



# Government Degree College

Affiliated to Andhra University

(Upgraded to Model Degree College under RUSA 2.0)

**Paderu, Alluri Sitharama Raju - District, AP.**

**Est:1985** NAAC "C" Grade **phone no: 08935 250013** **Email.ID :Paderu.jkc@gmail.com.**

**Department of Chemistry**

**Certificate Course**

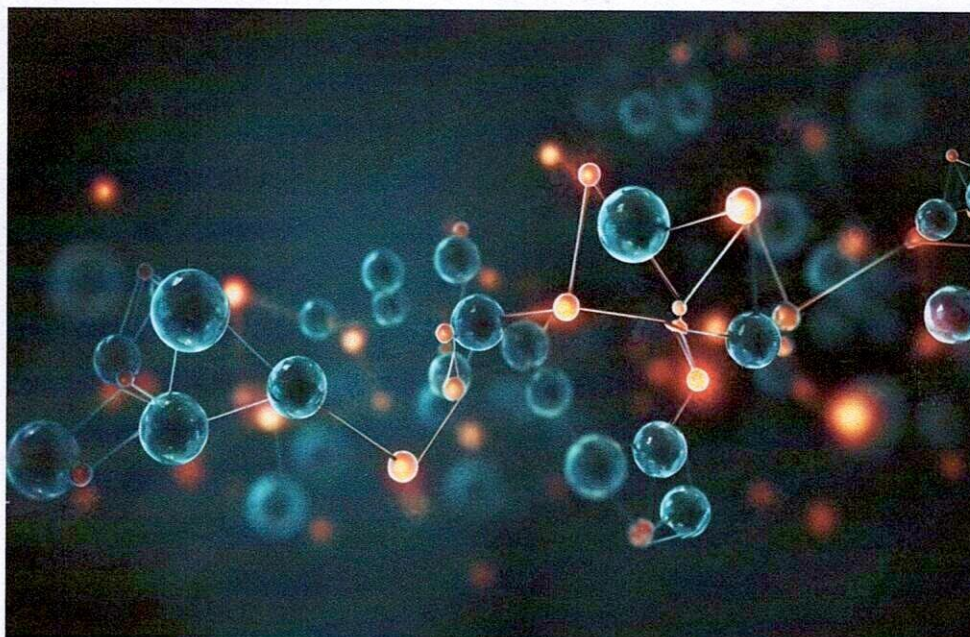
**Academic Year: 2022-23**

**DURATION: ONE MONTH**

**ONLY SCIENCE STUDENTS ARE ELIGIBLE**

**Name of the course: Chemistry of Nanoparticles**

**Course coordinator: P.VIJAYA LAKSHMI**







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Paderu, Alluri Sitharama Raju -District, AP.



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### Proposal for Certificate Course in Chemistry Of Nanoparticles

Academic year 2022-2023

Date: 22/11/2022

From  
The Course Coordinator,  
Dept. of Chemistry,  
Govt. Degree College  
Paderu.

To  
The Principal,  
Govt. Degree College  
Paderu.

Sub: Proposal for starting Certificate Course in 'Chemistry of Nanoparticles' to B.Sc students of our college-Request regarding.

Sir,

Our department of Chemistry is planning to start a certificate course in 'Chemistry of Nanoparticles' to the students of B.Sc groups choosing 76 among them. This course can Enhance the knowledge on Nano Technology which is the understanding and control of materials on the atomic, or even subatomic scale and also various applications of Nanoparticles.

In this regard we humbly request your esteemed self to conduct staff council meeting for discussing the syllabus and course outcomes.

Thanking you sir,

Name of the Certificate Course: **Chemistry of Nanoparticles**  
Course Coordinator : **P.Vijaya Lakshmi**

*P. Vijaya Lakshmi*  
Course Coordinator

*[Signature]*  
IQAC Coordinator



*[Signature]*  
Principal  
Principal  
Govt. Degree College  
PADERU 534 024  
Alluri Sitharama Raju-Dist.





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#### DEPARTMENT OF CHEMISTRY

### Detailed Objectives of 'Certificate Course in Chemistry Of Nanoparticles' for B.Sc,

**Title:** Chemistry Of Nanoparticles

**Eligibility:** all Under Graduate students of our college

**Duration:** 31 days, 1 hr/day

**Syllabus:** as given below

**System of Assessment:** internal

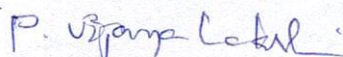
#### Introduction:

Certificate Course in Chemistry Of Nanoparticles: **What is it all about?**

Nanotechnology is a very important and fast-growing branch with multidisciplinary interface among all branches of science. Nanoparticles are now becoming important for the overall development of mankind. For example, to reduce the risk of global climate change and global warming in the first place, the only solution is to use green technology that works only using nanoparticles. The main feature of nanoscience is the control of matter on a nano scale. The physicochemical properties of the nanoparticles are entirely different from that of the bulk materials.

#### Objectives:

- To explain why the nanoparticles are of interest
- To indicate different types of nanoparticles
- To understand the influence of dimensionality of the object at nano scale on their properties
- To understand the size and shape controlled synthesis of nanoparticles
- To provide scientific understanding of applications of nanoparticles and nanotechnology in agriculture, health and environmental conservation
- Mention challenges associated with work in the area of nanoparticles
- Characterisation of nanoparticles

  
Course Coordinator

  
IQAC Coordinator



  
Principal  
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**DEPARTMENT OF CHEMISTRY**

Name of the Certificate course: Chemistry Of Nanoparticles

Course Coordinator: P. VIJAYA LAKSHMI

Total Hours: 35 Hrs

Academic Year: 2022-2023

**Course outcomes**

This program benefits participants in the following ways:

At the end of the course, student will learn the ability to:

- 1 Explain the effects of quantum confinement on the electronic structure and corresponding physical and chemical properties of nanomaterials at nanoscale.
- 2 Choose appropriate synthesis technique to synthesize quantum nanostructures of desired size, shape and surface properties.
- 3 Correlate properties of nanostructures with their size, shape and surface characteristics.
- 4 Appreciate enhanced sensitivity of nanomaterial based sensors and their novel applications in industry.
- 5 Apply engineering and physics concepts to the nano-scale and nano-continuum domain.
- 6 Design processing conditions to engineer functional nanomaterials.
- 7 Perform a critical analysis of the research literature.

P. Vijaya Lakshmi

Course Coordinator

IBAC Coordinator

Principal

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## DEPARTMENT OF CHEMISTRY

Detailed Syllabus of 'Certificate Course in CHEMISTRY Of  
Nanoparticles' for B.Sc.,

### Syllabus

#### UnitI: Introduction to nanotechnology

- Introduction
- Classification based on origin and dimensions.
- Classification based on pore dimensions and potential toxicity
- Classification based on composition.

#### UnitII: Synthesis methods and properties of nanoparticles

- Top-down method-Mechanical milling, Nanolithography, Thermal decomposition, Arc discharge methods.
- Bottom-up method-Sol-gel method, Spinning, Pyrolysis, Biosynthesis Solvothermal and hydrothermal methods.
- Physical, Magnetic, Optical properties of nano materials.
- Electrical, Chemical and Mechanical properties of nano materials.

#### UnitIII: Characterisation and of nanoparticles

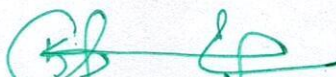
- Scanning Electron Microscopy(SEM)
- Transmission Electron Microscopy(TEM)
- Atomic Force Microscopy(AFM)
- Scanning and Tunneling Microscopy(STM)

#### UnitIV: Characterisation and applications of nanoparticles

- Powder X-ray Diffraction
- UV-Visible Spectroscopy
- IR-Spectroscopy
- Applications of Nanomaterials

P. Vijaya Lakshmi

Course Coordinator



IQAC Coordinator





Principal

Principal

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## DEPARTMENT OF CHEMISTRY

### CIRCULAR

Date: 25/11/2022

#### Sub: Certificate Program for the academic year 2022-2023

The Department of Chemistry is planned to conduct the certificate program for B.Sc students. The certificate course which is designed and offered by our department for the benefit of the students. Course will be conducted at free of cost and based on the performance of the participated students, the merit certificate will be issued after the successful completion of the course.

Students those who are willing to attend the certificate course can enrol their names to the course coordinator.

Name of the certificate Program: Chemistry Of Nanoparticles  
Course Coordinator :P.Vijaya Lakshmi

Commencement of the course from 01.12.2022 to 24.01.2023

Time: 9.00 am to 10.00 am

P. Vijaya Lakshmi

Course Coordinator

  
IQAC Coordinator



V. A.

Principal

Principal  
Govt. Degree College  
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## DEPARTMENT OF CHEMISTRY

### Minutes of the Meeting

The following are the minutes of the meeting held on 23.11.2022 for starting a certificate course in 'Chemistry Of Nanoparticles' for B.SC students for the academic year **2022-2023**.

The following minutes have been discussed and resolved unanimously.

1. It is proposed to start a certificate course in 'Chemistry Of Nanoparticles' for the student of B.Sc during the academic year 2022-2023.
2. It is proposed to endorse Smt. P.Vijaya Lakshmi, as course coordinator.
3. It is suggested to the coordinators to enrol maximum number of students for the certificate course.
4. It is also discussed to use Virtual classroom and other equipment to teach in an easy way.
5. It is also discussed how we can motivate the students towards the course.

### Members of the committee during minutes

- 1.
- 2.
- 3.
- 4.
- 5.
6. M. Anny
- 7.
- 8.

P. Vijaya Lakshmi  
Course Coordinator

IQAC Coordinator

Principal  
Govt. Degree College  
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**Government Degree College**  
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**DEPARTMENT OF CHEMISTRY**

NAME OF THE CERTIFICATE COURSE : NANOPARTICLES (2022-23)

**List of Students enrolled for the Course**

| Sl. No | Regd. No     | NAME OF THE CANDIDATE | GROUP         | SIGNATURE             |
|--------|--------------|-----------------------|---------------|-----------------------|
| 1      | 722125405004 | B. MAHESH PRAKASH     | I MPC         | B. MAHESH PRAKASH     |
| 2      | 722125405008 | G. PRASAD             | I MPC         | G. PRASAD             |
| 3      | 722125405012 | K. GANAPATHI          | I MPC         | K. GANAPATHI          |
| 4      | 722125405016 | K. SANDHYA RANI       | I MPC         | K. Sandhya Rani       |
| 5      | 722125405020 | K. SRINU              | I MPC         | K. SRINU              |
| 6      | 722125405024 | M. VENU GOPAL         | I MPC         | M. Venu gopal         |
| 7      | 722125405028 | P. MURALI             | I MPC         | P. murali             |
| 8      | 722125405036 | S. RADHA KRISHNA      | I MPC         | S. Radha krishna      |
| 9      | 722125405040 | V. DHARMA RAJU        | I MPC         | V. Dharma Raju        |
| 10     | 722125405044 | V. RAVI               | I MPC         | V. Ravi               |
| 11     | 722125405048 | B. GOBVINDA SWAMY     | I MPCs        | B. GOBVINDA Swamy     |
| 12     | 722125405053 | G. GAYATRI            | I MPCs        | G. Gayatri            |
| 13     | 722125405057 | K. ESWARA RAO         | I MPCs        | K. Eswarao            |
| 14     | 722125405062 | K. VIJAY              | I MPCs        | K. Vijay              |
| 15     | 722125405066 | K. UDAY KIRAN         | I MPCs        | K. Uday Kiran         |
| 16     | 722125405070 | L. DURGA BAHAVANI SAI | I MPCs        | L. Durga bahavani sai |
| 17     | 722125405074 | M. KONDA BABU         | I MPCs        | M. Kondababu          |
| 18     | 722125405078 | P. RAJESWARI          | I MPCs        | P. Rajeswari          |
| 19     | 722125405082 | P. NAGA RANI          | I MPCs        | P. Naga Rani          |
| 20     | 722125405086 | S. PURNACHANDAR       | I MPCs        | S. purnachandar       |
| 21     | 722125405090 | T. RAMYA              | I MPCs        | T. Ramya              |
| 22     | 722125405191 | S. TALUPULA DORA      | I MP WEB TECH | S. Talupula dora      |



| Sl. No | Regd. No     | NAME OF THE CANDIDATE    | GROUP          | SIGNATURE          |
|--------|--------------|--------------------------|----------------|--------------------|
| 23     | 722125405094 | A. PADMA KUMARI          | I CBZ          | A. padma kumari    |
| 24     | 722125405098 | B. LAKSHMI               | I CBZ          | B. lakshmi         |
| 25     | 722125405102 | K. CHJANTI BABU          | I CBZ          | K. Chianti Babu    |
| 26     | 722125405106 | K. NOOTHANA JYOTHI       | I CBZ          | K. noothana jyothi |
| 27     | 722125405110 | L. SAMPATHI              | I CBZ          | L. Sampathi        |
| 28     | 722125405114 | M. CHINNA BABU           | I CBZ          | M. Chinna babu     |
| 29     | 722125405118 | N. VIJAYA KUMARI         | I CBZ          | N. vijaya kumari   |
| 30     | 722125405122 | R. NAGA LAKSHMI          | I CBZ          | R. naga lakshmi    |
| 31     | 722125405126 | S. SUMITHRA              | I CBZ          | S. Sumithra        |
| 31     | 722125405130 | T. TEJASWINI             | I CBZ          | T. Tejaswini       |
| 32     | 722125405134 | V. MATYARAJU             | I CBZ          | V. matyara ju      |
| 33     | 722125405138 | B. NAVYA                 | I BZH          | B. navya           |
| 34     | 722125405142 | D. SUSMITHA              | I BZH          | D. susmitha        |
| 35     | 722125405146 | G. UDAY BHASKAR          | I BZH          | G. Uday Bhaskar    |
| 36     | 722125405150 | J. SRISAI                | I BZH          | J. Srisai          |
| 37     | 722125405154 | K. SATYA VENI            | I BZH          | K. SATYA veni      |
| 38     | 722125405158 | K. RUPAVATHI             | I BZH          | K. Rupavathi       |
| 39     | 722125405162 | K. POORNIMA              | I BZH          | K. poornima        |
| 40     | 722125405166 | M. YONATHAN              | I BZH          | M. poornima        |
| 41     | 722125405170 | P. NAGA RAJU             | I BZH          | P. Naga Raju       |
| 42     | 722125405174 | R. BABU RAO              | I BZH          | R. Babu Rao        |
| 43     | 722125405178 | S. GOWTHAM               | I BZH          | S. Gowtham         |
| 44     | 722125405182 | V. VENKATESH             | I BZH          | V. Venkatesh       |
| 45     | 722125405186 | V. RAVI TEJA             | I BZH          | V. Ravi Teja       |
| 46     | 722125405197 | B. MUNNA CHINNAYYA AKHIL | I CB SEED TECH | B.M.C. AKHIL       |
| 47     | 722125405201 | K. VISHNU                | I CB SEED TECH | K. Vishnu          |
| 48     | 722125405205 | S. VENKATA PRASAD        | I CB SEED TECH | S. venkata Prasad  |
| 49     | 722125405209 | U. PARTHEEP              | I CB SEED TECH | U. Pratheep        |
| 50     | 122125301028 | M. CHINNA RAO            | I HEP          | M. Chinna Rao      |



| Sl. No | Regd. No     | NAME OF THE CANDIDATE       | GROUP        | SIGNATURE              |
|--------|--------------|-----------------------------|--------------|------------------------|
| 51     | 122125301032 | P. KAMESH                   | I HEP        | P. Kamesh              |
| 52     | 122125301036 | P. SURI BABU                | I HEP        | P. SURI BABU           |
| 53     | 122125301040 | S. SUMITRA                  | I HEP        | S. Sumitra             |
| 54     | 122125301044 | T. ANDHRAIYYA               | I HEP        | T. ANDHRAIYYA          |
| 55     | 122125301048 | V. RAM NAIDU                | I HEP        | V. Ram naidu           |
| 56     | 122125301052 | V. MAHESH                   | I HEP        | V. Mahesh              |
| 57     | 122125301056 | V. DEVASAGAR                | I HEP        | V. Deva sagar          |
| 58     | 122125301088 | P. DAVEEDU                  | I SPL. ENG.  | P. daveedu             |
| 59     | 122125301092 | P. NAVEEN                   | I SPL. ENG.  | P. Naveen              |
| 60     | 122125301096 | S. RAMAKRISHNA              | I SPL. ENG.  | S. Ramakrishna         |
| 61     | 122125301100 | V. ANITHA                   | I SPL. ENG.  | V. Anitha              |
| 62     | 122125301104 | V. SURESH                   | I SPL. ENG.  | V. Suresh              |
| 63     | 122125301136 | P. BUJJI BABU               | I SPL. TEL.  | P. Bujji Babu          |
| 64     | 122125301140 | P. SAI DINESH KLARTHIK      | I SPL. TEL.  | P. Saidu nesh klarthik |
| 65     | 122125301144 | S. KAMA RAJU                | I SPL. TEL.  | S. Kama Raju           |
| 66     | 122125301148 | U. SWATHI                   | I SPL. TEL.  | U. Swathi              |
| 67     | 122125301152 | V. VASUDEVA RAJU            | I SPL. TEL.  | V. VASUDEVA RAJU       |
| 68     | 122125301174 | S. UPENDRA                  | I MC & J     | S. Upendra             |
| 69     | 122125403021 | K. LAKSHMAN                 | I B.Com(GEN) | K. Lakshman            |
| 70     | 122125403025 | K. CHINNA VENKATA SAI GOPAL | I B.Com(GEN) | K. Chinna venkata sai  |
| 71     | 122125403030 | M. BHEEMUDU                 | I B.Com(GEN) | M. BHEEMUDU            |
| 72     | 122125403034 | P. RAMESH                   | I B.Com(GEN) | P. Ramesh              |
| 73     | 122125403038 | R. NANI BABU                | I B.Com(GEN) | R. Nani babu           |
| 74     | 122125403043 | S. PRASANTH KUMAR           | I B.Com(GEN) | S. Prasanth kumar      |
| 75     | 122125403047 | T. BHEEM RAJU               | I B.Com(GEN) | T. Bheem Raju          |
| 76     | 122125403051 | U. SRINIVAS                 | I B.Com(GEN) | U. Srinivas            |

V. Ch  
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**DEPARTMENT OF CHEMISTRY**

Name of the certificate course: Chemistry of Nanoparticles

| S. No | Topics to be covered                          | Hours | Delivery Date |
|-------|-----------------------------------------------|-------|---------------|
| 1     | Greeting and Introduction                     | 6     | I Week        |
| 2     | Introduction to Nanoparticles                 |       |               |
| 3     | Classification : Nanoparticles in nature      |       |               |
| 4     | Organic Nanoparticles                         |       |               |
| 5     | Inorganic Nanoparticles                       |       |               |
| 6     | Carbon Nanoparticles                          |       |               |
| 7     | Composite Nanoparticles                       | 6     | II Week       |
| 8     | Synthesis:Top-down method- Nanolithography    |       |               |
| 9     | Mechanical milling                            |       |               |
| 10    | Bottom-up method-Sol-gel method               |       |               |
| 11    | Biological method                             |       |               |
| 12    | Properties-Physical properties                |       |               |
| 13    | Magnetic properties                           | 6     | III Week      |
| 14    | Optical properties                            |       |               |
| 15    | Electrical properties                         |       |               |
| 16    | Chemical properties                           |       |               |
| 17    | Characterisation-Scanning Electron Microscopy |       |               |
| 18    | Transmission Electron Microscopy              |       |               |
| 19    | Atomic Force Microscopy                       | 6     | IV Week       |
| 20    | Scanning Tunneling Microscopy                 |       |               |
| 21    | Powder X-ray Diffraction                      |       |               |
| 22    | UV-Visible Spectroscopy                       |       |               |
| 23    | IR-Spectroscopy                               |       |               |
| 24    | Energy Dispersive X-ray Diffraction           |       |               |





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| S. No | Topics to be covered                                 | Hours | Delivery Date |
|-------|------------------------------------------------------|-------|---------------|
| 25    | Surface Plasmon Resonance                            | 6     | V Week        |
| 26    | Applications-Diagnostic and Therapeutic applications |       |               |
| 27    | Environmental applications                           |       |               |
| 28    | Electronic applications                              |       |               |
| 29    | Mechanical applications                              |       |               |
| 30    | Anti-Bacterial applications                          |       |               |
| 31    | Research in India                                    | 1     |               |

**Course Coordinator: P.Vijaya Lakshmi**

**Total Hours: 31 Hrs**

**Academic Year: 2022-2023**





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#### Refferences:

**Materials Chemistry** by Fahlman, Bradley D., Fahlman, Bradley D.  
Published 2007, an open source e-book

Nanomaterials by Dieter Vollath - Ebook - Everand  
everand.com

<https://www.everand.com> › book › Nanomaterials-An-In

[The Art of Nanomaterials - Book](#)

**Bentham Science**  
<https://benthamscience.com> › eboo

[Current Nanoscience | Bentham Science](#)

[Eurekaselect](#)

<https://www.eurekaselect.com> › journal › related-ebooks

Nanotechnology - Wikibooks, open books for an open world

[Wikipedia](#)

<https://en.wikipedia.org/wiki/b:Nanotechnology>





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## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: \_\_\_\_\_

Reg.No. \_\_\_\_\_

Group/year \_\_\_\_\_

Date: 31/01/23

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$  Max.marks: 25

1. Who is the Father of Nanotechnology?

a) Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) Both a and b

8. What are quantum dots?

a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) Both a and b



### **PART-B**

**II. Answer the following fill in blanks. ( 1x8=8)**

11. Based on structural configuration nanoparticles are classified into ----- types.
12. Based on dimension nanoparticles are classified into -----types.
13. Based on origin nanoparticles are classified into ----- types.
14. Ferritin is example for ----- nanopartle.
15. Example for inorganic nanoparticle is -----.
16. ----- is example for carbon nanoparticle.
17. Nano sheets are ----- type of nanoparticles.
18. Example for zero-Dimension nanoparticles is -----.

### **PART-C**

**III. Answer the one word questions. (1x7=7)**

19. Colloids and preparations are ----- nanoparticles.
20. Nano tubes and nano rods are ----- nanoparticles.
21. Bio persistent granular nanoparticles -----.
22. CMAR abbreviation is -----.
23. Common Sol-gel precursors are ----- and -----.
24. Sol-gel method comes under ----- method.
25. Nano Lithography comes under ----- method.





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## **DEPARTMENT OF CHEMISTRY**

### **Test Analysis Report**

**Name of the course: Chemistry Of Nanomaterials**

**Name of the Course Coordinator: P.Vijaya Lakshmi**

**Academic Year: 2022-2023**

The Department of Chemistry offered Certificate course to students of B.Sc. We provided a syllabus to the students and covered all of the syllabus. The overall course duration was 35 hrs and the attendance of the students was recorded.

I confirmed that all the students for this certificate course actively attended and performed well. We conducted an exam and the eligible students received certificates.

*P. Vijaya Lakshmi*

**Course coordinator**

*[Signature]*

**IQAC Coordinator**

*[Signature]*

**Principal**

**Principal**  
**Govt. Degree College**  
**PADERU 534 024**  
**Alluri Sitharama Raju Dist.**



**GOVERNMENT DEGREE COLLEGE PADERU, ALLURI SITARAMARAJU DISTRICT-531024.**

## STUDENT ATTENDANCE REGISTER ( 01/12/2022 TO 24/01/2023 )

| S.NO | Regd. No.    | Name of the student | 1 | 2 | 3 | 4    | 5    | 6    | 7    | 8    | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27    | 28    | 29    | 30    | 31  | Tota |
|------|--------------|---------------------|---|---|---|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|------|
| 1    | 722125405004 | B. MAHESH PRAKASH   | P | P | P | 5/12 | 6/12 | 7/12 | 8/12 | 9/12 | 10/12 | 11/12 | 12/12 | 13/12 | 14/12 | 15/12 | 16/12 | 17/12 | 18/12 | 19/12 | 20/12 | 21/12 | 22/12 | 23/12 | 24/12 | 25/12 | 26/12 | 27/12 | 28/12 | 29/12 | 30/12 | 31/12 | 241 |      |
| 2    | 722125405008 | G. PRASAD           | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 3    | 722125405012 | K. GANAPATHI        | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 4    | 722125405016 | K. SANDHYA RANI     | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 5    | 722125405020 | K. SRINU            | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 6    | 722125405024 | M. VENU GOPAL       | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 7    | 722125405028 | P. MURALI           | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 8    | 722125405036 | S. RADHA KRISHNA    | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 9    | 722125405040 | V. DHARMA RAJU      | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 10   | 722125405044 | V. RAVI             | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 11   | 722125405048 | B. GOBVINDA SWAMY   | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 12   | 722125405053 | G. GAYATRI          | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 13   | 722125405057 | K. ESWARA RAO       | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 14   | 722125405062 | K. VIJAY            | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 15   | 722125405066 | K. UDAY KIRAN       | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 16   | 722125405070 | L.D. B. SAI         | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 17   | 722125405074 | M. KONDA BABU       | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 18   | 722125405078 | P. RAJESWARI        | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |
| 19   | 722125405082 | P. NAGA RANI        | P | P | P | P    | P    | P    | P    | P    | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P     | P   | 241  |



[illegible]



| S.NO | Regd. No.    | Name of the student | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | Total |
|------|--------------|---------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 39   | 722125405162 | K. POORNIIMA        | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 40   | 722125405166 | M. YONATHAN         | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 41   | 722125405170 | P. NAGA RAJU        | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 42   | 722125405174 | R. BABU RAO         | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 43   | 722125405178 | S. GOWTHAM          | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 44   | 722125405182 | V. VENKATESH        | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 45   | 722125405186 | V. RAVI TEJA        | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 46   | 722125405197 | B. M. C. AKHIL      | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 47   | 722125405201 | K. VISHNU           | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 48   | 722125405205 | S. VENKATA PRASAD   | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 49   | 722125405209 | U. PARTHEEP         | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 50   | 122125301028 | M. CHINNA RAO       | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 51   | 122125301032 | P. KAMESH           | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 52   | 122125301036 | P. SURI BABU        | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 53   | 122125301040 | S. SUMITRA          | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 54   | 122125301044 | T. ANDHRAIYA        | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 55   | 122125301048 | V. RAM NAIDU        | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 56   | 122125301052 | V. MAHESH           | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 57   | 122125301056 | V. DEVASAGAR        | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 58   | 122125301088 | P. DAVEEDU          | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |



**STUDENT ATTENDANCE REGISTER (**

**TO**

| S.NO | Regd. No.    | Name of the student | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | Total |
|------|--------------|---------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 59   | 122125301092 | P. NAVEEN           | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 60   | 122125301096 | S. RAMAKRISHNA      | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 61   | 122125301100 | V. ANITHA           | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 62   | 122125301104 | V. SURESH           | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 63   | 122125301136 | P. BUJJI BABU       | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 64   | 122125301140 | P. S. D. KARTHIK    | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 65   | 122125301144 | S. KAMA RAJU        | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 66   | 122125301148 | U. SWATHI           | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 67   | 122125301152 | V. VASUDEVA RAJU    | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 68   | 122125301174 | S. UPENDRA          | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 69   | 122125403021 | K. LAKSHMAN         | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 70   | 122125403025 | K. C. V. S. GOPAL   | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 71   | 122125403030 | M. BHEEMUDU         | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 72   | 122125403034 | P. RAMESH           | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 73   | 122125403038 | R. NANI BABU        | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 74   | 122125403043 | S. PRASANTH KUMAR   | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 75   | 122125403047 | T. BHEEM RAJU       | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
| 76   | 122125403051 | U. SRINIVAS         | P | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  | P  |       |
|      |              |                     |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |       |

V. 





## GOVERNMENT DEGREE COLLEGE, PADERU

(Upgraded to Model Degree College under RUSA 2.0)

ALLURI SITARAMA RAJU DISTRICT, A.P-531024.

Affiliated to Andhra University.



### CERTIFICATE OF COMPLETION

This is to certify that B. MAHESH PRAKASH Regd.No 722125405004 of **GOVERNMENT DEGREE COLLEGE, PADERU** has completed his/her one month CERTIFICATE COURSE on "**CHEMISTRY OF NANOPARTICLES**" from **01/12/2022 to 24/01/2023**, organised by the **DEPARTMENT OF CHEMISTRY**.

The overall performance of an **INDIVIDUAL** during his /her **ENTIRE COURSE** is found to be Satisfactory. He/She obtained A<sup>+</sup> Grade.

P. Vijayar Lakshmi  
**COURSE COORDINATOR**

V. V. S. S.

**PRINCIPAL**  
Principal  
Govt. Degree College  
PADERU 534 024

Alluri Sitarama Raju Dist.





## GOVERNMENT DEGREE COLLEGE, PADERU

(Upgraded to Model Degree College under RUSA 2.0)  
ALLURI SITARAMA RAJU DISTRICT, A.P-531024.  
Affiliated to Andhra University.



### CERTIFICATE OF COMPLETION

This is to certify that N. VIJAYA KUMARI Regd.No 722125405118 of GOVERNMENT DEGREE COLLEGE, PADERU has completed his/her one month CERTIFICATE COURSE on "**CHEMISTRY OF NANOPARTICLES**" from **01/12/2022** to **24/01/2023**, organised by the **DEPARTMENT OF CHEMISTRY**.

The overall performance of an **INDIVIDUAL** during his /her **ENTIRE COURSE** is found to be Satisfactory. He /She obtained A+ Grade.

*P. Vijaya Lakshmi*  
**COURSE COORDINATOR**

*V. Lakshmi*

**PRINCIPAL**  
Principal  
Govt. Degree College  
PADERU 534 024  
Alluri Sitarama Raju Dist.



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 4 types.

12. Based on dimension nanoparticles are classified into 5 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. fullerin is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are zero nanoparticles.

21. Bio persistent granular nanoparticles 3D.

22. CMAR abbreviation is carcinogenic, mutagenic, Arthmagenic, reproductive Toxin

23. Common Sol-gel precursors are ----- and ----- }

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)  
Paderu, Visakhapatnam - District, AP.

Est: 1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jkr@gmail.com.



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**  
Academic year: 2022-2023.

Name of the student: A. Uma Maheshwari  
Reg.No. 720125405114  
Group/year : III<sup>rd</sup> B3H

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

- a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

- a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) Iron Oxide b) ☒ Silver c) Both a and b

7. Example for natural Nanoparticle is

- a) ☒ Milk b) Blood c) Both a and b

8. What are quantum dots?

- a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

- a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

- a) Titanium Oxide b) ☒ Zinc Oxide c) Both a and b

14  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 3 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are 2D nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is carcinogenic, mutagenic, ~~ast~~ magenic, Reproductive

23. Common Sol-gel precursors are ----- and -----

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)  
Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jkc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: K. Chandhashekhar

Reg.No. 720125405033

Group/year : 3rd (mpc)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) ☒ 1-100 nm c) 1-100 cm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) Fe<sub>2</sub>O<sub>3</sub> c) ☒ Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) ☒ Bulk materials b) Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

18  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 2 types.
12. Based on dimension nanoparticles are classified into 4 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for Organic nanoparticle.
15. Example for inorganic nanoparticle is Silver.
16. Fullerene is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is Quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.
20. Nano tubes and nano rods are Zero nanoparticles.
21. Bio persistent granular nanoparticles 4D.
22. CMAR abbreviation is Carcinogenic, mutagenic, Aethnogenic Reproductive Toxin.
23. Common Sol-gel precursors are ----- and -----.
24. Sol-gel method comes under Bottom-up method.
25. Nano Lithography comes under Top-down method.





# Government Degree College

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Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: P. Chantuibabu

Reg.No. 720125405027

Group/year : 3<sup>rd</sup> m.p-c

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

- a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

- a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) Be b) Fe<sub>2</sub>O<sub>3</sub> c) ☒ Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

- a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

- a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

- a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

- a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

20  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.
12. Based on dimension nanoparticles are classified into 4-types.
13. Based on origin nanoparticles are classified into 3 types.
14. Ferritin is example for organic nanoparticle.
15. Example for inorganic nanoparticle is silver.
16. fullerin is example for carbon nanoparticle.
17. Nano sheets are 3D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.
20. Nano tubes and nano rods are zero nanoparticles.
21. Bio persistent granular nanoparticles 4D.
22. CMAR abbreviation is Carcinogenic, mutagenic, Asthrogenic, Reproductive Toxin.
23. Common Sol-gel precursors are metal and oxide.
24. Sol-gel method comes under Bottom-up method.
25. Nano Lithography comes under Top-down method.





# Government Degree College

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Paderu, Visakhapatnam -District, AP.

Est:1985 NAAC "C" Grade phone no: 08985 250013 Email ID :Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: S. Pulama

Reg.No. 721125405039

Group/year : II<sup>nd</sup> B.sc (mpc)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

21  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are zero nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is Carcinogenic, mutagenic, Asthmagenic, Reproductive Toxin.

23. Common Sol-gel precursors are metal and oxide.

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





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Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID :Paderu.jr@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: K. Nagamani

Reg.No. 7211205405021

Group/year : II<sup>nd</sup> B.sc Cmpc

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

22  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 4 types.

12. Based on dimension nanoparticles are classified into 5 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are zero nanoparticles.

21. Bio persistent granular nanoparticles 3D

22. CMAR abbreviation is carcinogenic mutagenic teratogenic Reproductive toxin

23. Common Sol-gel precursors are \_\_\_\_\_ and \_\_\_\_\_.

24. Sol-gel method comes under bottom-up method.

25. Nano Lithography comes under top-down method.





# Government Degree College

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Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID : Paderu.jkc@gmail.com.



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: K. Jayalaxmi

Reg.No. 721125405060

Group/year : II<sup>nd</sup> (MPC S)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) ☒ Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) ☒ None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

20  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.
12. Based on dimension nanoparticles are classified into 4 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for organic nanoparticle.
15. Example for inorganic nanoparticle is silver.
16. fullerenes is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.
20. Nano tubes and nano rods are 1D nanoparticles.
21. Bio persistent granular nanoparticles 4D.
22. CMAR abbreviation is carcinogenic, mutagenic, Asthmagenic, Reproductive toxin.
23. Common Sol-gel precursors are sodium chloride and sodium oxide.
24. Sol-gel method comes under bottom up method.
25. Nano Lithography comes under top-down method.





# Government Degree College

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Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID :Paderu.jkc@gmail.com.



## Certificate program Assessment test

Name of the course: Chemistry of Nanoparticles

Academic year: 2022-2023.

Name of the student: E. Radhakrishna

Reg.No. 7201254051203

Group/year : II BSc

## Certificate program Assessment test

Name of the course: Chemistry Of Nanomaterials

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) ☒ Richard Feynman b) ☐ Einstein c) ☐ Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) ☐ Lavoisier b) ☐ Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

- a) ☐ 1-100 pm b) ☐ 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

- a) ☐ One millionth of meter b) ☒ One billionth of meter c) ☐ One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) ☐ Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) ☐ Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) ☐ Iron Oxide b) ☐ Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

- a) ☐ Milk b) ☐ Blood c) ☒ Both a and b

8. What are quantum dots?

- a) ☐ Semiconductor nanoparticles b) ☐ Non semiconductor Nanoparticles c) ☒ None of the above

9. Green technology works only using

- a) ☐ Bulk materials b) ☒ Nanoparticles c) ☐ Both a and b

10. Which nanoparticles are used in making cosmetics

- a) ☐ Titanium Oxide b) ☐ Zinc Oxide c) ☒ Both a and b

20/25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.
12. Based on dimension nanoparticles are classified into 4 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for organic nanoparticle.
15. Example for inorganic nanoparticle is Silver.
16. fullerene is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.
20. Nano tubes and nano rods are zero nanoparticles.
21. Bio persistent granular nanoparticles -----.
22. CMAR abbreviation is Carcinogenic, Reproductive.
23. Common Sol-gel precursors are ----- and -----.
24. Sol-gel method comes under ----- method.
25. Nano Lithography comes under ----- method.





# Government Degree College

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Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 98935 250013 Email ID: Paderu.jtc@gmail.com.



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: P. Lovathalli

Reg.No.

720125405139

Group/year

: 11<sup>th</sup> B.2.H

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) ☒ Richard Feynman b) ☐ Einstein c) ☐ Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) ☐ Lavoisier b) ☐ Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

- a) ☐ 1-100 pm b) ☐ 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

- a) ☐ One millionth of meter b) ☒ One billionth of meter c) ☐ One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) ☒ Be b) ☐ Fe<sub>2</sub>O<sub>3</sub> c) ☐ Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) ☐ Iron Oxide b) ☒ Silver c) ☐ Both a and b

7. Example for natural Nanoparticle is

- a) ☐ Milk b) ☐ Blood c) ☒ Both a and b

8. What are quantum dots?

- a) ☒ Semiconductor nanoparticles b) ☐ Non semiconductor Nanoparticles c) ☐ None of the above

9. Green technology works only using

- a) ☒ Bulk materials b) ☐ Nanoparticles c) ☐ Both a and b

10. Which nanoparticles are used in making cosmetics

- a) ☒ Titanium Oxide b) ☐ Zinc Oxide c) ☐ Both a and b

14  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into ~~2~~ types.

12. Based on dimension nanoparticles are classified into ~~4~~ types.

13. Based on origin nanoparticles are classified into ~~2~~ types.

14. Ferritin is example for Organic nanoparticle.

15. Example for inorganic nanoparticle is Silver.

16. Fullerenes is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are ~~30~~ nanoparticles.

20. Nano tubes and nano rods are 1D nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is Chemical, Microbial, Abiotic, Radiogenic

23. Common Sol-gel precursors are ----- and -----

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

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Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 98935 250013 Email ID: Paderu.jkc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**  
Academic year: 2022-2023.

Name of the student: K. Remanesh  
Reg.No. 720125405021  
Group/year : 3rd m.p.c

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

- a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

- a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

- a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

- a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

- a) ☒ Bulk materials b) Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics.

- a) Titanium Oxide b) ☒ Zinc Oxide c) Both a and b

20  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. Fulleren is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is \_\_\_\_\_.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are 1D nanoparticles.

21. Bio persistent granular nanoparticles \_\_\_\_\_.

22. CMAR abbreviation is \_\_\_\_\_.

23. Common Sol-gel precursors are \_\_\_\_\_ and \_\_\_\_\_.

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

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Paderu, Visakhapatnam -District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID :Paderu.jc@gmail.com.



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: B. Madan Mohan Raju

Reg.No. 721125405001

Group/year : II<sup>nd</sup> MR.

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) Lavoisier b) Einstein c) Richard Feynman

3. Size of the nano particle is

- a) 1-100 pm b) 1-100 cm c) 1-100 nm

4. Nanometer is equals to

- a) One millionth of meter b) One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) Be b)  $\text{Fe}_2\text{O}_3$  c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) Iron Oxide b) Silver c) Both a and b

7. Example for natural Nanoparticle is

- a) Milk b) Blood c) Both a and b

8. What are quantum dots?

- a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

- a) Bulk materials b) Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

- a) Titanium Oxide b) Zinc Oxide c) Both a and b

18  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. fulleren is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are 2D nanoparticles.

21. Bio persistent granular nanoparticles -----.

22. CMAR abbreviation is -----.

23. Common Sol-gel precursors are ----- and -----.

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)  
Paderu, Visakhapatnam - District, AP.

Est: 1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jtc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: T. Surya Kumar

Reg.No. Y20125405145

Group/year : III B.Z.H.

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) Lavoisier b) Einstein c) Richard Feynman

3. Size of the nano particle is

- a) 1-100 pm b) 1-100 cm c) 1-100 nm

4. Nanometer is equals to

- a) One millionth of meter b) One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) Be b) Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) Iron Oxide b) Silver c) Both a and b

7. Example for natural Nanoparticle is

- a) Milk b) Blood c) Both a and b

8. What are quantum dots?

- a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

- a) Bulk materials b) Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

- a) Titanium Oxide b) Zinc Oxide c) Both a and b



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.
12. Based on dimension nanoparticles are classified into 4 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for Organic nanoparticle.
15. Example for inorganic nanoparticle is Silver.
16. Fullerin is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is \_\_\_\_\_.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.
20. Nano tubes and nano rods are zero nanoparticles.
21. Bio persistent granular nanoparticles \_\_\_\_\_.
22. CMAR abbreviation is carcinogenic.
23. Common Sol-gel precursors are \_\_\_\_\_ and \_\_\_\_\_.
24. Sol-gel method comes under Bottom-up method.
25. Nano Lithography comes under Top-down method.





# Government Degree College

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Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: K. Srujana

Reg.No. 720125405089

Group/year : 3<sup>rd</sup> CBZ

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) Lavoisier b) Einstein c) Richard Feynman

3. Size of the nano particle is

- a) 1-100 pm b) 1-100 cm c) 1-100 nm

4. Nanometer is equals to

- a) One millionth of meter b) One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) Be b)  $\text{Fe}_2\text{O}_3$  c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) Iron Oxide b) Silver c) Both a and b

7. Example for natural Nanoparticle is

- a) Milk b) Blood c) Both a and b

8. What are quantum dots?

- a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

- a) Bulk materials b) Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

- a) Titanium Oxide b) Zinc Oxide c) Both a and b

19  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is Silver.

16. Fulleren is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dot.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are zero nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is carcinogenic, mutagenic, Allergic, Reproductive Toxicity.

23. Common Sol-gel precursors are sodium asate and sodium oxide.

24. Sol-gel method comes under bottom up method.

25. Nano Lithography comes under top down method.





# Government Degree College

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Est:1985 NAAC "C" Grade phone no: 98935 250013 Email:ID:Paderu@k@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: P chittibabu

Reg.No. 120125405065

Group/year : 3rd M.P.C.S.

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) ☒ None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are 1D nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is \_\_\_\_\_.

23. Common Sol-gel precursors are \_\_\_\_\_ and \_\_\_\_\_.

24. Sol-gel method comes under bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

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Est:1985 NAAC "C" Grade phone no: 08935 250013 EmailID: Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**  
Academic year: 2022-2023.

Name of the student: G. Siva Prakash  
Reg.No. 720125405042  
Group/year : 3rd (mpcs)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) ☒ Silver c) Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

21  
25





# Government Degree College

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Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID : Paderu.jkr@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: V. BANGARU BABU

Reg.No. 720125405108

Group/year : III<sup>rd</sup> CBZ

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) ☒ Silver c) Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

20  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 4 types.

12. Based on dimension nanoparticles are classified into 5 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is Silver.

16. fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is Quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are 1D nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is carcinogenic mutagenic pathogenic  
Reproductive toxin

23. Common Sol-gel precursors are \_\_\_\_\_ and \_\_\_\_\_.

24. Sol-gel method comes under Kottanur method.

25. Nano Lithography comes under top-down method.





# Government Degree College

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Est: 1985 NAAC "C" Grade phone no: 08985 250013 Email ID: Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: S. Sairam

Reg.No. 721125405125

Group/year : III<sup>rd</sup> CBZ

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

☒ a) Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein ☒ c) Richard Feynman

3. Size of the nano particle is

☒ a) 1-100 pm b) 1-100 cm c) 1-100 nm

4. Nanometer is equals to

☒ a) One millionth of meter b) One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be ☒ b) Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver ☒ c) Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood ☒ c) Both a and b

8. What are quantum dots?

a) Semiconductor nanoparticles ☒ b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials ☒ b) Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide ☒ c) Both a and b

19  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for Organic nanoparticle.

15. Example for inorganic nanoparticle is Silver.

16. Fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are Zero nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is Carcinogenic, mutagenic, Antimutagenic, Reproductive

23. Common Sol-gel precursors are Metal and oxide <sup>toxics</sup>.

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

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Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jc@gmail.com.



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: P. Kalavathi

Reg.No. 721125405119

Group/year : II<sup>nd</sup>, CBZ

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) Lavoisier b) Einstein c) Richard Feynman

3. Size of the nano particle is

- a) 1-100 pm b) 1-100 cm c) 1-100 nm

4. Nanometer is equals to

- a) One millionth of meter b) One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) Be b) Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) Iron Oxide b) Silver c) Both a and b

7. Example for natural Nanoparticle is

- a) Milk b) Blood c) Both a and b

8. What are quantum dots?

- a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

- a) Bulk materials b) Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

- a) Titanium Oxide b) Zinc Oxide c) Both a and b

21  
28



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. Fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are Zero nanoparticles.

21. Bio persistent granular nanoparticles -----.

22. CMAR abbreviation is Carcinogenic, Mutagenic, Asthmagenic, Reproductive Toxin.

23. Common Sol-gel precursors are metal oxides and metal chloride.

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

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Est: 1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: K. pujitha

Reg.No. 721125405014

Group/year : II<sup>nd</sup> B.Sc (MPC)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

- a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

- a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

- a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

- a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

- a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

- a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

22/1  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 4 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 3 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is Silver.

16. Fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are 1D nanoparticles.

21. Bio persistent granular nanoparticles 2D.

22. CMAR abbreviation is Carcinogenic, mutagenic, Arthmagenic, reproductive toxin.

23. Common Sol-gel precursors are metal and oxide.

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under top-down method.





# Government Degree College

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Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: K. Sivisha

Reg.No. 721125405067

Group/year : II<sup>nd</sup> (MPC8)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) Lavoisier b) Einstein c) Richard Feynman

3. Size of the nano particle is

- a) 1-100 pm b) 1-100 cm c) 1-100 nm

4. Nanometer is equals to

- a) One millionth of meter b) One billionth of meter c) One trillionth of meter

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- a) Be b)  $\text{Fe}_2\text{O}_3$  c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) Iron Oxide b) Silver c) Both a and b

7. Example for natural Nanoparticle is

- a) Milk b) Blood c) Both a and b

8. What are quantum dots?

- a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

- a) Bulk materials b) Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

- a) Titanium Oxide b) Zinc Oxide c) Both a and b

18/25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

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16. Fullerene is example for carbon nanoparticle.

17. Nano sheets are 2d type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 2d nanoparticles.

20. Nano tubes and nano rods are zero nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is Carcinogenic, mutagenic, Antithyrogenic  
reproductive toxin

23. Common Sol-gel precursors are metal and oxide.

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under top-down method.





# Government Degree College

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Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID : Paderu.jkr@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: P. Swri babu

Reg.No. 721125405033

Group/year : IIMPC

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

21/25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 2 types.

13. Based on origin nanoparticles are classified into 3 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is Silver.

16. fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 4D nanoparticles.

20. Nano tubes and nano rods are 1D nanoparticles.

21. Bio persistent granular nanoparticles -----.

22. CMAR abbreviation is Carcinogenic, mutagenic, Allergic, Reproductive Toxic.

23. Common Sol-gel precursors are metal and Sodium.

24. Sol-gel method comes under Bottom up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)  
Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: D. Mahan Rao

Reg.No. 720125405008

Group/year : III<sup>rd</sup> Yr

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) One billionth of meter c) ☒ One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) ☒ Blood c) Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) ☒ Bulk materials b) Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) ☒ Zinc Oxide c) Both a and b

17/25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 4 types.
12. Based on dimension nanoparticles are classified into 4 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for organic nanoparticle.
15. Example for inorganic nanoparticle is silver.
16. fullerene is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 2D nanoparticles.
20. Nano tubes and nano rods are 0 nanoparticles.
21. Bio persistent granular nanoparticles 4D.
22. CMAR abbreviation is construction material risks.
23. Common Sol-gel precursors are sodium chloride and sodium oxide.
24. Sol-gel method comes under bottom-up method.
25. Nano Lithography comes under top-down method.





# Government Degree College

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Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID : Paderu.jc@gmail.com.



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: M. Anitha

Reg.No. 721125405106

Group/year : 11th BSC (CBZ)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

21  
2/5  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 3 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is Silver.

16. Fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are Zero nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is carcinogenic, mutagenic, Arthanogenic, Reproductive toxin

23. Common Sol-gel precursors are Metal oxides and Metal chlorides

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

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Est:1985 NAAC "C" Grade phone no: 98935 250013 Email ID: Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: P. Uday Kiran

Reg.No. 721125405208

Group/year : ITM P.W

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.
12. Based on dimension nanoparticles are classified into 3 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for inorganic nanoparticle.
15. Example for inorganic nanoparticle is Silver.
16. Fullerene is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 4D nanoparticles.
20. Nano tubes and nano rods are zero nanoparticles.
21. Bio persistent granular nanoparticles 4D.
22. CMAR abbreviation is Carcinogenic, Mutagenic, Aethanogenic, Reproductive toxin.
23. Common Sol-gel precursors are metal alkoxides and metal chlorides.
24. Sol-gel method comes under soften-up method.
25. Nano Lithography comes under Top-down method.





# Government Degree College

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Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: Gr Anji

Reg.No. 721125905094

Group/year : 1<sup>st</sup> B.Sc (C.B.Z)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

21/25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.
12. Based on dimension nanoparticles are classified into 4 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for inorganic nanoparticle.
15. Example for inorganic nanoparticle is silver.
16. fullerene is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 4D nanoparticles.
20. Nano tubes and nano rods are zero nanoparticles.
21. Bio persistent granular nanoparticles 4D.
22. CMAR abbreviation is Carcinogenic, Mutagenic, Allergenic, Reproductive Toxins.
23. Common Sol-gel precursors are metal and metal chlorides.
24. Sol-gel method comes under Bottom-up method.
25. Nano Lithography comes under Top-down method.





# Government Degree College

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Est: 1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.gdc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**  
Academic year: 2022-2023.

Name of the student: **V. NAVEEN**  
Reg.No. **721125405131**  
Group/year: **III<sup>rd</sup> CBZ**

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) ☒ Blood c) Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) ☒ Titanium Oxide b) Zinc Oxide c) Both a and b

20/25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. Fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are 1D nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is Carcinogenic, mutagenic, Asthmagenic, Reproductive Toxin

23. Common Sol-gel precursors are metal oxide and metal chloride

24. Sol-gel method comes under Bottom up method.

25. Nano Lithography comes under Top down method.





# Government Degree College

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Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID : Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**  
Academic year: 2022-2023.

Name of the student: **B. MAHESH BABU**  
Reg.No. **721125405135**  
Group/year : **IInd (BZH)**

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: **31/08/22**

Academic year: **2022-2023**

Time: **2.00 hrs**

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b)  $\text{Fe}_2\text{O}_3$  c) ☒ Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) ☒ None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

20  
24



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. Fulleren is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are 1D nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is carcinogenic, mutagenic, Asthmagenic, Reproductive Tonic.

23. Common Sol-gel precursors are metal and oxide.

24. Sol-gel method comes under Bottom up method.

25. Nano Lithography comes under Top down method.





# Government Degree College

Affiliated to Andhra University  
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Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 08985 250013 Email ID: Paderu.jkc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: K. X. Jayomi

Reg.No. 720125405186

Group/year : 3<sup>rd</sup> BZH

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) ☒ Lavoisier b) Einstein c) Richard Feynman

3. Size of the nano particle is

- a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

- a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) Be b) Fe<sub>2</sub>O<sub>3</sub> c) ☒ Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

- a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

- a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

- a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

- a) Titanium Oxide b) ☒ Zinc Oxide c) Both a and b



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. Fulleren is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are zero nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is carcinogenic, mutagenic, Asthmagenic, Reproductive Toxin.

23. Common Sol-gel precursors are metal and oxide.

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

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Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID : Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: A. pragathi

Reg.No. 720125405001

Group/year : III<sup>rd</sup> Mpc

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) ☒ Zinc Oxide c) Both a and b



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 6 types.
12. Based on dimension nanoparticles are classified into 4 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for organic nanoparticle.
15. Example for inorganic nanoparticle is Silver.
16. fullerene is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.
20. Nano tubes and nano rods are one nanoparticles.
21. Bio persistent granular nanoparticles 4D.
22. CMAR abbreviation is Construction Manager at Risk.
23. Common Sol-gel precursors are Sodium chloride and Sodium oxide.
24. Sol-gel method comes under Bottom-up method.
25. Nano Lithography comes under Top-down method.





# Government Degree College

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Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**  
Academic year: 2022-2023.

Name of the student: K. Kashamma  
Reg.No. 780125405014  
Group/year : III<sup>rd</sup> MPC

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) Semiconductor nanoparticles b) ☒ Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) ☒ Zinc Oxide c) Both a and b

20/25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is silver.

16. fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are Zero nanoparticles.

21. Bio persistent granular nanoparticles Ag.

22. CMAR abbreviation is carcinogenic, mutagenic, Asthmagenic, Reproductive toxin.

23. Common Sol-gel precursors are \_\_\_\_\_ and \_\_\_\_\_.

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

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Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID : Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: R. Jhansi

Reg.No.

721125405081

Group/year

: ITd(mpc5)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) ☐ Einstein c) ☐ Newton

2. Who coined 'There is plenty of room at the bottom'?

a) ☐ Lavoisier b) ☒ Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) ☐ 1-100 pm b) ☐ 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) ☐ One millionth of meter b) ☒ One billionth of meter c) ☐ One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) ☐ Be b) ☐ Fe<sub>2</sub>O<sub>3</sub> c) ☒ Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) ☐ Iron Oxide b) ☐ Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) ☐ Milk b) ☒ Blood c) ☐ Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) ☐ Non semiconductor Nanoparticles c) ☐ None of the above

9. Green technology works only using

a) ☐ Bulk materials b) ☒ Nanoparticles c) ☐ Both a and b

10. Which nanoparticles are used in making cosmetics

a) ☐ Titanium Oxide b) ☐ Zinc Oxide c) ☒ Both a and b

20  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.
12. Based on dimension nanoparticles are classified into 3 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for organic nanoparticle.
15. Example for inorganic nanoparticle is silver.
16. Fullerene is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.
20. Nano tubes and nano rods are one nanoparticles.
21. Bio persistent granular nanoparticles 4D.
22. CMAR abbreviation is carcinogenic, mutagenic, Aethmagenic, reproductive toxin.
23. Common Sol-gel precursors are metal and oxide.
24. Sol-gel method comes under Bottom-up method.
25. Nano Lithography comes under Top-down method.





# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)  
Paderu, Visakhapatnam - District, AP.

Est: 1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**  
Academic year: 2022-2023.

Name of the student: Chandini K. Pavan Kumar  
Reg.No. 220125405156  
Group/year : III<sup>rd</sup> MPCS (BZH)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) ☒ Blood c) Both a and b

8. What are quantum dots?

a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

17  
25



## PART-B

### II. Answer all the following fill in blanks. (1x8=8)

11. Based on structural configuration nanoparticles are classified into 2 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is Silver.

16. Fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is Quantum dots.

### III. Answer all the one word questions. (1x7=7)

19. Colloids and preparations are 2D nanoparticles.

20. Nano tubes and nano rods are 1D nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is carcinogenic mutagenic Asthmagenic reproductive toxin.

23. Common Sol-gel precursors are Salt and Oxide.

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)  
Paderu, Visakhapatnam -District, AP.

Est:1985 NAAC "C" Grade phone no: 08985 250013 Email ID: Paderu.jkr@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: B. Ravindra

Reg.No. 721125405053

Group/year : II MPCs

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) ☒ Be b) Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) ☒ Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) Semiconductor nanoparticles b) ☒ Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) ☒ Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

20  
28



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.
12. Based on dimension nanoparticles are classified into 4 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for organic nanoparticle.
15. Example for inorganic nanoparticle is silver.
16. fullerin is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D-4D nanoparticles.
20. Nano tubes and nano rods are zero nanoparticles.
21. Bio persistent granular nanoparticles 4D.
22. CMAR abbreviation is carcinogenic, mutagenic, Arthrogenic Reproductive Toxins.
23. Common Sol-gel precursors are metal oxide and oxide.
24. Sol-gel method comes under Bottom-up method.
25. Nano Lithography comes under Top-down method.





# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)  
Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jc@gmail.com.



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: K. Swati babu

Reg.No. 721125405150

Group/year : III nd (H.B. 7)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) ☒ Lavoisier b) Einstein c) Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) ☒ Be b) Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) Semiconductor nanoparticles b) ☒ Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

19  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.
12. Based on dimension nanoparticles are classified into 4 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for organic nanoparticle.
15. Example for inorganic nanoparticle is silver.
16. fullerin is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.
20. Nano tubes and nano rods are 1D nanoparticles.
21. Bio persistent granular nanoparticles -----.
22. CMAR abbreviation is Carcinogenic, Mutagenic, Allergic, Reproductive Toxin.
23. Common Sol-gel precursors are metal and oxide.
24. Sol-gel method comes under Bottom-up method.
25. Nano Lithography comes under Top-down method.





# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)  
Paderu, Visakhapatnam - District, AP.  
Est: 1985 NAAC "C" Grade phone no: 08935 250013 Email ID: Paderu.jkc@gmail.com



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticals**  
Academic year: 2022-2023.

Name of the student: G. Swapna

Reg.No. 721125405144

Group/year : II (CBZ-I)

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b)  $\text{Fe}_2\text{O}_3$  c) ☒ Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) Semiconductor nanoparticles b) ☒ Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticals c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) ☒ Titanium Oxide b) Zinc Oxide c) Both a and b

18  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.
12. Based on dimension nanoparticles are classified into 4 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for organic nanoparticle.
15. Example for inorganic nanoparticle is Silver.
16. fullerin is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.
20. Nano tubes and nano rods are zero nanoparticles.
21. Bio persistent granular nanoparticles \_\_\_\_\_.
22. CMAR abbreviation is Carcinogenic, Mutagenic, Allergenic, Reproductive Toxic.
23. Common Sol-gel precursors are metal and Sodium.
24. Sol-gel method comes under Bottom-up method.
25. Nano Lithography comes under Top down method.





# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)  
Paderu, Visakhapatnam - District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 230013 Email ID: Paderu.jc@gmail.com.



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: M. Monika

Reg.No. 720125405132

Group/year : 3rd B2H

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology?

- a) ☒ Richard Feynman b) ☐ Einstein c) ☐ Newton

2. Who coined 'There is plenty of room at the bottom'?

- a) ☐ Lavoisier b) ☐ Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

- a) ☐ 1-100 pm b) ☐ 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

- a) ☐ One millionth of meter b) ☒ One billionth of meter c) ☐ One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

- a) ☐ Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) ☐ Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

- a) ☐ Iron Oxide b) ☐ Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

- a) ☐ Milk b) ☐ Blood c) ☒ Both a and b

8. What are quantum dots?

- a) ☐ Semiconductor nanoparticles b) ☒ Non semiconductor Nanoparticles c) ☐ None of the above

9. Green technology works only using

- a) ☐ Bulk materials b) ☒ Nanoparticles c) ☐ Both a and b

10. Which nanoparticles are used in making cosmetics

- a) ☐ Titanium Oxide b) ☐ Zinc Oxide c) ☒ Both a and b

14  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.
12. Based on dimension nanoparticles are classified into 4 types.
13. Based on origin nanoparticles are classified into 2 types.
14. Ferritin is example for organic nanoparticle.
15. Example for inorganic nanoparticle is silver.
16. Fullerene is example for carbon nanoparticle.
17. Nano sheets are 2D type of nanoparticles.
18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.
20. Nano tubes and nano rods are zero nanoparticles.
21. Bio persistent granular nanoparticles -----.
22. CMAR abbreviation is -----.
23. Common Sol-gel precursors are ----- and -----.
24. Sol-gel method comes under Bottom-up method.
25. Nano Lithography comes under Top-down method.





# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)  
Paderu, Visakhapatnam -District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID :Paderu.jkr@gmail.com.



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**  
Academic year: 2022-2023.

Name of the student: J. RASIVA  
Reg.No. 720125405083  
Group/year : 3rd CBZ

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer.  $1 \times 10 = 10$

Max.marks: 25

1. Who is the Father of Nanotechnology? (a)

a) Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom' (c)

a) Lavoisier b) Einstein c) Richard Feynman

3. Size of the nano particle is (c)

a) 1-100 pm b) 1-100 cm c) 1-100 nm

4. Nanometer is equals to (b)

a) One millionth of meter b) One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment? (b)

a) Be b)  $\text{Fe}_2\text{O}_3$  c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment? (c)

a) Iron Oxide b) Silver c) Both a and b

7. Example for natural Nanoparticle is (a)

a) Milk b) Blood c) Both a and b

8. What are quantum dots? (c)

a) Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using (b)

a) Bulk materials b) Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics (c)

a) Titanium Oxide b) Zinc Oxide c) Both a and b

18/25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for organic nanoparticle.

15. Example for inorganic nanoparticle is Silver.

16. fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 3D nanoparticles.

20. Nano tubes and nano rods are zero nanoparticles.

21. Bio persistent granular nanoparticles -----.

22. CMAR abbreviation is -----.

23. Common Sol-gel precursors are ----- and -----.

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.





# Government Degree College

Affiliated to Andhra University  
(Upgraded to Model Degree College under RUSA 2.0)  
Paderu, Visakhapatnam -District, AP.

Est:1985 NAAC "C" Grade phone no: 08935 250013 Email ID : Paderu.jkr@gmail.com.



## Certificate program Assessment test

Name of the course: **Chemistry of Nanoparticles**

Academic year: 2022-2023.

Name of the student: K. papu Rao

Reg.No. 720125405055

Group/year : 3<sup>rd</sup> MPCS

S. Kasi

721125405176

11 B2A

## Certificate program Assessment test

Name of the course: **Chemistry Of Nanomaterials**

date: 31/08/22

Academic year: 2022-2023

Time: 2.00 hrs

### PART-A

I. Answer the following questions with appropriate answer. 1×10=10

Max.marks: 25

1. Who is the Father of Nanotechnology?

a) ☒ Richard Feynman b) Einstein c) Newton

2. Who coined 'There is plenty of room at the bottom'?

a) Lavoisier b) Einstein c) ☒ Richard Feynman

3. Size of the nano particle is

a) 1-100 pm b) 1-100 cm c) ☒ 1-100 nm

4. Nanometer is equals to

a) One millionth of meter b) ☒ One billionth of meter c) One trillionth of meter

5. Which of the following nanoparticle is used in cancer treatment?

a) Be b) ☒ Fe<sub>2</sub>O<sub>3</sub> c) Both a and b

6. Which of the following Nanoparticle is used in Monkey Pox treatment?

a) Iron Oxide b) Silver c) ☒ Both a and b

7. Example for natural Nanoparticle is

a) Milk b) Blood c) ☒ Both a and b

8. What are quantum dots?

a) ☒ Semiconductor nanoparticles b) Non semiconductor Nanoparticles c) None of the above

9. Green technology works only using

a) Bulk materials b) ☒ Nanoparticles c) Both a and b

10. Which nanoparticles are used in making cosmetics

a) Titanium Oxide b) Zinc Oxide c) ☒ Both a and b

21  
25



**PART-B**

**II. Answer all the following fill in blanks. (1x8=8)**

11. Based on structural configuration nanoparticles are classified into 5 types.

12. Based on dimension nanoparticles are classified into 4 types.

13. Based on origin nanoparticles are classified into 2 types.

14. Ferritin is example for inorganic nanoparticle.

15. Example for inorganic nanoparticle is Silver.

16. fullerene is example for carbon nanoparticle.

17. Nano sheets are 2D type of nanoparticles.

18. Example for zero-Dimension nanoparticles is quantum dots.

**III. Answer all the one word questions. (1x7=7)**

19. Colloids and preparations are 4D nanoparticles.

20. Nano tubes and nano rods are zero nanoparticles.

21. Bio persistent granular nanoparticles 4D.

22. CMAR abbreviation is carcinogenic, mutagenic, Asthmagenic, Reproductive

23. Common Sol-gel precursors are metal alkoxides and metal chlorides Toxin

24. Sol-gel method comes under Bottom-up method.

25. Nano Lithography comes under Top-down method.



| S.NO | Regd.No      | Name of the Student | Group    | Marks Obtained | Grade |
|------|--------------|---------------------|----------|----------------|-------|
| 1    | 720125405001 | A.PRAGATHI          | III MPC  | 22             | A+    |
| 2    | 720125405008 | D.MOHAN RAO         | III MPC  | 17             | B+    |
| 3    | 720125405014 | K.KASULAMMA         | III MPC  | 20             | A     |
| 4    | 720125405021 | K.RAMA RAO          | III MPC  | 20             | A     |
| 5    | 720125405027 | P.CHANTI BABU       | III MPC  | 20             | A     |
| 6    | 720125405033 | S.CHANDRA SEKHAR    | III MPC  | 18             | A     |
| 7    | 720125405042 | G.SIVA PRAKASH      | III MPCs | 21             | A+    |
| 8    | 720125405065 | P.CHITTIBABU        | III MPCs | 20             | A     |
| 9    | 720125405083 | J.RASI              | III CBZ  | 18             | A     |
| 10   | 720125405089 | K.SRUJANA           | III CBZ  | 19             | A     |
| 11   | 720125405108 | V.BANGARU BABU      | III CBZ  | 20             | A     |
| 12   | 720125405114 | A.UMA MAHESWARI     | III BZH  | 14             | B     |
| 13   | 720125405126 | K.NAYONI            | III BZH  | 19             | A     |
| 14   | 720125405132 | M.MOUNIKA           | III BZH  | 14             | B     |
| 15   | 720125405139 | P.LOVA THALLI       | III BZH  | 14             | B     |
| 16   | 720125405145 | T.SURYA KUMARI      | III BZH  | 18             | A     |
| 17   | 721125405001 | B.MADHAN MOHAN RAJU | II MPC   | 18             | A     |
| 18   | 721125405014 | K.PUJITHA           | II MPC   | 22             | A+    |
| 19   | 721125405021 | K.NAGAMANI          | II MPC   | 22             | A+    |
| 20   | 721125405033 | P.SURI BABU         | II MPC   | 21             | A+    |
| 21   | 721125405039 | S.PULAMA            | II MPC   | 21             | A+    |
| 22   | 721125405053 | B.RAVINDRA          | II MPCs  | 20             | A     |
| 23   | 721125405060 | K.JAYA LAKSHMI      | II MPCs  | 20             | A     |
| 24   | 721125405067 | K.SIRISHA           | II MPCs  | 18             | A     |
| 25   | 721125405081 | R.JHANSI            | II MPCs  | 20             | A     |
| 26   | 721125405208 | P.UDAY KIRAN        | II MPW   | 20             | A     |
| 27   | 721125405094 | G.ANJI              | II CBZ   | 21             | A+    |
| 28   | 721125405106 | M.ANITHA            | II CBZ   | 21             | A+    |
| 29   | 721125405119 | P.KALAVATHI         | II CBZ   | 21             | A+    |
| 30   | 721125405125 | S.SAIRAM            | II CBZ   | 19             | A     |
| 31   | 721125405131 | V.NAVEEN            | II CBZ   | 20             | A     |
| 32   | 721125405135 | B.MAHESH BABU       | II BZH   | 20             | A     |
| 33   | 721125405144 | G.SWAPNA            | II BZH   | 19             | A     |
| 34   | 721125405150 | K.SURI BABU         | II BZH   | 19             | A     |
| 35   | 721125405156 | K.CHANDINI          | II BZH   | 17             | B+    |
| 36   | 721125405163 | O.RADHA KRISHNA     | II BZH   | 20             | A     |
| 37   | 721125405176 | S.KASI              | II BZH   | 21             | A+    |





## GOVERNMENT DEGREE COLLEGE, PADERU

(Upgraded to Model Degree College under RUSA 2.0)

ALLURI SITARAMA RAJU DISTRICT, A.P-531024.

Affiliated to Andhra University.



### CERTIFICATE OF COMPLETION

This is to certify that A.PRAGATHI Regd.NO 720125405001 of GOVERNMENT DEGREE COLLEGE, PADERU has completed his/her one month CERTIFICATE COURSE on "**Chemistry of Nanoparticles**" from **01/08/2022** to **31/08/2022**, organised by the DEPARTMENT OF CHEMISTRY.

The overall performance of an INDIVIDUAL during his /her ENTIRE COURSE is found to be SATISFACTORY  
(Satisfactory/ Not satisfactory). He/She obtained grade is A+

  
COURSE COORDINATOR

  
PRINCIPAL



Principal  
Govt. Degree College  
PADERU 534 024  
Alluri Sitharama Raju-Dist.





**GOVERNMENT DEGREE COLLEGE, PADERU**



(Upgraded to Model Degree College under RUSA 2.0)  
ALLURI SITHARAMA RAJU DISTRICT, A.P-531024.  
Affiliated to Andhra University.

**CERTIFICATE OF COMPLETION**

This is to certify that K.NAGAMANI Regd.NO 721125405021 of GOVERNMENT DEGREE COLLEGE, PADERU has completed his/her one month CERTIFICATE COURSE on "Chemistry of Nanoparticles" from 01/08/2022 to 31/08/2022, organised by the DEPARTMENT OF CHEMISTRY.

The overall performance of an INDIVIDUAL during his /her ENTIRE COURSE is found to be SATISFACTORY  
(Satisfactory/ Not satisfactory). He/She obtained grade is A+

  
COURSE COORDINATOR



  
PRINCIPAL

Principal  
Govt. Degree College  
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