List of Courses for the AY 2021-22

S. No	Name of the Course
1	Pharmacist: Patient Care process (PPCP)
2	Machine learning & AI in Computer Aide Drug Design (CADD)
3	Biomimetic Drug Delivery Systems: Nature-Inspired Solutions
4	Foundations of Molecular Docking in drug Discovery: A comprehensive Certificate Program
5	Pharmaceutical Analysis for Clinical Trials
6	Biopharmaceutical Quality Assurance & Validation
7	NPTEL

T. Sarithyosh

PRINCIPAL
Sarojini Naidu Vanita Pharmacy Maha Vidyalaya
Vijayapuri Colony, S.Lalaguda, Tarnaka
Secunderabad-500 017.

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tamaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

Value Added Course on "Pharmacist-Patient Care Process (PPCP)"
Course Assessment

Time: 10 mins   Marks: 10

Please tick the right answer:
1. **What is the first step in the pharmacist patient care process?**
A) Monitoring
B) Assessment
C) Planning
D) Implementation

2. **Which phase involves setting specific goals and interventions for patient care?**
A) Evaluation
B) Planning
C) Implementation
D) Monitoring

3. **What is the primary purpose of the monitoring phase in the patient care process?**
A) Identifying drug interactions
B) Assessing patient response
C) Establishing patient rapport
D) Developing treatment plans

4. **During the implementation phase, what does the pharmacist carry out based on the established plan?**
A) Medication Dispensing
B) Patient Education
C) Health screenings
D) Diagnostic testing

5. **Which of the following is an essential component of the evaluation phase?**
A) Diagnosing new conditions
B) Adjusting treatment plans
C) Initiating therapy
D) Identifying patient preferences

6. **What is the purpose of the evaluation phase in the pharmacist patient care process?**
A) To initiate therapy
B) To assess treatment outcomes
C) To develop a care plan
D) To collect patient history

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tamaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

7. **Which of the following is a common goal during the pharmacist patient care process?**
A) Maximizing prescription sales
B) Minimizing patient adherence
C) Optimizing patient outcomes
D) Ignoring patient concerns

8. **What role does patient education play in the pharmacist patient care process?**
A) It is optional
B) It is not necessary
C) It is essential for informed decision making
D) It is only for specific patient populations

9. **What ethical principle guides the pharmacist in maintaining patient confidentiality during the pharmacist care process?**
A) Justice
B) Autonomy
C) Beneficence
D) Non-Maleficence

10. **Which step ensures that the patient is actively involved in the decision making process regarding their drug therapy?**
A) Assessment
B) Planning
C) Implementation
D) Evaluation

Feel free to adapt these questions based on the specific focus and content of your Value-Added course.

Answers for the multiple choice questions

Question	1	2	3	4	5	6	7	8	9	10
Answer	B	B	B	A	B	B	C	C	B	A

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tarnaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

(Sponsored by the Exhibition Society), Tarnaka,
Secunderabad Affiliated to Osmania University, Approved
by AICTE & PCI (ISO 9001: 2015 Certified Institution)
NBA Accredited B. Pharmacy Course

CERTIFICATE

OF COMPLETION

This is presented to _Anumakonda Rishika_

for successful completion of VALUE ADDED COURSE on
**"PHARMACIST: PATIENT CARE PROCESS
(PPCP)"**

Held from 3rd August to 21st August, 2021

**Dr. Vemuri Jyothi
Principal**

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

(Sponsored by the Exhibition Society), Tarnaka,
Secunderabad Affiliated to Osmania University, Approved
by AICTE & PCI (ISO 9001: 2015 Certified Institution)
NBA Accredited B. Pharmacy Course

CERTIFICATE

OF COMPLETION

This is presented to _Dhanyatha Boylla_

for successful completion of VALUE ADDED COURSE on
**"PHARMACIST: PATIENT CARE PROCESS
(PPCP)"**

Held from 3rd August to 21st August, 2021

**Dr. Vemuri Jyothi
Principal**

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tamaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

Machine Learning and AI in Computer-Aided Drug Design (CADD)

Course Assessment

Question 1: What is the primary goal of Computer-Aided Drug Design (CADD)?
A) To increase the cost of drug discovery
B) To reduce the time and cost of drug development
C) To replace human researchers entirely
D) To complicate the drug design process

Question 2: Which of the following is NOT a common Machine Learning technique used in CADD?
A) Support Vector Machines
B) Convolutional Neural Networks
C) Quantum Computing
D) Random Forests

Question 3: How does Machine Learning enhance the process of virtual screening in CADD?
A) By decreasing the accuracy of predictions
B) By requiring more experimental validation
C) By identifying promising compounds more efficiently
D) By ignoring the chemical properties of compounds

Question 4: What is a major challenge in integrating AI into CADD?
A) Too many high-quality, annotated datasets are available
B) AI models are too easy to interpret
C) Limited generalization across different datasets
D) AI models reduce the need for computational resources

Question 5: Which AI technique is particularly suited for analyzing molecular structures in CADD?
A) Linear Regression
B) Graph Neural Networks
C) K-Means Clustering
D) Principal Component Analysis

Question 6: What role does Reinforcement Learning play in CADD?
A) It is used to decrease the efficiency of molecule design
B) It optimizes chemical synthesis routes and drug formulation strategies
C) It simplifies the drug approval process
D) It is not used in CADD

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tamaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

Question 7: Why is model interpretability important in CADD?
A) It is not important; only model accuracy matters
B) It allows researchers to ignore model predictions
C) It helps in understanding how models make predictions, crucial for scientific validation
D) It makes models less accurate

Question 8: Which of the following best describes the impact of AI on the future of drug discovery and development?
A) It will make drug discovery and development more time-consuming and expensive
B) It will have no significant impact on drug discovery and development
C) It will revolutionize drug discovery and development, making it more efficient and effective
D) It will entirely replace human researchers in drug discovery and development

Question 9: What is a significant barrier to the integration of AI in CADD related to data?
A) The overabundance of high-quality data
B) The scarcity of high-quality, annotated datasets
C) The complete transparency of proprietary data
D) The irrelevant nature of available data

Question 10: In the context of CADD, what is virtual screening primarily used for?
A) To physically test each compound in a lab
B) To search large libraries of compounds to identify those most likely to bind to a drug target
C) To create virtual reality environments for drug researchers
D) To increase the number of compounds that need to be synthesized

ANSWERS:
1. Answer: B) To reduce the time and cost of drug development
2. Answer: C) Quantum Computing
3. Answer: C) By identifying promising compounds more efficiently
4. Answer: C) Limited generalization across different datasets
5. Answer: B) Graph Neural Networks
6. Answer: B) It optimizes chemical synthesis routes and drug formulation strategies
7. Answer: C) It helps in understanding how models make predictions, crucial for scientific validation
8. Answer: C) It will revolutionize drug discovery and development, making it more efficient and effective
9. Answer: B) The scarcity of high-quality, annotated datasets
10. Answer: B) To search large libraries of compounds to identify those most likely to bind to a drug target

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tarnaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(SPONSORED BY THE EXHIBITION SOCIETY), TARNAKA, SECUNDERABAD.
AFFILIATED TO OSMANIA UNIVERSITY, APPROVED BY AICTE & PCI
ISO 9001: 2015 CERTIFIED INSTITUTION, NBA ACCREDITED B. PHARMACY COURSE

CERTIFICATE OF COMPLETION

This is presented to _Asma Fathima_ for successful completion of Value added course on

"MACHINE LEARNING AND AI IN COMPUTER AIDED DRUG DESIGN(CADD)"

Held from 21st October to 5thNovember, 2021

Dr. Vemuri Jyothi
Principal

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(SPONSORED BY THE EXHIBITION SOCIETY), TARNAKA, SECUNDERABAD.
AFFILIATED TO OSMANIA UNIVERSITY, APPROVED BY AICTE & PCI
ISO 9001: 2015 CERTIFIED INSTITUTION, NBA ACCREDITED B. PHARMACY COURSE

CERTIFICATE OF COMPLETION

This is presented to _Paripelli Harini_ for successful completion of Value added course on

"MACHINE LEARNING AND AI IN COMPUTER AIDED DRUG DESIGN(CADD)"

Held from 21st October to 5thNovember, 2021

Dr. Vemuri Jyothi
Principal

Value Added Course on "Biomimetic Drug Delivery Systems: Nature-Inspired Solutions"
Course Assessment

Time: 10 mins   Marks: 10

Please tick the right answer:

1. **Which of the following is NOT a characteristic of biomimetic drug delivery systems?**
(a) Mimicry of biological mechanisms for targeted delivery
(b) Enhanced drug efficacy and reduced side effects
(c) Increased complexity and cost of development
(d) Dependence on synthetic polymers and materials

2. **An example of a biomimetic drug delivery system inspired by viruses is:**
(a) Liposomes
(b) Prodrug systems
(c) Antibody-drug conjugates
(d) Polymeric micelles

3. **CAMEL capsules, designed to adhere to mucus membranes in the gastrointestinal tract, are inspired by:**
(a) Gecko feet
(b) Spider silk
(c) Bacterial adhesion
(d) Sea urchin spines

4. **Magnetic nanoparticles used for targeted drug delivery to specific tissues often utilize:**
(a) Lectin-glycan interactions
(b) Antibody-antigen recognition
(c) Magnetic field gradients
(d) All of the above

5. **Which biomimetic system utilizes enzymatic degradation for controlled drug release?**
(a) Polymeric nanoparticles
(b) Hydrogel matrices
(c) Prodrug systems
(d) Liposomes

6. **Challenges associated with biomimetic drug delivery systems include:**
(a) Difficulty in replicating complex biological processes
(b) Potential immunogenicity of synthetic materials
(c) Scalability and cost-effectiveness for large-scale production
(d) All of the above

7. **Which statement is TRUE about the future of biomimetic drug delivery?**
(a) The field is nearing its full potential with limited room for further development.
(b) Advancements in nanotechnology and bioengineering will drive further innovation.
(c) Biomimetic systems will replace conventional drug delivery methods entirely.
(d) Regulatory hurdles will hinder the clinical translation of these systems.

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tarnaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

8. **Liposomes, vesicles inspired by cell membranes, are an example of biomimetic drug delivery for:**
a) Sustained release of drugs in specific organs
b) Gene delivery and transfection of cells
c) Overcoming the blood-brain barrier
d) All of the above

9. **Snake venom peptides are being investigated for their potential in:**
a) Developing biocompatible carriers for targeted drug delivery
b) Inhibiting angiogenesis and tumor growth
c) Acting as anti-inflammatory and analgesic agents
d) All of the above

10. **The concept of "Trojan horse" drug delivery involves:**
a) Modifying drugs to resemble endogenous molecules for targeted uptake
b) Encapsulation of drugs in carriers that evade immune recognition
c) Utilizing viruses or bacteria as drug delivery vectors
d) All of the above

Feel free to adapt these questions based on the specific focus and content of your Value- Added course.

Answers for the multiple choice questions

Question	1	2	3	4	5	6	7	8	9	10
Answer	c	d	c	c	b	d	b	d	d	a

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

(Sponsored by the Exhibition Society), Tarnaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(SPONSORED BY THE EXHIBITION SOCIETY), TARNAKA, SECUNDERABAD.
AFFILIATED TO OSMANIA UNIVERSITY, APPROVED BY AICTE & PCI
ISO 9001: 2015 CERTIFIED INSTITUTION, NBA ACCREDITED B. PHARMACY COURSE

CERTIFICATE OF COMPLETION

This is presented to _Rishika Srivastav_ for successful completion of Value added course on

"BIOMIMETIC DRUG DELIVERY SYSTEMS: NATURE-INSPIRED SOLUTIONS"

Held from 3rd January to 22nd January, 2022

T. Saritha Jyostna
Principal

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(SPONSORED BY THE EXHIBITION SOCIETY), TARNAKA, SECUNDERABAD.
AFFILIATED TO OSMANIA UNIVERSITY, APPROVED BY AICTE & PCI
ISO 9001: 2015 CERTIFIED INSTITUTION, NBA ACCREDITED B. PHARMACY COURSE

CERTIFICATE OF COMPLETION

This is presented to _Fariya Begum_ for successful completion of Value added course on

"BIOMIMETIC DRUG DELIVERY SYSTEMS: NATURE-INSPIRED SOLUTIONS"

Held from 3rd January to 22nd January, 2022

T. Saritha Jyostna
Principal

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tamaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

Value Added Course on "Foundations of Molecular Docking in drug Discovery"
Course Assessment

Time: 10 mins   Marks: 10
Please tick the right answer:

1. **What is the primary goal of molecular docking in drug discovery?**
a) To identify the most potent drug candidate based on its chemical structure.
b) To predict the binding affinity and pose of a ligand within a protein target.
c) To design new drugs with specific properties based on known drug targets.
d) To understand the mechanism of action of existing drugs at the molecular level.

2. **Which of the following is NOT a key component of a molecular docking simulation?**
a) Protein structure
b) Ligand structure
c) Scoring function
d) Docking algorithm

3. **What type of scoring function is commonly used in molecular docking?**
a) Empirical scoring function
b) Knowledge-based scoring function
c) Force field-based scoring function
d) All of the above

4. **What are the limitations of using empirical scoring functions in molecular docking?**
a) They are computationally expensive.
b) They are not accurate for all types of protein-ligand interactions.
c) They require a large amount of experimental data for training.
d) They cannot be used to predict protein-protein interactions.

5. **Which of the following factors can influence the accuracy of a molecular docking simulation?**
a) Protein flexibility
b) Ligand flexibility
c) Water molecules
d) All of the above

6. **What is the difference between rigid docking and flexible docking?**
a) Rigid docking allows for both protein and ligand flexibility, while flexible docking only allows for ligand flexibility.
b) Flexible docking allows for both protein and ligand flexibility, while rigid docking only allows for protein flexibility.
c) Rigid docking treats both protein and ligand as rigid structures, while flexible docking allows for some degree of flexibility in both.
d) There is no difference between the two methods.

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tamaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

7. **What is the advantage of using water molecules in a docking simulation?**
a) They can improve the accuracy of the scoring function.
b) They can be used to model ligand solvation.
c) They can be used to identify hydrogen bonding interactions.
d) All of the above.

8. **What are some of the challenges in the field of molecular docking?**
a) Accurately predicting protein-ligand interactions
b) Developing robust scoring functions
c) Handling large and complex molecules
d) All of the above

9. **How can virtual screening be used in conjunction with molecular docking?**
a) To identify potential drug candidates from large libraries of compounds.
b) To refine the poses of docked ligands for better accuracy.
c) To predict the ADME/Tox properties of drug candidates.
d) All of the above

10. **What is the future of molecular docking in drug discovery?**
a) It will become obsolete as new drug discovery methods are developed.
b) It will continue to be a valuable tool for drug discovery, but with improved accuracy and efficiency.
c) It will only be used for specific types of drug discovery projects.
d) It is difficult to predict the future of this field.

Feel free to adapt these questions based on the specific focus and content of your Value-Added course.

Answers for the multiple choice questions

1 b) To predict the binding affinity and pose of a ligand within a protein target.
2 d) Docking algorithm
3 d) All of the above
4 b) They are not accurate for all types of protein-ligand interactions.
5 d) All of the above
6 c) Rigid docking treats both protein and ligand as rigid structures, while flexible docking allows for some degree of flexibility in both.
7 d) All of the above.
8 d) All of the above
9 d) All of the above
10 b) It will continue to be a valuable tool for drug discovery, but with improved accuracy and efficiency.

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
SPONSORED BY EXHIBITION SOCIETY ,AFFLIATED TO OSMANIA UNIVERSITY,
APPROVED BY AICTE & PCI ISO 9001:2015 CREDITED INSTITUTION, NBA
ACCREDITED B. PHARMACY COURSE

CERTIFICATE
Of Completition

This certificate is presented to

Kolloju Bhanulekha

for successful completion of VALUE ADDED COURSE on
" FOUNDATIONS OF MOLECULAR DOCKING IN DRUG
DISCOVERY : A COMPRAHENSIVE CERTIFICATE PPROGRAM"
Held from 03.01.2022 to 22.01.2022

Dr. Vemuri Jyothi
PRINCIPAL

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
SPONSORED BY EXHIBITION SOCIETY ,AFFLIATED TO OSMANIA UNIVERSITY,
APPROVED BY AICTE & PCI ISO 9001:2015 CREDITED INSTITUTION, NBA
ACCREDITED B. PHARMACY COURSE

CERTIFICATE
Of Completition

This certificate is presented to

Yerra Jayasree

for successful completion of VALUE ADDED COURSE on
" FOUNDATIONS OF MOLECULAR DOCKING IN DRUG
DISCOVERY : A COMPRAHENSIVE CERTIFICATE PPROGRAM"
Held from 03.01.2022 to 22.01.2022

Dr. Vemuri Jyothi
PRINCIPAL

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tarnaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

Value Added Course on "Pharmaceutical Analysis for Clinical Trials"
<u>Course Assessment</u>

Time: 10 mins   Marks: 10

Please tick the right answer:

1. What is the primary role of regulatory bodies such as the FDA and EMA in pharmaceutical analysis for clinical trials?
A) Developing analytical methods
B) Ensuring Good Laboratory Practice (GLP) compliance
C) Establishing safety guidelines
D) Enforcing statistical analysis protocols

2. Which organization provides international guidelines for the conduct of pharmaceutical analysis in clinical trials?
A) FDA (Food and Drug Administration)
B) WHO (World Health Organization)
C) NIH (National Institutes of Health)
D) ICH (International Council for Harmonization)

3. What is a key consideration when interpreting clinical trial data for reporting?
A) Simplifying complex findings
B) Overlooking statistical significance
C) Disregarding data outliers
D) Providing a comprehensive and accurate representation of study outcomes

4. In the context of GLP, what does the term "traceability" refer to?
A) The ability to trace the source of raw materials
B) The ability to trace the calibration history of instruments
C) The ability to trace the movement of laboratory personnel
D) The ability to trace the generation of analytical data back to its source

5. What is the main objective of bioanalytical method validation in the context of clinical trials?
A) Ensuring the method is complex
B) Demonstrating the method's feasibility
C) Verifying the method's suitability for its intended purpose
D) Reducing the sensitivity of the method

6. Which parameter is commonly assessed during the validation of bioanalytical methods?
A) Aesthetic appeal
B) Linearity
C) Laboratory temperature
D) Employee satisfaction

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tarnaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

7. **What does pharmacokinetics primarily focus on in drug development?**
A) Drug efficacy
B) Drug safety
C) Drug absorption, distribution, metabolism, and excretion (ADME)
D) Statistical significance

8. **What is a critical consideration when handling clinical trial samples for analysis?**
A) Delayed processing for aesthetic purposes
B) Ensuring proper sample traceability and integrity
C) Using non-approved equipment
D) Randomizing sample identification numbers

9. **What is the purpose of statistical analysis in clinical trials?**
A) Enhancing the complexity of trial outcomes
B) Ensuring a simple interpretation of results
C) Making informed decisions based on data
D) Ignoring variability in data

10. **Why is transparent reporting of clinical trial data essential?**
A) To confuse regulatory bodies
B) To facilitate regulatory approval
C) To hide methodological flaws
D) To delay the publication process

Feel free to adapt these questions based on the specific focus and content of your certificate course

Answers for multiple choice questions:

Question	1	2	3	4	5	6	7	8	9	10
Answer	B	D	D	D	C	B	C	B	C	B

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tarnaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(SPONSORED BY THE EXHIBITION SOCIETY), TARNAKA, SECUNDERABAD.
AFFILIATED TO OSMANIA UNIVERSITY, APPROVED BY AICTE & PCI
ISO 9001: 2015 CERTIFIED INSTITUTION, NBA ACCREDITED B. PHARMACY COURSE

CERTIFICATE OF COMPLETION

This is presented to _Pendyala Madhuri_ for

successful completion of Value added course on

"PHARMACEUTICAL ANALYISIS FOR CLINICAL TRIALS"

Held from 17th January to 2nd February, 2022

T.Saritha Jyostna
Principal

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(SPONSORED BY THE EXHIBITION SOCIETY), TARNAKA, SECUNDERABAD.
AFFILIATED TO OSMANIA UNIVERSITY, APPROVED BY AICTE & PCI
ISO 9001: 2015 CERTIFIED INSTITUTION, NBA ACCREDITED B. PHARMACY COURSE

CERTIFICATE OF COMPLETION

This is presented to _Bommu Shivani_ for

successful completion of Value added course on

"PHARMACEUTICAL ANALYISIS FOR CLINICAL TRIALS"

Held from 17th January to 2nd February, 2022

T.Saritha Jyostna
Principal

Value added Course on "Bio-pharmaceutical Quality Assurance & Validation"

Course Assessment

Time: 10 mins   Marks: 10

Please tick the right answer:

1. **What is the primary objective of Good Manufacturing Practices (GMP) in pharmaceuticals?**
a) Increasing production output
b) Ensuring consistent quality and safety of medications
c) Minimizing operational costs
d) Enhancing marketing and brand image

2. **What are the four core principles of Quality Management Systems (QMS) in pharmaceuticals?**
a) Quality, Efficiency, Innovation, Sustainability
b) Quality, Risk Management, Continuous Improvement, Regulatory Compliance
c) Cost-effectiveness, Patient Satisfaction, Transparency, Ethical Marketing
d) Automation, Standardization, Environmental Protection, Data Security

3. **What type of document outlines standard procedures and policies for pharmaceutical manufacturing?**
a) Standard Operating Procedures (SOPs)
b) Batch Records
c) Quality Assurance Reports
d) Product Specifications

4. **How does Quality Risk Management (QRM) contribute to pharmaceutical safety?**
a) Reacting to product defects and recalls
b) Proactively identifying and minimizing potential risks associated with production
c) Investigating customer complaints
d) Training personnel on GMP regulations

5. **What is the key purpose of conducting internal audits in a pharmaceutical QMS?**
a) Identifying product defects and recalls
b) Evaluating system effectiveness and identifying areas for improvement
c) Training personnel on GMP regulations
d) Investigating customer complaints

6. **What type of validation study assesses the effectiveness of cleaning procedures in a pharmaceutical facility?**
a) Analytical method validation
b) Sterilization validation
c) Cleaning validation
d) Process validation

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(Sponsored by the Exhibition Society), Tarnaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

7. How does data integrity play a crucial role in pharmaceutical quality assurance?
a) Reducing costs
b) Improving marketing strategies
c) Guaranteeing the accuracy, reliability, and completeness of data
d) Expediting product launches

8. What are the main differences between batch release and stability testing of pharmaceutical products?
a) Batch release focuses on stability testing, while stability testing is done after batch release.
b) Stability testing measures product consistency, while batch release tests for impurities.
c) Batch release tests specific parameters before release, while stability testing assesses long-term product quality.
d) Both are unnecessary for ensuring product quality.

9. What are the potential consequences of non-compliance with GMP regulations in the pharmaceutical industry?
a) Increased marketing costs
b) Lost sales opportunities
c) Product recalls, regulatory penalties, and reputational damage
d) Minor production delays

10. What are some emerging trends in Bio-pharmaceutical Quality Assurance & Validation?
a) Increased reliance on paper-based records
b) Implementation of digital technologies like automation, artificial intelligence, and real-time monitoring
c) Reduced focus on risk management
d) Simplified validation processes

Feel free to adapt these questions based on the specific focus and content of your Value-added course.

Answers for the Multiple-Choice Questions:

Questions	1	2	3	4	5	6	7	8	9	10
Answers	b	c	b	b	b	b	b	b	b	b

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

(Sponsored by the Exhibition Society), Tarnaka, Secunderabad
Affiliated to Osmania University, Approved by AICTE & PCI
ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(SPONSORED BY THE EXHIBITION SOCIETY), TARNAKA, SECUNDERABAD.
AFFILIATED TO OSMANIA UNIVERSITY, APPROVED BY AICTE & PCI
ISO 9001: 2015 CERTIFIED INSTITUTION, NBA ACCREDITED B. PHARMACY COURSE

CERTIFICATE OF COMPLETION

This is presented to _Potta.Jhansi_ for successful completion of Value added course on

"BIOPHARMACEUTICAL QUALITY ASSURANCE & VALIDATION"

Held from 4th March to 23rd March, 2022

T.Saritha Jyostna
Principal

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA
(SPONSORED BY THE EXHIBITION SOCIETY), TARNAKA, SECUNDERABAD.
AFFILIATED TO OSMANIA UNIVERSITY, APPROVED BY AICTE & PCI
ISO 9001: 2015 CERTIFIED INSTITUTION, NBA ACCREDITED B. PHARMACY COURSE

CERTIFICATE OF COMPLETION

This is presented to _Miryala.Srilekha_ for successful completion of Value added course on

"BIOPHARMACEUTICAL QUALITY ASSURANCE & VALIDATION"

Held from 4th March to 23rd March, 2022

T.Saritha Jyostna
Principal

NPTEL CERTIFICATES FOR THE ACADEMIC YEAR 2021-22

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22CY06S33530569

To
ETABOINA LAXMI
8-2-269/19/609
INDRA NAGAR
HYDERABAD
TELANGANA - 500033
PH. NO :6281622789

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

ETABOINA LAXMI

for successfully completing the course

Biochemistry

with a consolidated score of **60** %

Online Assignments	20.1/25	Proctored Exam	40/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam

To validate and check scores: https://nptel.ac.in/noc

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: **NPTEL22CY06S33530603**

To
GAMPALA TEJASHREE
6-2-67/1 NEW-BHOIGUDA
NEW-BHOIGUDA SECUNDERABAD
SECUNDERABAD
TELANGANA - 500003
PH. NO :9059840522

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

Elite

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to

GAMPALA TEJASHREE

for successfully completing the course

Biochemistry

with a consolidated score of **69** %

Online Assignments	19.35/25	Proctored Exam	49.5/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

Roll No: **NPTEL22CY06S33531866**

To
SARAYU GUTHULA
H-NO-1-121/117C V.S.T COLONY
NACHARAM, HYDERABAD
HYDERABAD
TELANGANA - 500076
PH. NO :8143992428

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

SARAYU GUTHULA

for successfully completing the course

Biochemistry

with a consolidated score of **53** %

Online Assignments	20.25/25	Proctored Exam	33/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22CY06S43531380

To
HUSNA MAHVEEN
H.NO 22-5-675,CHOWK MAIDAN KHAN
ALIJAH KOTLA
HYDERABAD
TELANGANA - 500002
PH. NO :9347655808

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to

HUSNA MAHVEEN

for successfully completing the course

Biochemistry

with a consolidated score of **54** %

Online Assignments	18.81/25	Proctored Exam	35.21/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22CY06S43532627

To
JARUPULA DIVYA
H.NO.17-1-391/G/F/42, SINGARENI COLONY
SAIDABAD, HYDERABAD
HYDERABAD
TELANGANA - 500059
PH. NO :9949622537

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

JARUPULA DIVYA

for successfully completing the course

Biochemistry

with a consolidated score of **43** %

Online Assignments	12.72/25	Proctored Exam	30.62/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

Roll No:NPTEL22CY06S43532627

To validate and check scores: https://nptel.ac.in/noc

Roll No: NPTEL22CY06S33530088

To
RAKSHITHA
34-99, FL NO-102, 1ST FLOOR
RAGHURAM RESIDENCY, V V PURAM
HYDERABAD
TELANGANA - 500056
PH. NO :8106323216

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

RAKSHITHA

for successfully completing the course

Biochemistry

with a consolidated score of **56** %

Online Assignments	18.72/25	Proctored Exam	37.5/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

Roll No: NPTEL22CY06S33530247

To
MINNEKANTI JAHNAVI
GAYATRINAGAR MOULAALI
STREET NO 4
HYDERABAD
TELANGANA - 500040
PH. NO :7680061678

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to

MINNEKANTI JAHNAVI

for successfully completing the course

Biochemistry

with a consolidated score of **50** %

Online Assignments	20.44/25	Proctored Exam	30/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22CY06S33530148

To
NOMITHA MEDHA BYREDDY
H.NO.-12-5-149/14/6/2
VIJAYAPURI COLONY,AXIS BANK LANE,TARNAKA
SECUNDERABAD
TELANGANA - 500017
PH. NO :9573251612

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

Elite

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to

NOMITHA MEDHA BYREDDY

for successfully completing the course

Biochemistry

with a consolidated score of **63** %

Online Assignments	19.75/25	Proctored Exam	43.5/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

Roll No:NPTEL22CY06S33530148

To validate and check scores: https://nptel.ac.in/noc

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22CY06S43531203

To
POOSA HARINI
HNO 173 LALBAZAR
TRIMULGHERRY SECUNDERABAD
HYDERABAD
TELANGANA - 500015
PH. NO :6304478751

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

Elite

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to

POOSA HARINI

for successfully completing the course

Biochemistry

with a consolidated score of **70** %

Online Assignments	19.44/25	Proctored Exam	50.51/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22CY06S33530294

To
S RAVALIKA
18-3-463/1/58/1
SHIVAJINAGAR,RAJANNNABAOWLI
HYDERABAD
TELANGANA - 500053
PH. NO :8317605796

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to

S RAVALIKA

for successfully completing the course

Biochemistry

with a consolidated score of **53** %

Online Assignments	20.44/25	Proctored Exam	33/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

**Roll No: NPTEL22CY06S43530992**

To
SNEHA
1-8-215/28/29, TIRTH SHILA, FLAT 102
BHAGAVAN MAHAVEER ROAD, OLD BAZAR
SECUNDERABAD
TELANGANA - 500003
PH. NO :9448690244

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.
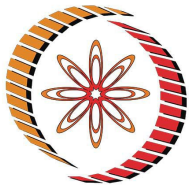
Elite

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to

SNEHA

for successfully completing the course

Biochemistry

with a consolidated score of **61** %

Online Assignments	20.03/25	Proctored Exam	41.33/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22CY06S33530140

To
V NIKITA SHREE
F3 SHIVA SAI APT 3 MAA FURNITURE LANE
CHANDRAGIRI COLONY (WEST), MALKAJIGIRI
HYDERABAD
TELENGANA - 500056
PH. NO :9392820887

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to

V NIKITA SHREE

for successfully completing the course

Biochemistry

with a consolidated score of   **49**   %

Online Assignments	18.5/25	Proctored Exam	30/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

Roll No: NPTEL22CY06S33530365

To
V SAI MALAVYA
VIJAYAPURI COLONY TARNAKA
12-5-31/32 S LALA GUDA ROAD SECUNDERABAD
SECUNDERABAD
TELANGANA - 500017
PH. NO :9381294761

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

Elite

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to

V SAI MALAVYA

for successfully completing the course

Biochemistry

with a consolidated score of **60** %

Online Assignments	19.53/25	Proctored Exam	40.5/75

Total number of candidates certified in this course: **394**

Prof. Jayanta Mukhopadhyay
Dean Outreach
IIT Kharagpur

Jan-Apr 2022
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam
FREE ONLINE EDUCATION
शिक्षित भारत, उन्नत भारत