



RAAK

COLLEGE OF ENGINEERING AND TECHNOLOGY

[Approved by AICTE, New Delhi & Affiliated to Pondicherry University]
An ISO 9001:2015 Certified Institution

VALUE ADDED COURSES

2022-2023

Department of Mechanical Engineering

22ME01-Integrated Modeling and Analysis using Creo

MARK SHEET

Sl. No	Register Number	Student Name	MARKS
1	19TB1201	ABDUL AJEES.M	96
2	19TB1202	ARUNESHWAR. J	92
3	19TB1203	DEVA. R	88
4	19TB1205	MOHANDOSS. A	92
5	19TB1206	NANTHAKUMAR. S	88
6	19TB1207	NARAYANA MOORTHIS	84
7	19TB1208	PONNAMBALAM. E	96
8	19TB1209	PRADEEPRAJ.R	92
9	19TB1211	SILAMBU KALIDASAN. M	88
10	19TB1212	VASANTHARAJ. R	88
11	19TBL055	GOUTHAM.N	96



HOD

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.
PRINCIPAL
RAAK College of Engineering & Technology
No.1, Muthupillai Palayam Road,
Sulthanpet Post,
Puducherry - 605 110

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VALUE ADDED COURSES

2022-2023

Department of Mechanical Engineering

22ME01-Integrated Modeling and Analysis using Creo

NAME:

CLASS:

DATE:

1. When was Pro/ENGINEER released?

- A. 1987
- B. 1978-06-07
- C. 2004-10-18
- D. 1994-02-25

Answer: A

2. What license is Pro/ENGINEER distributed under?

- A. Proprietary
- B. triple-license MPL, GPL and LGPL
- C. Various
- D. Apache License v2.0

Answer: A

3. Which of the following genres does Pro/ENGINEER produce?

- A. CAD software
- B. Simulation software
- C. 3D Modeling Software for Urban Environments
- D. Benchmark software

Answer: A

4. Which of the following platforms does Pro/ENGINEER run on?

- A. Ubuntu (operating system)
- B. Unix




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- C. Windows 7
- D. Windows XP

Answer: B

5. Which is the file extension for Pro/E sketch file
- A. dwg
 - B. Stl
 - C. sec
 - D. dxf

Answer: C

6. "Feature in Pro/E refers to
- A. Line
 - B. Circle
 - C. Geometric
 - D. Entity

Answer: C

7. Minimum number of surfaces when adding a shell feature
- A. 5
 - B. 3
 - C. 1
 - D. 2

Answer: B


8. Which one of the following is used to find parent/child relationships
- A. Reroute
 - B. Redefine
 - C. Reorder
 - D. Global ref. viewer

Answer: D

9. If you use Window, Close without saving your model, have you lost your work?
- A. True
 - B. False

Answer: B




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10. If you use File, Erase without saving your model, have you lost your work?

- A. True
- B. False

Answer: A

11. All Pro-E features have parents.

- A. True
- B. False

Answer: A

12. All Pro-E features have children.

- A. True
- B. False

Answer: B

13. Parent child relationships are bad.

- A. True
- B. False

Answer: B

14. Can parent child relationships be broken?

- A. True
- B. False

Answer: A

15. What is the minimum number of surfaces you must remove when adding a shell feature?

- A. 1
- B. 2
- C. 3
- D. 4

Answer: A

16. What is the minimum number of sections you must sketch when adding a blend feature?

- A. 1
- B. 2




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- C. 3
- D. 4

Answer: B

17. If a drawing view is added with the 'no scale' option, does it really have no scale?

- A. Yes
- B. No

Answer: B

18. Can a feature be reordered before any of its parents?

- A. Yes
- B. No

Answer: B

19. Can a feature with children be suppressed?

- A. Yes
- B. No

Answer: A

20. What does 'ceil 10.2' evaluate to?

- A. 10
- B. 11
- C. 10.5
- D. 10.25

Answer: B

21. What does 'floor 25.8' evaluate to?

- A. 26
- B. 24
- C. 25
- D. 25.5

Answer: C

22. Can you add motion to a part?

- A. Yes
- B. No

Answer: A




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23. Can a drawing reference more than one assembly?

- A. Yes
- B. No

Answer: A

24. Before revealing the Creo brand, PTC referred to its project to revolutionize the CAD industry as:

- A. Project Green
- B. Project Lightning
- C. Project Galaxy

Answer: B

25. Creo means many things in many different languages, which of the following is one of the meanings:

- A. To create
- B. To believe
- C. PTC's suite of design software
- D. All of the above

Answer: D




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VALUE ADDED COURSES

2022-2023

Department of Mechanical Engineering

22ME01-Integrated Modeling and Analysis using Creo

NAME: GOUTHAM.N

CLASS: IV/MECH

DATE: 20/08/2022

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24
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96%



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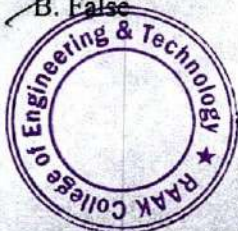
- A. True
- B. False

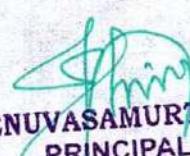
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B. False

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21. What does 'floor 25.8' evaluate to?

- A. 26
- B. 24
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- D. 25.5

22. Can you add motion to a part?

- A. Yes
- B. No

23. Can a drawing reference more than one assembly?

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Certificate of Completion

2022-2023

This is to certify that Mr/Ms G. V. THAMIN

Year..... Department..... M.E.C.H...... has successfully Completed the Value added course.

COURSE TITLE: INTEGRATED MODELING AND ANALYSIS USING

SCORE: 96

COURSE DURATION: 9.1.8.22 to 14.1.8.22

G. S. Seenuvasamurthi

HOD

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VALUE ADDED COURSES

2022-2023

Department of Mechanical Engineering

22ME02-Pollution and control

MARK SHEET

Sl. No	Register Number	Student Name	MARKS
1	20TB0301	ABINESH.A	96
2	20TB0302	AMARESH.V	96
3	20TB0303	HARISUDHAN.D	88
4	20TB0304	KAPILDEV.S	92
5	20TB0305	RAJENDIRAN.P	92
6	20TB0306	SURESH KUMAR.R	88
7	20TBL175	HARIHARAN V	84
8	20TBL176	JEROSIN.D	96
9	20TBL177	KISHORE.K	96
10	20TBL178	MADHAVAN.G.K	88
11	20TBL180	PRAVIN.I	84
12	20TBL181	RAGHUL RAJ.K	88
13	20TBL182	RITHEESH KUMAR.R	92
14	20TBL183	THAMIZH ELAKIYAN.S	92



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VALUE ADDED COURSES

2022-2023

Department of Mechanical Engineering

22ME02-Pollution and control

NAME:

CLASS:

DATE:

1. Which gas is mainly produced due to incomplete burning of wood?

- a) CO b) SO₂ c) NO₂ d) NO₃

Answer: a.

2. Which of the following is involved in production of carboxy haemoglobin?

- a) CO b) SO₂ c) NO₂ d) NO₃

Answer: a

3. Which of the following is a liquid form of aerosol?

- a) Fume b) Dust c) Mist d) Smoke

Answer: c.

4. X ray films are a source of which of the following gas?

- a) SO₂ b) CO₂ c) NO₂ d) SO₃

Answer: c

5. The maximum size of fly ash is _____

- a) 1µm b) 100µm c) 1000µm d) 10µm

Answer: c



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6. Which of the following leads to a disease called broncho spasm?

- a) SO_2 b) SO_3 c) SO_4 d) CO_2

Answer: b

7. The minimum size of the smoke particle is _____

- a) $0.2\mu\text{m}$ b) $1\mu\text{m}$ c) $0.8\mu\text{m}$ d) $0.5\mu\text{m}$

Answer: d

8. Which of the following is a secondary air pollutant?

- a) SPM b) PAN c) SO_2 d) NO_2

Answer: b

9. The permissible concentration of PM 10 in the air is _____

- a) $60\mu\text{g}/\text{m}^3$ b) $40\mu\text{g}/\text{m}^3$ c) $50\mu\text{g}/\text{m}^3$ d) $20\mu\text{g}/\text{m}^3$

Answer: a

10. Which of the following is not a part of photochemical smog?

- a) NO_2 b) O_3 c) PAN d) SPM

Answer: d

11. Which air pollutant cause corrosion of building?

- a) SO_2 b) SO_3 c) CO d) NO_2

Answer: a

12. Which of the following air pollutant effects plants the most?

- a) Fluorine b) SO_2 c) PAN d) HCl

Answer: a



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13. The size of cigarette particles is _____

- a) $1\mu\text{m}$ b) $10\mu\text{m}$ c) $10\mu\text{m}$

Answer: c

14. Concentration of fluorine that cause a photo toxicological effect on the plant is _____

- a) $0.1\mu\text{g}/\text{m}^3$ b) $0.3\mu\text{g}/\text{m}^3$ c) $0.5\mu\text{g}/\text{m}^3$ d) $1\mu\text{g}/\text{m}^3$

Answer: b

15. Which of the following gas is not colorless?

- a) NO b) O_3 c) Pb d) SO_3

Answer: a

16. What is the minimum height of the chimney in a thermal power plant of capacity 350MW?

- a) 100m b) 220m c) 380m d) 60m

Answer: b

17. Coning plume occurs under which conditions?

- a) Super adiabatic b) Sub adiabatic c) Neutral d) Inversion

Answer: b

18. In which of the following plumes, stable condition prevails?

- a) Lofting b) Fanning c) Neutral d) Fumigating

Answer: b

19. Which of the following plume is worst for the dispersion of pollutants?

- a) Trapping b) Fanning c) Neutral d) Fumigating

Answer: d



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20. In which of the following plumes, unstable condition prevails?

- a) Trapping b) Fanning c) Looping d) Neutral

Answer: c

21. Which of the following are contradictory plume?

- a) Lofting and fumigating b) Looping and coning c) Neutral and lofting d) Fumigating and trapping

22. The maximum efficiency of the electrostatic precipitator is _____

- a) 95% b) 80% c) 99% d) 100%

Answer: c

23. The minimum particle size removed by the gravitational chamber is _____

- a) $>50\mu\text{m}$ b) $>10\mu\text{m}$ c) $>25\mu\text{m}$ d) $>0.5\mu\text{m}$

Answer: a

24. Which of the following is used in ceramic industries?

- a) Electrostatic precipitator b) Dynamic precipitator c) Spray tower d) Wet cyclonic scrubber

Answer: b

25. Wet scrubbers are classified into _____ types.

- a) 2 b) 3 c) 5 d) 6

Answer: b




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2022-2023

Department of Mechanical Engineering

22ME02-Pollution and control

NAME: ABINVESTH.A

CLASS: III / MECH

DATE: 20/08/2022

1. Which gas is mainly produced due to incomplete burning of wood?

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$\frac{24}{25}$

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2. Which of the following is involved in production of carboxy haemoglobin?

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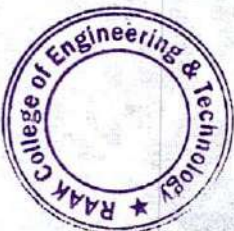
a) Fume b) Dust ~~c) Mist~~ d) Smoke

4. X ray films are a source of which of the following gas?

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5. The maximum size of fly ash is _____

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Certificate of Completion

2022-2023

This is to certify that Mr/Ms

JEROSIN . D

Year..... Department..... ^{Mech} has successfully Completed the Value added course.

COURSE TITLE: Pollution & control

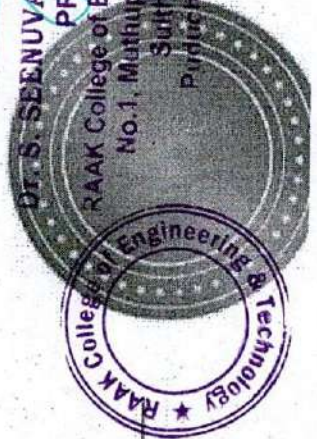
COURSE DURATION: (9-9-22 to 13-8-22)

SCORE: 96

Shoshni

HOD

Dr. S. Seenuvasamurthi
DR. S. SEENUVASAMURTHI, M.E., Ph.D.
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VALUE ADDED COURSES

2022-2023

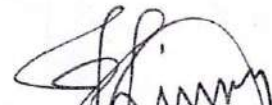
Department of Mechanical Engineering

ME2203 -3D Printing


MARK SHEET

Sl. No	Register Number	Student Name	MARKS
1	21TB0111	ARASUKUMAR S	92
2	21TB0113	DHIVAGAR G	88
3	21TB0114	HARIHARAN S	84
4	21TB0115	KARAN P	84
5	21TB0117	ROHIT BRUNO K	96
6	21TBL071	LOKESWARAN. R	84


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Department of Mechanical Engineering

22ME03-3D PRINTING

NAME:

CLASS:

DATE:

1. What is 3D printing?

- a) Creating two-dimensional designs
- b) Adding layers to create three-dimensional objects
- c) Printing text documents on paper
- d) printing holographic images

Answer: b) Adding layers to create three-dimensional objects

2. Which technology is commonly used in 3D printing?

- a) Laser cutting
- b) Injection molding
- c) Additive manufacturing
- d) CNC machining

Answer: c) Additive manufacturing




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3. What is the main advantage of 3D printing over traditional manufacturing methods?

- a) Lower cost
- b) Faster production speed
- c) Ability to create complex geometries
- d) More durable materials

Answer: c) Ability to create complex geometries

4. Which software is commonly used to create digital models for 3D printing?

- a) AutoCAD
- b) Photoshop
- c) Solid Works
- d) Microsoft Excel

Answer: c) Solid Works

5. Which material is commonly used in consumer-grade 3D printers?


- a) Metal
- b) Glass
- c) Plastic
- d) Rubber

Answer: c) Plastic

6. What is the term for the digital file that contains the instructions for a 3D printer?

- a) Blueprint
- b) Template
- c) Code
- d) G-code




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Answer: d) G-code

7. Which industry has been greatly influenced by 3D printing technology?

- a) Automotive
- b) Banking
- c) Agriculture
- d) Hospitality

Answer: a) Automotive

8. What is the process called when a 3D printer creates an object layer by layer?

- a) Sintering
- b) Extrusion
- c) Curing
- d) Fusing

Answer: b) Extrusion

9. Which additive manufacturing method uses a laser to solidify powdered materials?


- a) Fused deposition modeling (FDM)
- b) Stereo lithography (SLA)
- c) Selective laser sintering (SLS)
- d) Digital light processing (DLP)

Answer: c) Selective laser sintering (SLS)

10. What is the term for the supportive structure that holds up overhanging parts during the 3D printing process?

- a) Scaffold




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- b) Support material
- c) Filament
- d) Infill

Answer: b) Support material

11. Which industry has been utilizing 3D printing to create custom prosthetic limbs?

- a) Healthcare
- b) Retail
- c) Construction
- d) Energy

Answer: a) Healthcare

12. Which material is commonly used in industrial-grade 3D printers for metal printing?

- a) PLA
- b) ABS
- c) Titanium
- d) Nylon


Answer: c) Titanium

13. What is the term for the process of smoothing the surface of a 3D-printed object?

- a) Finishing
- b) Polishing
- c) Sanding
- d) Post-processing

Answer: d) Post-processing




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14. Which 3D printing method is most suitable for creating highly detailed objects with smooth surfaces?

- a) Fused deposition modeling (FDM)
- b) Stereo lithography (SLA)
- c) Selective laser sintering (SLS)
- d) Digital light processing (DLP)

Answer: b) Stereo lithography (SLA)

15. What is the term for the resolution or layer thickness of a 3D-printed object?

- a) Fidelity
- b) Tolerance
- c) Resolution
- d) Accuracy

Answer: c) Resolution

16. Which industry has utilized 3D printing for rapid prototyping of new product designs?

- a) Fashion
- b) Entertainment
- c) Food and beverage
- d) Manufacturing

Answer: d) Manufacturing

17. Which factor determines the printing speed in 3D printing?

- a) Layer thickness
- b) Material viscosity




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- c) Print bed temperature
- d) Printer model and settings

Answer: d) Printer model and settings

18. What is the term for the process of combining multiple 3D-printed parts into a single assembly?

- a) Integration
- b) Assembly
- c) Fusion
- d) Merging

Answer: b) Assembly

19. Which industry has been exploring 3D-printed construction for building houses?


- a) Architecture
- b) Aerospace
- c) Retail
- d) Tourism

Answer: Architecture

20. What is the term for the failure that occurs when a 3D-printed object warps or deforms during the printing process?

- a) Delamination
- b) Warping
- c) Distortion
- d) Shrinkage




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Answer: b) Warping

21. Which 3D printing method uses a liquid resin cured by a light source to create solid objects?

- a) Fused deposition modeling (FDM)
- b) Stereo lithography (SLA)
- c) Selective laser sintering (SLS)
- d) Digital light processing (DLP)

Answer: b) Stereolithography (SLA)

22. Which industry has utilized 3D printing to create intricate jewelry designs?

- a) Agriculture
- b) Mining
- c) Retail
- d) Education

Answer: c) Retail

23. What is the term for the process of removing support material from a 3D-printed object?

- a) Dissolving
- b) Sanding
- c) Trimming
- d) Cleaning

Answer: c) Trimming

24. Which material is commonly used in 3D printing for dental applications?

- a) Gold




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- b) Silver
- c) Ceramic
- d) Resin


Answer: c) Ceramic

25. Which 3D printing method uses a powder bed and a high-power laser to selectively melt and fuse powdered materials?

- a) Fused deposition modeling (FDM)
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- d) Digital light processing (DLP)

Answer: c) Selective laser sintering (SLS)




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VALUE ADDED COURSES

2022-2023

Department of Mechanical Engineering


22ME03-3D PRINTING

NAME: ROHIT BRUNO. K
CLASS: II / MECH
DATE: 20/08/2022

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29
25
96%




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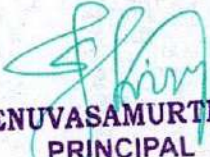



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Certificate of Completion

2022-2023

This is to certify that Mr/Ms **KARAN..P.**

Year..... Department..... **M.E.C.H.**..... has successfully Completed the Value added course.

COURSE TITLE: **3D..PRINTING.**

SCORE: **84.**

COURSE DURATION: **9.1.8.1.22 to 13.18.122.**

[Handwritten Signature]

HOD

[Handwritten Signature]
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