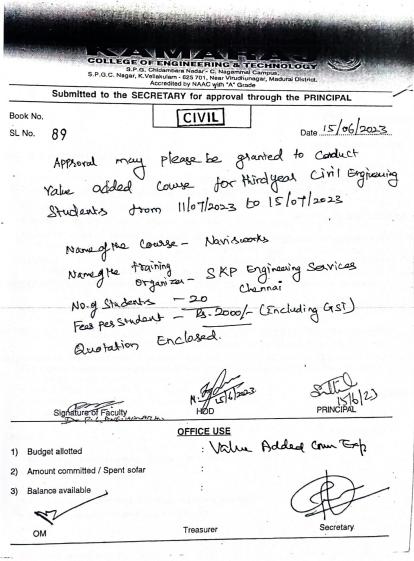
S.No.	Checklist	Availability
1	Institutional approval copy	
2	Circular	
3	Syllabus copy with Course Outcomes	
4	BoS Approval	./
5	Minutes of Three member Committee	
6	Geo-tagged Photos	1
7	Certificate of all participants	10
8	Examination Schedule	
9	Question and Answers	V
10	Attendance Sheet	~
11	Evaluated Answer sheet	V
12	Test Report	
13	Mark Statement	
14	Grade Sheet	
15	Feedback form	1
16	Feedback Analysis and Report	
17	Program Report	V
18	Student's Oral Feedback(Recorded Video)	1
19	VAC –Short Video	V

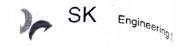


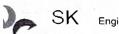
S.P.C.C. Nagar, K. Vellakulam, – 625 701 (Near VIRUDHUNAGAR).

## DEPARTMENT OF CIVIL ENGINEERING

The Department of Civil Engineering has planned to conduct a value-added course on "Navis  $W_{\text{Ork}^{\eta_i}}$ software for third-year Civil Engineering students from 01.08.2023 to 05.08.2023. S.K.P Engineering Services, Chennai is going to handle the training. In this connection, all are instructed to attend the training without fail.







**Engineering Services** 

## Building estimation, costing and simulation

**Duration: 30 HRS** 

### Session 1: Introduction

- Work With Files
- About Autodesk Navisworks Manage, User interface
- About Autodesk Navisworks Manage, User interface
   Files, File types: File Formats, Append Files, Merge Files, Refreshing Flies, Save files, DeleteFiles, Option

### O Session 2: Review the Model

- Selection tree, 3D sectioning, Viewpoints
- Select Object, Hide Object, Object Attributes
- Create and use set of Objects & Find Items
- Review Tools: Comments, Redlines and tags, Manipulate Object Attributes, Transform Objects
- Review roots: Comments, Neumos on Comments, Neumos on

#### Session 3: Explore Your Model

- Navigate the scene: Navigation Bar Tools, Steering Wheel Tool, Camera, Navigate Realism, Reference V.
- Control Model Appearance: Select Render Mode, Add lights, Select Background effect
- Clash Detection: Overview of Clash Detective Tool, Clash detective Window, Working With Clashtests Tests, Set Clash Rules, Select Object for Clashing, View Clash results, Produce clash Reports

#### Session 4: Time-liner

- Time-liner: Time-liner Window, Tasks tab, Data Source Tab, Configure tab, Simulate tab,
- Time-liner Costs

building estimation, costing and simulation

Juration: 30 HRS

#### Session 5: Animate Objects

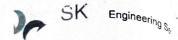
- Animator: Animating Objects, Animator Tree view, Animator Toolbar, Animator Time-liner View
- Work with Animation Scenes: Work with Animation Sets.
- Work with Camera, Use Animator for Soft Clashing
- Scripter: Work With Scripts, Work with Actions, Work with Events, Properties Window
- Autodesk Rendering: Autodesk Rendering Overview, Adding Materials to a Model, Creating andEditing Material Material Mapping
- Lighting

#### Session 6: Quantification

- Quantification: About Quantification, Take-off Methods, Supporting File types, QuantificationTool, Quantification
- Quantification: Perform Virtual Take off, Perform 2D take-off, Manage take-off Data, Updateand Analyse data, Export take-off Data,
- Estimation
- Quantity take-off
- Autodesk Quantity take-off: DWF, Non-intelligent image formats
- DWF creation: AutoCAD, Revit Architecture
- take-off tools: Manual take-off Tools, Automatic take-off Tools
- Workflow & Graphical User Interface

#### Session 7:

- Selection of Objects, Modifying the Layout on Palettes
- Adding Additional Currencies
- Preferences
- Creating a New Project: Project Settings, Organizing Your Project
- Catalog: Create a New Catalog, Export and Import
- Settings
- Organizing the Projects
- Work Breakdown Structure
- Sheet Scale
- take-off items, Assembly





S.P.G.Chidambara Nader - C.Nagammal Cempus S.P.G.C. Nagar, K.Vellakulam — 625 701 (Near VIRUDHUNAGAR)

### Department of Civil Engineering

Seventh BoS Meeting Minutes

Date

: 27.09.2023

Time

: 11.30 am to 12.30 pm

Venue

: CAD Lab

Link (hybrid mode)

: https://shorturl.at/jmCDG

The following members were present:

S.No.	Name of the Expert	Designation	Capacity	Signature
1 .	Dr. S. Arul Mary	Professor, Department of Civil Engineering, Thiagarajar College of Engineering, Madurai	Anna University Nominee	J. h
2	Dr.K.Muthukumaran	Professor, Department of Civil Engineering National Institute of Technology, Tiruchirappali	Academic Council Nominee	tumling_
3	Dr.C.Sivanesan	Professor, Department of Civil Engineering Government College of Engineering, Srirangam, Trichy.	Academic Council Nominee	En .
4	Er.S.Viswanathan	Structural and Project Management Consultant, Viswanathan Associates, Madurai	Industrial Expert	Madex
5	Er.J.Jeyapraveen	Proprietor, JPJ Construction, Madurai	Alumni	J. 504

Building estimation, costing and simulation

Duration: 30 HRS

### Session 8: Manual Takeoff Tools

- Area take-off Tools,
- Backout take-off
- Linear take-off Tools
- Count take-off Tools

### Session 9: Automatic Takeoff Tools

- Model take-off
- Search take-off
- Single Click Auto take-off

### Session 10:

- Validate take-off Data
- Compare & Display
- Report Generation: Reports Dialog
- Export & Publish to DWF

Interna	Faculty Members of BoS	Designation	Signature
S.No.	Name of the Faculty	Assistant Professor & HOD/Civil	N. A.
1	Dr.N.Jegan Durai	Chairman of BoS - CIVIL	The state of the s
2	Dr.M.Subahar	Department BoS Coordinator  Assistant Professor/Civil	M. Sub 2
3	Dr.P.Ganesh Prabhu	Assistant Professor/Civil	the
4	Mr.P.Ponkarthikeyan (Ph.D.,)	Assistant Professor/Civil	Part .
5	Mr.D.Velumani (Ph.D.,)	Assistant Professor/Civil	(9)
6	Mrs.S.Brintha	Assistant Professor/Civil	J. 500
7	Mr.K.Hariharan	Assistant	

> HOD/CIVIL gave a brief presentation about the review of the Minutes of the 6th BoS meeting. Recommendations of the committee and relevant implications were presented to the committee. 6th BoS recommendations were reviewed and accepted by the committee.

## 007.03.00: ITEMS FOR DISCUSSION AND APPROVAL

Name of the Course

> The BoS Coordinator Dr.M.Subahar, Presented the final year curriculum and syllabi of R2021 and including the Open Elective courses offered by department of Civil Engineering.

007.03.01: Proposed Curriculum and Syllabi for VII and VIII Semester

### 07.01.0 Welcome address by HoD

> Dr.N.Jegan Durai (Head of the Department) Department of Civil Engineering welcomed

007.02.00 : Approval of  $6^{th}$  BoS Meeting Minutes & Action taken

### VII Semester

Time of the Course	2.05-00-00-00-00-00-00-00-00-00-00-00-00-0
Irrigation Engineering	Suggestions from BoS members
Estimation Costing and Quantity	Detailing/Drawing can be given as activity
surveying Lab	verify the CO statement it is mentioned as
1	and give a generalized word (other building
	bending schedule can be in the
and Earth;	respond of Excel sheet for estimation can be given
uded in votructural Design and Detailing	
aboratory	Counterfort retaining wall can be included, Exercise
uded in uni	was not specific and Ensure the tar-
reedom Sys	traction carrier is given, so Water tank recting
	at state states can be removed. New version of and a
alysis bool	to be mentioned in reference.
	VIII Semester
EL was incl Name of the Course	Suggestions from BoS members
oject Work	Approved by BoS members
4. 4. 1 (16) (17) (17) (17) (17) (17) (17) (17) (17	

Item No.	Suggestions of BoS Members in 6 <sup>th</sup> BoS Meeting	Action Taken
1.	<ul> <li>Include Seismic Design in Vertical 1 replacing BIM.</li> <li>Expert suggested to include Eigenvalues analysis to estimate natural frequency, mode shape, in Dynamics syllabus.</li> </ul>	<ul> <li>Structural Dynamics and Earth         Engineering was included in vetructured to the structured of the stru</li></ul>
2.	<ul> <li>Include Introduction to ITS in 5th unit in Traffic Engineering.</li> <li>In the reference include Highway traffic analysis book SALTER &amp; HOUNSEL.</li> </ul>	Highway traffic analysis book  SALTER & HOUNSEL was included in reference section  Introduction to ITS was included 5th unit.
3.	<ul> <li>Committee suggested that topics on design of Firefighting, fire safety &amp;MEP to be included in the</li> </ul>	<ul> <li>Firefighting, fire safety include Unit – IV.</li> <li>Topics related to MEP was included.</li> </ul>



# DEPARTMENT OF CIVIL ENGINEERING

Three Members Committee – Minutes of Meeting for Value Added  $C_{0u_{\Gamma Se}}$ 

Date: 14.06.2023

		Value Added Course selection meeting
Agenda		
Date	1:	14.06.2023
Time	1:	1.30 pm
Members Present	:	Three Members Committee Member  1.Dr. N.Jegandurai, HOD/Civil  2. Dr.P.Ganeshprabhu, AP/Civil
Minutes of Meeting	:	3.Dr.M.Subahar, AP/Civil  A three member committee has been formed and a meeting is organized to select value added course for third year Civil Engineering students.  Meeting stared by 1.30pm. N.Jegandurai, HOD/Civil, welcome the gathering.  Dr.M.Subahar AP/Civil subject expert has proposed various courses. Those courses are listed below.  1. Naviswork  2. Total station surveying
		Sketchup  Due to the increased demand for BIM modeling, N.Jegandurai, HOD/Civil, has recommended to offer Naviswork.

Dr.M.Subahar, AP/Civil, Subject Expert, has also recommended this course because it will help to understand the 3D Modeling and BIM.

Dr. P.Ganeshprabhu, Placement Coordinator, have also recommended to offer Navisworks course. In current scenario, this course is in huge demand in construction industry.

Based on the suggestion given by the committee, the Navisworks was accepted to be conducted as a value-added course for Third-year Civil Engineering students. Justification for the Course selection:

- 1. This course will improve employability skills
- 2. This course will improve their understanding in 3D Modeling and BIL.
- 3. This course will support students to satisfy industry needs

Placement Coordinator

Subject Expert

HOD/Civil

Dr.N.Jegandurai



Department ... Costing and Simulation Using Navisworks

Value Added Course on Building Estimation, Costing and Simulation Using Navisworks







Day 2





### Day 3





Day 4









Building Estimation, Costing and Simulation using Navisworks

AWARDED TO :	SRI POOPA	ANRAJA.A
CONDUCTED AT : _	Kamaraj College of Eng	ineering and Technology
	01-08-2023	05-08-2023
	Start Date	End Date



AWARDED T

SK ENGINEERING SERVICE

## CERTIFICATE OF PARTICIPATION

**Building Estimation, Costing and Simulation using Navisworks** 

ANAROLD 10 :	DHARUN.	•
CONDUCTED AT:	Kamaraj College of Engineering and Technology	
	01-08-2023	05-08-2023
	Start Date	End Date

**Authorized Signatory** 

M. -the



Building Estimation, Costing and Simulation using Navisworks

AWARDED TO :	UTHAMA R	AJA.R	
CONDUCTED AT :	Kamaraj College of Engi	neering and Technology	
1	01-08-2023	05-08-2023	3
	Start Date	End Date	
		Authorized Sig	gnat



SKP ENGINEERING SERVICE

## **CERTIFICATE OF PARTICIPATION**

Building Estimation, Costing and Simulation using Navisworks

AWARDED TO :	SURYA.T	
ONDUCTED AT:	Kamaraj College of Eng	ineering and Technology
CONDUCTED AT :	Kamaraj College of Eng	ineering and Technology05-08-2023

**Authorized Signatory** 

M.-tho



**Building Estimation, Costing and Simulation using Navisworks** 

AWARDED TO	:	PRIYADHARSHINI.N
		- INTADIAKSIIINI.N

CONDUCTED AT : Kamaraj College of Engineering and Technology

01-08-2023

**Start Date** 

05-08-2023

**End Date** 

Authorized Signatory



SK ENGINEERING SERVICE

# CERTIFICATE OF PARTICIPATION

**Building Estimation, Costing and Simulation using Navisworks** 

AWARDED TO	:	VARSHIDHA.U

CONDUCTED AT : Kamaraj College of Engineering and Technology

01-08-2023

**Start Date** 

.05-08-2023

**End Date** 

**Authorized Signatory** 

M.-the



**Bullding Estimation, Costing and Simulation using Navisworks** 

AWARDED TO :	SENTHILK	UMAR.D
ONDUCTED AT :	Kamaraj College of Eng	ineering and Technology
	01-08-2023	05-08-2023
	Start Date	End Date

Authorized Signatory



SK ENGINEERING SERVICE

## CERTIFICATE OF PARTICIPATION

**Building Estimation, Costing and Simulation using Navisworks** 

AWARDED TO :	AMUTHA	AVALLI.S
ONDUCTED AT:	Kamaraj College of Eng	ineering and Technology
ONDUCTED AT:	Kamaraj College of Eng	ineering and Technology 05-08-2023

**Authorized Signatory** 

M. -the



**Building Estimation, Costing and Simulation using Navisworks** 

AWARDED TO :	ANTONY	NITHAS.A
CONDUCTED AT:	Kamaraj College of Eng	ineering and Technology
	01-08-2023	05-08-2023
	Start Date	End Date
		Authorized Signator



SK ENGINEERING SERVICE

## CERTIFICATE OF PARTICIPATION

**Building Estimation, Costing and Simulation using Navisworks** 

AWARDED TO :	ALAGUSIVARAMA	AKRISHNAN.S	•
CONDUCTED AT :	Kamaraj College of Eng	ineering and Technology	
CONDUCTED AT : _	Kamaraj College of Eng	ineering and Technology 05-08-2023	

**Authorized Signatory** 

M. -the



Building Estimation, Costing and Simulation using Navisworks

AWARDED TO :	SANJA	r.R	
CONDUCTED AT :	Kamaraj College of Eng	ineering and Technology	
	01-08-2023	05-08-2023	
	Start Date	End Date	2
		Authorized	l Signatory



SK ENGINEERING SERVICE

# CERTIFICATE OF PARTICIPATION

**Building Estimation, Costing and Simulation using Navisworks** 

AWARDED TO :	NIRANJANA.A.G
CONDUCTED AT : Kamaraj Coll	ege of Engineering and Technology
01-08-2023	05-08-2023
Start Date	End Date
	Authorized Signatory



Building Estimation, Costing and Simulation using Navisworks

AWARDED TO :	SATHISH KUM	AR.M
ONDUCTED AT :	Kamaraj College of Engir	neering and Technology
	01-08-2023	05-08-2023
	Start Date	End Date
		Authorized Signatory
•		H_+P-
CE	RTIFICATE OF	PARTICIPATION  Simulation using Naviswor
CE: Building	RTIFICATE OF	PARTICIPATION  d Simulation using Naviswor
CE: Building	RTIFICATE OF	PARTICIPATION  d Simulation using Naviswor
Building	RTIFICATE OF SESTIMATION, Costing and VISH	PARTICIPATION  d Simulation using Naviswor  VA.C
Building	RTIFICATE OF SESTIMATION, Costing and VISH	PARTICIPATION  d Simulation using Naviswor
Building	RTIFICATE OF SESTIMATION, Costing and VISH	PARTICIPATION d Simulation using Naviswor VA.C gineering and Technology



**Building Estimation, Costing and Simulation using Navisworks** 

AWARDED TO :	GUGAN.	M	2
CONDUCTED AT:	Kamaraj College of Eng	ineering and Technology	
	01-08-2023	05-08-2023	
	Start Date	End Date	

Authorized Signatory



SK ENGINEERING SERVICE

## CERTIFICATE OF PARTICIPATION

**Building Estimation, Costing and Simulation using Navisworks** 

AWARDED TO :	ROSHI	NI.B	
ONDUCTED AT :	Kamaraj College of Engi	neering and Technology	3
ONDUCTED AT:	Kamaraj College of Engi 01-08-2023	neering and Technology  05-08-2023	•

**Authorized Signatory** 



**Building Estimation, Costing and Simulation using Navisworks** 

POORM	IIMA. V	•
Kamaraj College of En	gineering and Technology	
01-08-2023	05-08-2023	
Start Date	End Date	
7 2K+646	Author	ized Signatory
		, P
SK ENGINE	ERING SERVICE	
TIFICATE OF	PARTICIPATIO	ON
timation,Costing and	Simulation using Navis	works
SUDHAGA	AR PANDI.P	
		•
Kamaraj College of Engi	neering and Technology	
01-08-2023	05-08-2023	
	Kamaraj College of En  01-08-2023 Start Date  SK ENGINE  CIFICATE OF  timation, Costing and  SUDHAGA  Kamaraj College of Engi	SK ENGINEERING SERVICE  CIFICATE OF PARTICIPATIO  timation, Costing and Simulation using Navis  SUDHAGAR PANDI.P  Kamaraj College of Engineering and Technology

**Start Date** 

**Authorized Signatory** 



Building Estimation, Costing and Simulation using Navisworks

AWARDED TO		CHDI VICUMAMDADAN ND	
	•	SHRI VISHWAMBARAN.NP	

CONDUCTED AT : Kamaraj College of Engineering and Technology

01-08-2023

**Start Date** 

05-08-2023

**End Date** 

**Authorized Signatory** 



SK ENGINEERING SERVICE

### **CERTIFICATE OF PARTICIPATION**

**Building Estimation, Costing and Simulation using Navisworks** 

AWARDED TO	:	MOHAMED KAIFA

CONDUCTED AT : Kamaraj College of Engineering and Technology

01-08-2023

**Start Date** 

05-08-2023

**End Date** 

**Authorized Signatory** 

M. -the



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNA),

S.P.G.Chidambara Nadar - C.Negammal Campus S.P.G.C. Nagar, K.Velakulam – 625 701 (Near VIRUDHUNAGAR).

### **Department of Civil Engineering**

Value Added Course on Navisworks

**EXAMINATION SCHEDULE** 

				Venue
T	Date	Time	Roll Number	Yemus
-	05.8.2023	9.30 am to 11.00 am	21UCI001 to 21UCIV021	Civil CADD Lab
1				

Value Added Course In-charge

## NAVISWORKS MANAGE EXAMINATION QUESTIONS

#### PART - A:

30 X 1 = 30 Marks

- 1. What is the primary purpose of Navisworks Manage?
- b) Clash detection and coordination
- c) Project scheduling
- d) Cost estimation
- 2. Which file formats can be imported into Navisworks?
- b) RVT, IFC, NWC
- c) PNG, JPEG, TIFF
- d) DOCX, PPTX, MDB
- 3. Which Navisworks feature allows users to simulate construction sequencing?
- b) Clash Detective
- c) Quantification
- d) Presenter
- 4. What is the purpose of Navisworks Clash Detective?
- a) Simulate construction scheduling
- b) Manage project costs
- c) Identify and resolve clashes in a 3D model
- d) Generate detailed reports
- 5. Which tool in Navisworks allows users to create custom viewpoints and presentations?
- b) TimeLiner
- c) Presenter
- d) Quantification
- 6. What is the file extension for a Navisworks cache file?
- a).NWD
- b) .NWC
- c) .RVT
- d) .IFC
- 7. In Navisworks, what does the "Redline" tool do?
- a) Adjusts the color balance of the 3D model
- b) Provides markup and annotation capabilities
- c) Enables real-time rendering
- d) Creates custom view filters

Which Navisworks feature allows you to extract data from the 3D model for quantity takeoffs?	
adata from the 3D mouer to	16. What is the purpose of the Navisworks "Switchback" feature?
-liows you to extract data	a) to toggie between different 3D views
ship Navisworks feature allows	b) To convert 3D models to 2D drawings
TimeLiner	c) To export the model to - try
	d) To reverse the clash detection process
Presenter	a) to reterise the clash detection process
Clash Detective	17 Which Neutronal C
Quantification neglection Tree"?	17. Which Navisworks feature allows for real-time navigation and walkthroughs in the model?
) Quantification  What Is the purpose of the Navisworks "Selection Tree"?  What Is the purpose of the Navisworks "Selection Tree"?	a) Animator
What is the purpose of the West.  Shows a list of all available 3D views  Shows a list of all available 3D views.	b) TimeLiner
Shows a list of moder of moder	c) Clash Detective
What is the purpose  3) Shows a list of all available 3D views  5) Displays a hierarchical structure of model elements  6) Displays a hierarchical structure of model elements  6) Provides a timeline for project scheduling  6) Provides a timeline for project scheduling	d) Presenter
c) Provides a timeline for project	
d) Generates clash reports	18. What does the "TimeLiner" tool in Navisworks allow you to do?
allows users to animate objects una	a) Create construction schedules
c) Provides a timeline to P	b) Animate objects in the 3D model
a) Animator	c) Perform quantity takeoffs
b) Presenter	d) Create quicking taxeouts
r) Timeliner	d) Create custom presentation slides
n clash Datertive	40 What are
Clash Detective?	19. What is the purpose of the "Real-time Rendering" option in Navisworks?
11. What is the primary function of Navisworks Clash Detective?	a) Speed up the clash detection process
	b) Improve the performance of the software
a) 3D modeling b) Clash detection and coordination	c) Create high-quality images of the 3D model
c) Quantity takeoff	d) Enable collaboration with remote team members
d) Project scheduling	
	20. Which Navisworks feature allows users to create custom reports based on clashes, quantities,
12. In Navisworks, what is a "clash"?	and other data?
A dispresement between project	a) Animator
b) A software error in the program	b) Presenter
\ \ = interference between two or the	c) TimeLiner
d) A collision on the construction site	d) Quantification
to do do?	o, quantimetrici
13. What does the "Quantification" tool in Navisworks allow you to do?	21 Which file format is commonly used for a large state of the state o
a) Perform calculations on the project	21. Which file format is commonly used for exchanging 3D models between different software applications?
c) Extract data and measurements from the 3D model	a) DWG
d) Create 2D drawings and elevations	b) PDF
of cross and an area and area area.	c) IFC
14. Which Navisworks feature is used for creating construction schedules based on the 3D model?	d) NWC
a) TimeLiner	
b) Animator	22. What is the purpose of the "Search Sets" feature in Navisworks?
c) Presenter	a) To find clashes in the 3D model
d) Clash Detective	b) To organize model elements into groups
U) clash betechte	c) To create custom presentation slides
15. How does Navisworks handle clashes in a 3D model?	d) To perform quantity takeoffs
a) Automatically resolves the clashes	
b) Highlights the clashes for manual review	23. Which Navisworks feature allows you to create custom animations and visual effects in the 3D
c) Ignores the clashes and proceeds with the model	model?
d) Deletes the elements causing the clashes	a) Animator
u) beletes the elements causing the closines	b) TimeLiner
	c) Presenter
	d) Clash Detective

- 24. What does the "Save Viewpoint" tool do in Navisworks? a) Save the current model to a different file format b) Capture the current camera angle and position for later use
- c) Export the model to a 2D drawing
- d) Create a backup of the model

## 25. How does Navisworks help in the coordination process of a construction project?

- a) By automatically resolving all clashes in the 3D model b) By providing tools to detect and manage clashes among different trades
- c) By generating cost estimates for the entire project
- d) By scheduling tasks and activities in the project timeline

## 26. Which Navisworks tool allows you to create custom presentations with slides and

- annotations? a) Animator
- b) Clash Detective
- c) TimeLiner
- d) Presenter

### 27. What is the purpose of the "Sectioning" tool in Navisworks?

- a) To divide the project into phases for scheduling
- b) To create 2D drawings from the 3D model
- c) To organize model elements into sections for analysis
- d) To save the current view of the model for future reference

### 28. How can you share a Navisworks project with team members who don't have Navisworks installed?

- a) Export the project as a PDF document
- b) Save the project as a PNG image
- c) Convert the project to a 3D printable file format
- d) Export the project as an NWD file for use with Navisworks Freedom

### 29. Which Navisworks tool allows you to create custom views by hiding or isolating specific model elements?

- a) Animator
- b) Switchback
- c) Presenter
- d) Hide/Reveal

#### 30. What is the purpose of the "Time-based Clashes" feature in Navisworks?

- a) To create clashes between different trades in the 3D model
- b) To schedule clashes to occur at specific project milestones
- c) To prioritize clashes based on their impact on the project timeline
- d) To analyze clashes over a specified time duration

#### PART - B:

#### 15 X 2 = 30 Marks

### , 31. Which file format is commonly used for sharing 3D models in a BIM collaboration

- a) PNG
- b) NWD
- c) DWG
- d) TIFF

### 32. What is the primary function of the Navisworks "Measure" tool?

- a) To calculate the total cost of the project
- b) To take linear and angular measurements in the 3D model
- c) To create a detailed project schedule
- d) To perform quantity takeoffs

### 33. What is the purpose of the "Model Search" tool in Navisworks?

- a) To search for specific model elements using keywords
- b) To search for clash results in the 3D model
- c) To search for project-related documents and files
- d) To find specific views in the model

#### 34. How can you share a Navisworks project with a client or stakeholder who does not have Navisworks installed?

- a) Export the project as a 3D PDF
- b) Send the Navisworks project file (NWD) for viewing
- c) Convert the project to a 2D CAD drawing
- d) Provide access to the project through a cloud-based collaboration platform

### 35. Which Navisworks feature allows you to compare different versions of the same 3D model?

- a) Animator
- b) TimeLiner
- c) Presenter
- d) Clash Detective

#### 36. What does the "Time-based Clash Test" in Navisworks allow you to do?

- a) Schedule clashes to occur at specific project milestones
- b) Automatically resolve clashes in the 3D model
- c) Analyze clashes over a specified time duration
- d) Compare different versions of the model for changes

#### 37. How can you create a visual walkthrough of the project in Navisworks?

- a) By using the "Fly" tool
- b) By applying realistic textures to the model
- c) By adjusting the lighting and shadows
- d) By using the "Walk" tool

Department of Civil Engineering

Value Added Course on NavisWorks

Attendance Sheet

Course Content: TNTROCUCTION - NAVIS LORGE Name of the Trainer: RANGANATHAN- k

Date: 01.8.2023

Session: FN

te: 01.8	.2025	Signature	
GI NI-	Roll No.	Student Name	A. Sri PenBannaja
SI. No.	21UCI001	SRI POOPANRAJA.A	p. Sritantanage
2.	21UCl002	DHARUN.V	DUH. Rea.
3.	21UCI003	UTHAMA RAJA.R	R. Other Fra.
4.	21UCI004	SURYA.T	1. Surga
5.	21UCI005	PRIYADHARSHINI.N	1/41
6.	21UCI006	VARSHIDHA.U	U-Va-
7.	21UCI007	SENTHILKUMAR.D	AB
8.	21UCI008	AMUTHAVALLI.S	1
9.	21UCI009	ANTONY NITHAS.A	Ars
10.	21UCl010	ALAGUSIVARAMAKRISHNAN.S	Richard
11.	21UCI011	SANJAY.R	NA.
12.	21UCI012	NIRANJANA.A.G	1000
13.	21UCI013	SATHISH KUMAR.M	CVIII
14.	21UCI014	VISHVA.C	AG
15.	21UCI016	GUGAN.M	AB
16.	21UCI017	ROSHINI.B	V. Poornima
17.	21UCIV018	POORNIMA. V	ACQM
18.	21UCIV019	SUDHAGAR PANDI.P SHRI VISHWAMBARAN.N	Modera
19.	21UCIV020 21UCIV021	MOHAMED KAIFA	A A

2 | Page



**Department of Civil Engineering** 

Value Added Course on NavisWorks

Attendance Sheet

Course Content: REVIEVY 700LS

Name of the Trainer: RANGANATHAN . K

Date: 01.8.2023

Session: AN

Sl. No.	Roll No.	Student Name	Signature
1.	21UCI001	SRI POOPANRAJA.A	0.010 0 == 1
2.	21UCI002	DHARUN.V	A: Sri PooPankaj
3.	21UCI003	UTHAMA RAJA.R	R. W. Rasal
4.	21UCI004	SURYA.T	A
5.	21UCI005	PRIYADHARSHINI.N	HOTEL N
6.	21UCI006	VARSHIDHA.U	No11
7.	21UCI007	-SENTHILKUMAR.D	The state of the s
8.	21UCI008	AMUTHAVALLI.S	AB
9.	21UCI009	ANTONY NITHAS.A	Afor lands
10.	21UCI010	ALAGUSIVARAMAKRISHNAN.S	AB
11.	21UCI011	SANJAY.R	pro-
12.	21UCI012	NIRANJANA.A.G	1-1. G. Alandan
13.	21UCI013	SATHISH KUMAR.M	1. Salle
14.	21UCI014	VISHVA.C	Vigura. C
15.	21UCI016	GUGAN.M	. A3
16.	21UCI017	ROSHINI.B	. AG
17.	21UCIV018	POORNIMA. V	James V
18.	21UCIV019	SUDHAGAR PANDI.P	24
19.	21UCIV020	SHRI VISHWAMBARAN.N	NA
20.	21UCIV021	MOHAMED KAIFA	1-100

HODEIVIL

## Department of Civil Engineering

Value Added Course on Advanced 3D Reality Modelling using Context Capture software

Value Added Course on NavisWorks

Attendance Sheet

Name of the Trainer: RANGA NA THAM . K Course Content: EXPLORE YOUR MODEL

Date: 02.8.2023

Session: FN

ate: 02.8	5,2025		Signature		
Sl. No.	Roll No.	Student Name	A. Sni Perker		
1.	21UCI001	SRI POOPANRAJA.A	Colson S		
2.	21UCI002	DHARUN.V	2 Von Rin		
3.	21UCI003	UTHAMA RAJA.R	T. Waya		
4.	21UCI004	SURYA.T	Days.		
5.	21UCI005	PRIYADHARSHINI.N	washedly u		
6.	21UCI006	VARSHIDHA.U	Valstuding C		
7.	21UCI007	SENTHILKUMAR.D	1 Haise		
8.	21UCI008	AMUTHA VALLI.S	Bullet		
9.	21UCI009	ANTONY NITHAS.A	A STATE OF THE PARTY OF THE PAR		
10.	21UCI010	ALAGUSIVARAMAKRISHNAN.S			
11.	21UCI011	SANJAY.R	SAC		
12.	21UCl012	NIRANJANA.A.G	Marion		
13.	21UCI013	SATHISH KUMAR.M			
14.	21UCI014	VISHVA.C	( Vinna		
15.	21UCI016	GUGAN.M	CAM.		
16.	21UCI017	ROSHINI.B	Chart.		
17.	21UCIV018	POORNIMA. V	V. Bornima.		
18.	21UCIV019	SUDHAGAR PANDI.P	Ros-		
19.	21UCIV020	SHRI VISHWAMBARAN.N	Met.		
20.	21UCIV021	MOHAMED KAIFA	XX		

Value Added Course In-charge

Signature of the Trainer

4|Page



### **Department of Civil Engineering**

Value Added Course on NavisWorks

Attendance Sheet

Course Content: CLASH DETECTION

Name of the Trainer: RANGANATHAN. K

Date: 02.8.2023

Session: AN

Sl. No.	Roll No.	Student Name	Signature
1.	21UCI001	SRI POOPANRAJA.A	A. Dri Pat rgra
2.	21UCI002	DHARUN.V	Dollars
3.	21UCI003	UTHAMA RAJA.R	R. Whe Rege
4.	21UCI004	SURYA.T	T. Swy a
5.	21UCI005	PRIYADHARSHINI.N	121
6.	21UCI006	VARSHIDHA.U	Warsh.
7.	21UCI007	SENTHILKUMAR.D	1000 T
8.	21UCI008	AMUTHAVALLI.S	D. H. 1-16.
9.	21UCI009	ANTONY NITHAS.A	AA
10.	21UCI010	ALAGUSIVARAMAKRISHNAN.S	1575
11.	21UCI011	SANJAY.R	\$2
12.	21UCI012	NIRANJANA.A.G	Wald.
13.	21UCI013	SATHISH KUMAR.M	285
14.	21UCI014	VISHVA.C	Cixishua
15.	21UCI016	GUGAN.M	Char.
16.	21UCI017	ROSHINI.B	(2m)-
17.	21UCIV018	POORNIMA. V	Doorn
18.	21UCIV019	SUDHAGAR PANDI.P	PSP
19.	21UCIV020	SHRI VISHWAMBARAN.N	NO
20.	21UCIV021	MOHAMED KAIFA	A XI



Department of Civil Engineering

Value Added Course on Navisworks

Attendance Sheet

Course Content: ANIMATE OF ECTS

Name of the Trainer: RANGAN ATHAN . )

Session: FN

te: 03.8	.2023		Signature
	Roll No.	Student Name	1. Smi Para
SI. No.	-	SRI POOPANRAJA.A	1/3 m
1.	21UCI001	DHARUN.V	R. Olthan Page
2.	21UCI002 21UCI003	UTHAMA RAJA.R	R. Uthan Fur
4.	21UCI003	SURYA.T	
5.	21UCI005	PRIYADHARSHINI.N	- Juliani
6.	21UCI006	VARSHIDHA.U	Variation of the second
7.	21UCI007	SENTHILKUMAR.D	7 1
8.	21UCI008	AMUTHAVALLI.S	A College
9.	21UC1009	ANTONY NITHAS.A	Mass
10.	21UCI010	ALAGUSIVARAMAKRISHNAN.S	AVIOL
11.	21UCI011	SANJAY.R	Saul 105
12.	21UCI012	NIRANJANA.A.G	4:4:4
13.	21UCI013	SATHISH KUMAR.M	Sacrific.
14.	21UCI014	VISHVA.C	Fisher.
15.	21UCI016	GUGAN.M	9700
16.	21UCI017	ROSHINI.B	1
17.	21UCIV018	POORNIMA. V	The mina
18.	21UCIV019	SUDHAGAR PANDI.P	The state of the s
19.	21UCIV020	SHRI VISHWAMBARAN.N	10
20.	21UCIV021	MOHAMED KAIFA	1 Appender

Value Added Course In-charge

6 | Page



### **Department of Civil Engineering**

Value Added Course on Navisworks

Attendance Sheet

Course Content: ANIMATOR 9 SCRIPTS

CREATION

Name of the Trainer: RANGANATHAN . K

Date: 03.8.2023

Session: AN

Sl. No.	Roll No.	Student Name	Signature
1.	21UCI001	SRI POOPANRAJA.A	100.01
2.	21UCI002	DHARUN.V	WOL ST
3.	21UCI003	UTHAMA RAJA.R	R-UAm Rice
4.	21UCI004	SURYA.T	K-Offin life
5.	21UCI005	PRIYADHARSHINI.N	The state of the s
6.	21UCI006	VARSHIDHA.U	- Their
7.	21UCI007	SENTHILKUMAR.D	Detlar
8.	21UCI008	AMUTHAVALLI.S	M
9.	21UCI009	ANTONY NITHAS.A	A.
10.	21UCI010	ALAGUSIVARAMAKRISHNAN.S	Mallyor
11.	21UCI011	SANJAY.R	Gul
12.	21UCI012	NIRANJANA.A.G	25.109
13.	21UCI013	SATHISH KUMAR.M	I Salah
14.	21UCI014	VISHVA.C	Janhis T
15.	21UCI016	GUGAN.M	Guega
16.	21UCI017	ROSHINI.B	Parti-
17.	21UCIV018	POORNIMA. V	11 Poorin
18.	21UCIV019	SUDHAGAR PANDI.P	Photo
19.	21UCIV020	SHRI VISHWAMBARAN.N	NE 5- 5-4
20.	21UCIV021	MOHAMED KAIFA	miles In

## NAVISWORKS MANAGE EXAMINATION QUESTIONS

30 X 1 = 30 Marks

#### PART - A:

- 1. What is the primary purpose of Navisworks Manage?
- a) 3D modeling
- Clash detection and coordination
- c) Project scheduling
- d) Cost estimation
- 2. Which file formats can be imported into Navisworks?
- a) DWG, PDF, XLS
- MRVT, IFC, NWC
- c) PNG, JPEG, TIFF
- d) DOCX, PPTX, MDB
- 3. Which Navisworks feature allows users to simulate construction sequencing?
- atTimeLiner
- b) Clash Detective
- c) Quantification
- d) Presenter
- 4. What is the purpose of Navisworks Clash Detective?
- a) Simulate construction scheduling
- b) Manage project costs
- Midentify and resolve clashes in a 3D model
- d) Generate detailed reports
- 5. Which tool in Navisworks allows users to create custom viewpoints and presentations?
- a) Animator
- b) TimeLiner
- e) Presenter
- d) Quantification
- 6. What is the file extension for a Navisworks cache file?
- a) .NWD
- B).NWC
- c) .RVT
- d) .IFC
- 7. In Navisworks, what does the "Redline" tool do?
- a) Adjusts the color balance of the 3D model
- Provides markup and annotation capabilities
- c) Enables real-time rendering
- d) Creates custom view filters



21UCID

11. What is the primary function of Navisworks Clash Detective?

a) 3D modeling AnClash detection and coordination

d) Generates clash reports

c) Quantity takeoff

d) Clash Detective

b) Presenter c) TimeLiner

c) Clash Detective \*\* MQuantification

- d) Project scheduling
- 12. In Navisworks, what is a "clash"?
  - a) A disagreement between project stakeholders

9. What is the purpose of the Navisworks "Selection Tree"?

thy Displays a hierarchical structure of model elements c) Provides a timeline for project scheduling

a) Shows a list of all available 3D views

- b) A software error in the program
- An interference between two or more 3D model elements
- d) A collision on the construction site
- 13. What does the "Quantification" tool in Navisworks allow you to do?
  - a) Perform calculations on the project timeline
  - b) Estimate the total project cost
- chextract data and measurements from the 3D model
- d) Create 2D drawings and elevations
- 14. Which Navisworks feature is used for creating construction schedules based on the 3D model?

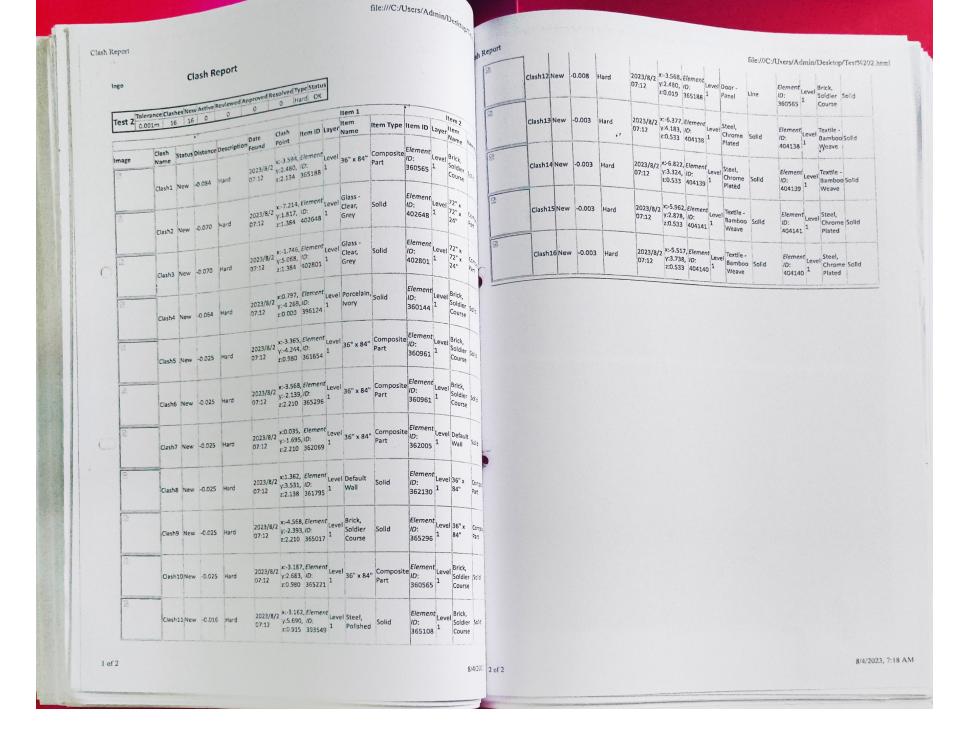
8. Which Navisworks feature allows you to extract data from the 3D model for quantity takeoffs?

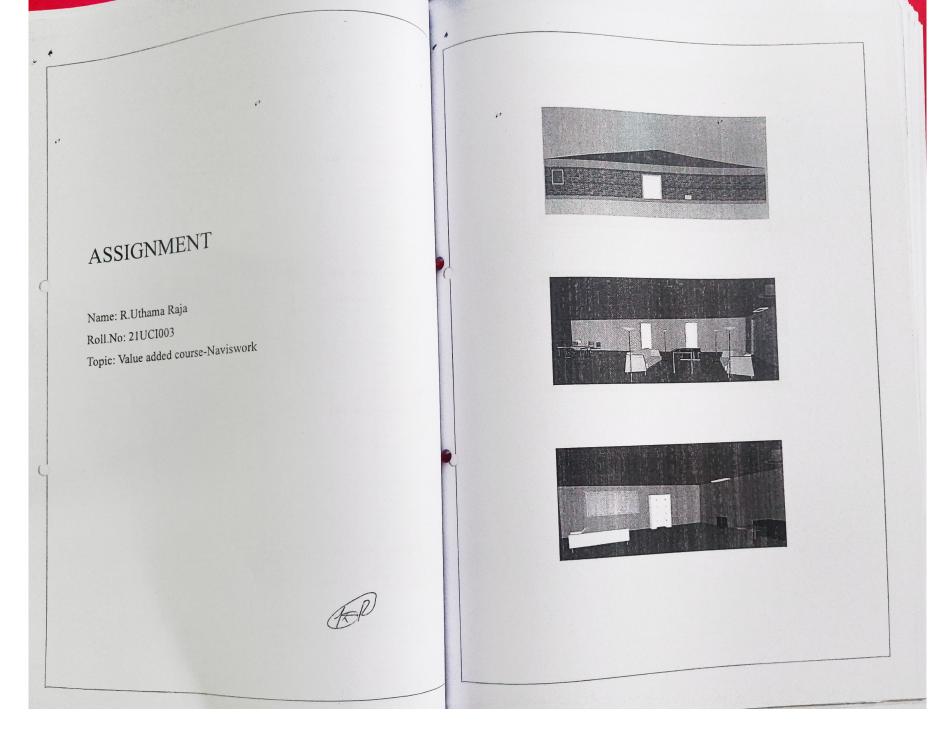
10. Which Navisworks feature allows users to animate objects and create walkthroughs?

- TimeLiner
- b) Animator
- c) Presenter
- d) Clash Detective
- 15. How does Navisworks handle clashes in a 3D model?
  - a) Automatically resolves the clashes
- by Highlights the clashes for manual review
- c) Ignores the clashes and proceeds with the model
- d) Deletes the elements causing the clashes

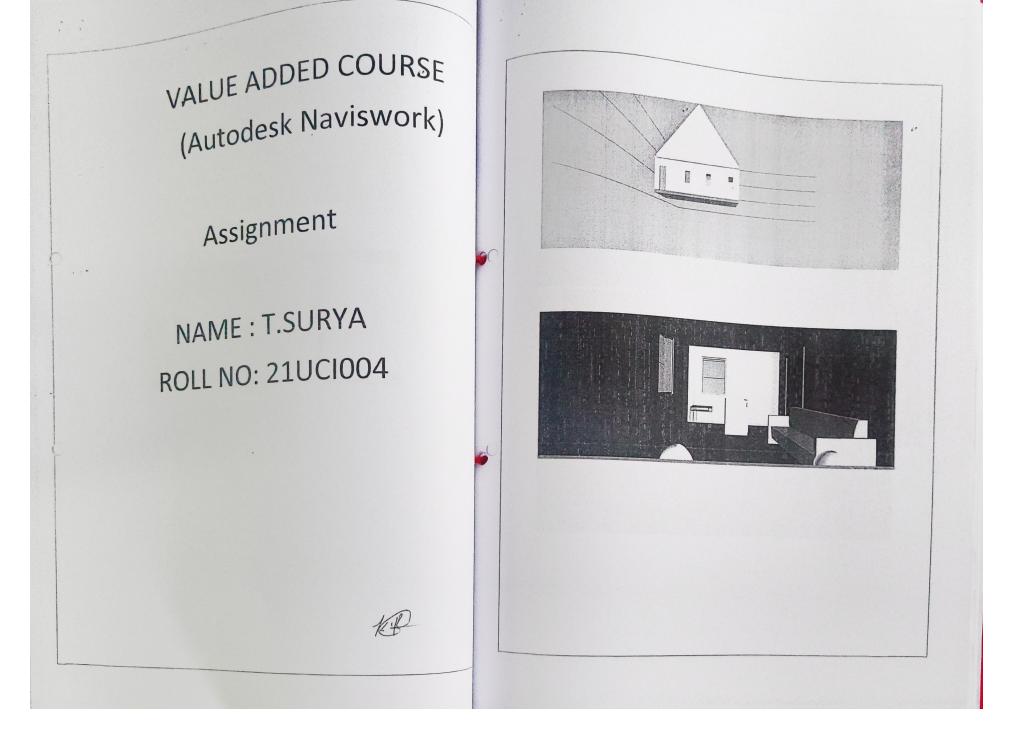
21 vciao 2 NAVISWORKS MANAGE EXAMINATION QUESTIONS 8. Which Navisworks feature allows you to extract data from the 3D model for quantity takeoffs? byPresenter c) Clash Detective 30 X 1 = 30 Marks d) Quantification PART - A: 9. What is the purpose of the Navisworks "Selection Tree"? a) Shows a list of all available 3D views 1. What is the primary purpose of Navisworks Manage? by Displays a hierarchical structure of model elements c) Provides a timeline for project scheduling a) 3D modeling b Clash detection and coordination d) Generates clash reports c) Project scheduling 10. Which Navisworks feature allows users to animate objects and create walkthroughs? d) Cost estimation 2. Which file formats can be imported into Navisworks? b) Presenter c) TimeLiner a) DWG, PDF, XLS d) Clash Detective M RVT, IFC, NWC c) PNG, JPEG, TIFF 11. What is the primary function of Navisworks Clash Detective? d) DOCX, PPTX, MDB 3. Which Navisworks feature allows users to simulate construction sequencing? b) Clash detection and coordination a) TimeLiner c) Quantity takeoff b) Clash Detective d) Project scheduling c) Quantification 12. In Navisworks, what is a "clash"? d Presenter a) A disagreement between project stakeholders 4. What is the purpose of Navisworks Clash Detective? b) A software error in the program a) Simulate construction scheduling of An interference between two or more 3D model elements b) Manage project costs d) A collision on the construction site exidentify and resolve clashes in a 3D model d) Generate detailed reports 13. What does the "Quantification" tool in Navisworks allow you to do? a) Perform calculations on the project timeline 5. Which tool in Navisworks allows users to create custom viewpoints and presentations? b) Estimate the total project cost a) Animator extract data and measurements from the 3D model b) TimeLiner d) Create 2D drawings and elevations of Presenter d) Quantification 14. Which Navisworks feature is used for creating construction schedules based on the 3D model? a TimeLiner 6. What is the file extension for a Navisworks cache file? b) Animator a) .NWD c) Presenter W.NWC d) Clash Detective c) .RVT d) .IFC 15. How does Navisworks handle clashes in a 3D model? 7. In Navisworks, what does the "Redline" tool do? a) Automatically resolves the clashes by Highlights the clashes for manual review a) Adjusts the color balance of the 3D model Provides markup and annotation capabilities c) Ignores the clashes and proceeds with the model c) Enables real-time rendering d) Deletes the elements causing the clashes d) Creates custom view filters

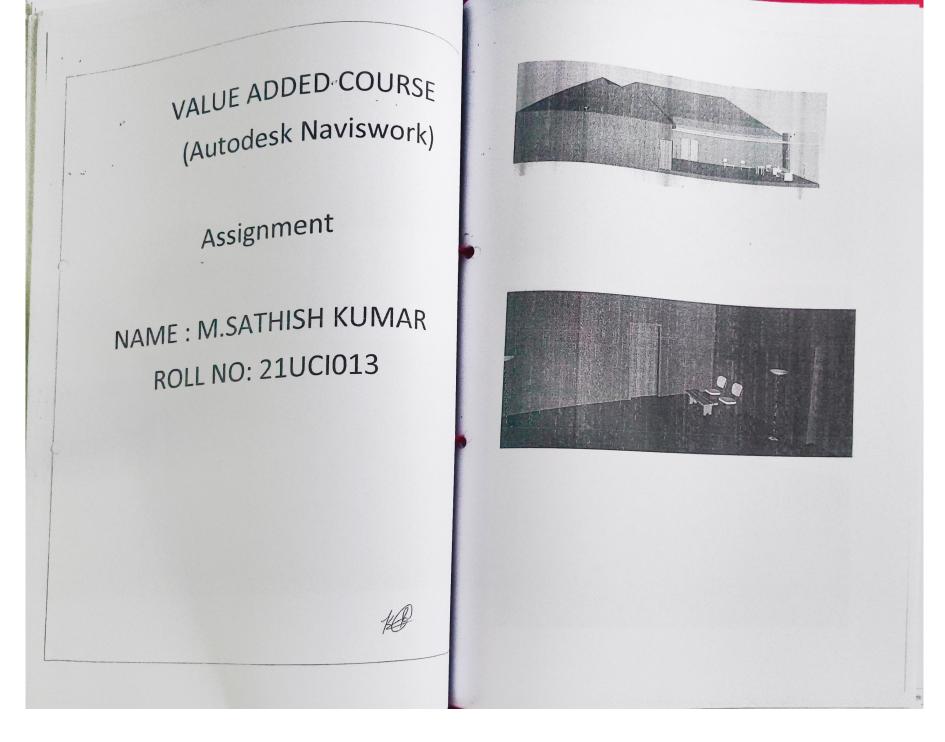
NAVISWORKS MANAGE EXAMINATION QUESTIONS 8. Which Navisworks feature allows you to extract data from the 3D model for quantity takeoffs? b) Presenter 30 X 1 = 30 Marks c) Clash Detective d Quantification PART - A: 9. What is the purpose of the Navisworks "Selection Tree"? a) Shows a list of all available 3D views 1. What is the primary purpose of Navisworks Manage? b) Displays a hierarchical structure of model elements c) Provides a timeline for project scheduling a) 3D modeling Clash detection and coordination d) Generates clash reports c) Project scheduling d) Cost estimation 10. Which Navisworks feature allows users to animate objects and create walkthroughs? Animator 2. Which file formats can be imported into Navisworks? b) Presenter a) DWG, PDF, XLS c) TimeLiner BURVT, IFC, NWC d) Clash Detective c) PNG, JPEG, TIFF d) DOCX, PPTX, MDB 11. What is the primary function of Navisworks Clash Detective? 3. Which Navisworks feature allows users to simulate construction sequencing? a) 3D modeling b) Clash detection and coordination a) TimeLiner c) Quantity takeoff b) Clash Detective d) Project scheduling c) Quantification #Presenter 12. In Navisworks, what is a "clash"? a) A disagreement between project stakeholders 4. What is the purpose of Navisworks Clash Detective? b) A software error in the program a) Simulate construction scheduling An interference between two or more 3D model elements b) Manage project costs d) A collision on the construction site c) Identify and resolve clashes in a 3D model di Generate detailed reports 13. What does the "Quantification" tool in Navisworks allow you to do? a) Perform calculations on the project timeline 5. Which tool in Navisworks allows users to create custom viewpoints and presentations? b) Estimate the total project cost b) TimeLiner Extract data and measurements from the 3D model Presenter d) Create 2D drawings and elevations d) Quantification 14. Which Navisworks feature is used for creating construction schedules based on the 3D model? 6. What is the file extension for a Navisworks cache file? a) RimeLiner a) .NWD b) Animator bh.NWC c) Presenter c) .RVT d) Clash Detective d) .IFC 15. How does Navisworks handle clashes in a 3D model? 7. In Navisworks, what does the "Redline" tool do? a) Automatically resolves the clashes a) Adjusts the color balance of the 3D model Highlights the clashes for manual review by Provides markup and annotation capabilities c) Ignores the clashes and proceeds with the model c) Enables real-time rendering d) Deletes the elements causing the clashes d) Creates custom view filters

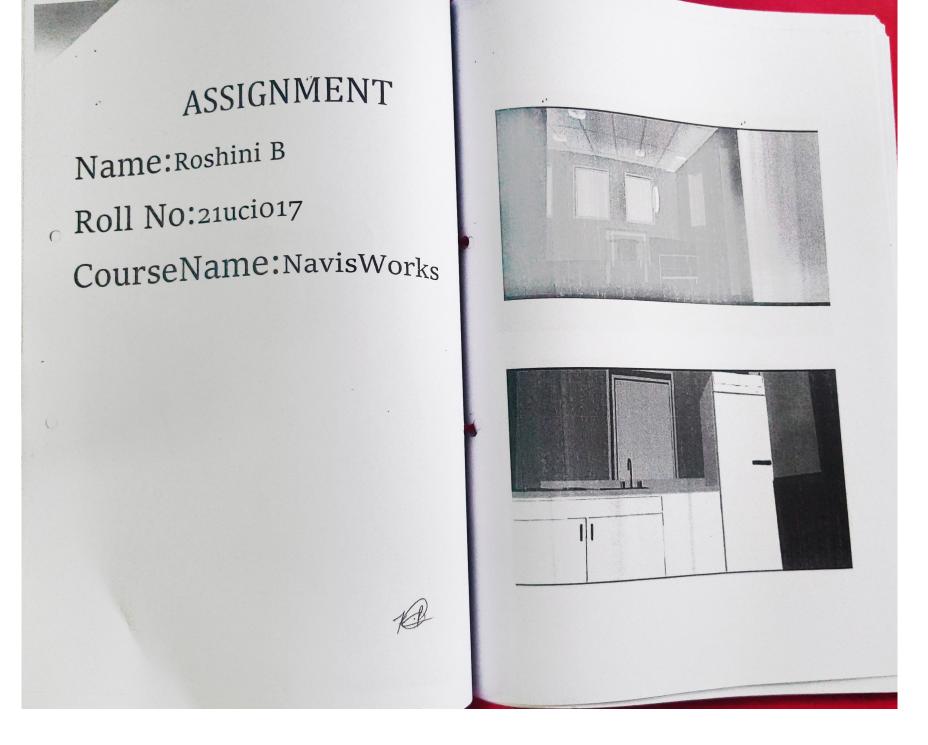




Scanned with ACE Scanner









Value Added Course on Navisworks

Score Sheet

-		No	Student Name	Total (100)
Sl.No	Roll No.	Reg. No.	SRI POOPANRAJA.A	88
	77701001	920421103012	DHARUN.V	93
1.	21UCI001	920421103004	UTHAMA RAJA.R	95
2.	21UC1002	920421103014	UTHAWA T	73
3.	21UCI003	920421103013	SURYA.T PRIYADHARSHINI.N	85
4.	21UCI004 21UCI005	920421103007	VARSHIDHA.U	93
5.	21UCI003	920421103015	SENTHILKUMAR.D	90
6.	21UCI007	920421103011	AMUTHAVALLI.S	81
7.	21UCI008	920421103002	ANTONY NITHAS.A	89
9.	21UCI009	920421103003	ALAGUSIVARAMAKRISHNAN.S	70
10.	21UCI010	920421103001	SANJAY.R	85
11.	21UCI011	920421103009	NIRANJANA.A.G	89
12.	21UCl012	920421103006	SATHISH KUMAR.M	84
13.	21UCI013	920421103010	VISHVA.C	78
14.	21UCI014	920421103016	GUGAN.M	91
15.	21UCI016	920421103005	ROSHINI.B	83
16.	21UCI017	920421103008	POORNIMA. V	77
17.	21UCIV018	920421103302	SUDHAGAR PANDI.P	82
18.	21UCIV019	920421103304	SHRI VISHWAMBARAN.N	78
19.	21UCIV020	920421103303	MOHAMED KAIFA	84
20.	21UCIV021	920421103301	MOHAWED RAIL'A	04

N- JOHN HODICIVIL

DEAN-ACADEMIC VA

Department of Civil Engineering

Value Added Course on Navisworks

Score Sheet

1.	. Roll No. 21UCI001	Student Name	Assignment Marks	Assessment Marks	Total Marks
2.	21UCI002	SRI POOPANRAJA.A	(40)	(60)	(100)
3.	21UCI003	DHARUN.V		48	88
4.	21UCI004	UTHAMA RAJA.R	39	54	93
		SURYA.T	40	55	95
5.	21UCI005	PRIYADHARSHINI.N	38	35	73
6.	21UCI006	VARSHIDHA.U	39	46	85
7.	21UCI007	SENTHILKUMAR.D	40	53	93
8.	21UCI008	AMUTHAVALLI.S	39	51	90
9.	21UC1009	ANTONY NITHAS.A	38	43	81
10.	21UCI010	ALAGUSTA A	39	50	89
		ALAGUSIVARAMAKRIS HNAN,S	36	34	70
11.	21UCI011	SANJAY.R			70
12.	21UCI012	NIRANJANA.A.G	36	49	85
13.	21UCI013	SATHISH KUMAR.M	38	51	89
14.	21UCI014	VISHVA.C	38	46	84
15.	21UCI016	GUGAN.M	39	39	78
16.	21UCI017	ROSHINI.B	38	53	91
17.	21UCIV018	POORNIMA. V	38	45	83
18.	21UCIV019		38	39	77
	21UCIV020	SUDHAGAR PANDI.P SHRI	39	43	82
19.		VISHWAMBARANN	39	39	78
20.	21UCIV021	MOHAMED KAIFA	38	46	84

Value Added Course In-charge

1 Page

Signature of the Training Organization

HODCIVIL

DEAN-ACADEMIC

1|Page



## Department of Civil Engineering

Value Added Course on Navisworks

Test Report

SI. No.	Roll No.	Student Name	Part A 30 Marks	Part B 30 Marks	Total Marks (60)
31. 140.		SRI POOPANRAJA.A	28	20	48
1.	21UCI001	DHARUN.V	26	28	54
2.	21UCI002	UTHAMA RAJA.R	26418	28	54+1
3.	21UCI003		21	14	35
4.	21UCI004	SURYA.T	24	22	46
5.	21UC1005	PRIYADHARSHINI.N	27	26	
6.	21UCI006	VARSHIDHA.U			53
7.	21UCI007	SENTHILKUMAR.D	25	26	51
8.	21UCI008	AMUTHAVALLI.S	21	22	43
9.	21UCI009	ANTONY NITHAS.A	26	24	50
10.	21UCI010	ALAGUSIVARAMAKRIS HNAN.S	18	16	34
1	21UCI011	SANJAY.R	23	26	49
12.	21UCl012	NIRANJANA.A.G	25	26	51
13.	21UCI013	SATHISH KUMAR.M	22	24	46
14.	21UCI014	VISHVA.C	25	14	39
15.	21UCI016	GUGAN.M	27	26	53
16.	21UCI017	ROSHINI.B	25	20	The state of the s
17. 2	UCIV018	POORNIMA. V	21	18	45
18. 2	IUCIV019	SUDHAGAR PANDI.P	23	20	39
19. 2		SHRI VISHWAMBARAN.N	21	18	<i>4</i> 3
0. 2	1UCIV021	MOHAMED KAIFA	22		46

Value Added Course In-charge

Training Organization



Value Added Course on NavisWorks

Assignment Score Sheet

SI. No.	Roll No.	Students	
1.	21UCI001	SRI POODANTS	Assignment Marks
2.	21UCI002	SRI POOPANRAJA.A DHARUN.V	40
3.	21UCI003	UTHAMA RAJA.R	39
4.	21UCI004	SURYA.T	40
5.	21UCI005	PRIYADHARSHINI.N	38
6.	21UCI006	VARSHIDHA.U	39
7.	21UCI007	SENTHILKUMAR.D	40
8.	21UCI008	AMUTHAVALLI.S	39
9.	21UCI009	ANTONY NITHAS.A	38
	21UCI010	ALAGUSIVARAMAKRISHN AN.S	39
	21UCI011	SANJAY.R	36
	21UCI012	NIRANJANA.A.G	38
	21UCI013	SATHISH KUMAR.M	38
14.	21UCI014	VISHVA.C	39
15.	21UCI016	GUGAN.M	38
16.	21UCI017	ROSHINI.B	38
17.	21UCIV018	POORNIMA. V	38
18.	21UCIV019	SUDHAGAR PANDI.P	39
19.	21UCIV020	SHRI VISHWAMBARAN.N	39
20.	21UCIV021	MOHAMED KAIFA	38

Value Added Course In-charge

HOD CIVIL

