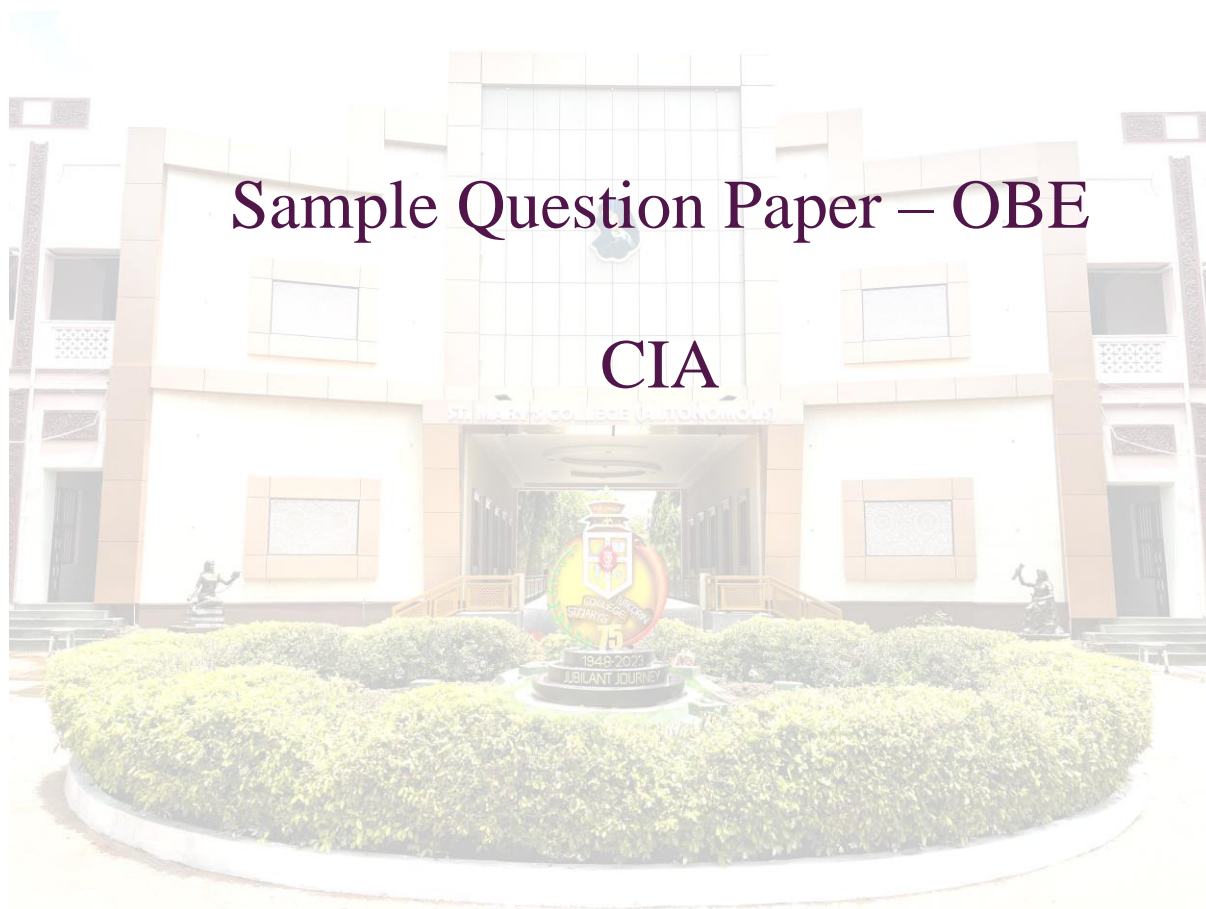




St. Mary's College (Autonomous)
Reaccredited with 'A+' Grade by NAAC (Cycle IV)
Thoothukudi



Criterion: II –Teaching Learning and Evolution
2.6: Student Performance and Learning Outcomes
Year: 2018-2023



St. Mary's College (Autonomous), Thoothukudi – 628 001

III B. A. History - Semester V

Core 3

History of Europe from A.D1453 to 17789 Sub. Code:18UHIC53

Date : 24.08.2022

Max. Marks: 30

Time : 1 hour

CIA - I August 2022

SECTION - A

(2x2=4)

I. Answer any TWO questions in about 50 words each:

1. Describe the achievements of Louis XI in France. (K1)
2. Write about the origin of Renaissance. (K1)
3. Estimate the contribution of Bartholomew Diaz. (K2)

SECTION - B

(2x5=10)

II. Answer the following questions in about 150 words each:

4. (a) Discuss the importance of Period of Transition. (K2)
(or)
(b) Explain the importance of Italian wars. (K2)
5. (a) Illustrate the contribution of Michelangelo to Renaissance paintings. (K2)
(or)
(b) Differentiate the paintings of Leonardo Da vinci and Raphael Sanzio. (K4)

SECTION - C

(2x8=16)

III. Answer any TWO in about 300 words each:

6. Analyse the various causes and effects of Geographical Discoveries. (K4)
7. Evaluate the rebirth of Greek and Latin literature during Renaissance. (K5)
8. Estimate the progress of science during Renaissance. (K5)

ST.MARY'S COLLEGE (Autonomous) – THOOTHUKUDI- 628 001

**I B.Sc. Botany – Semester I
Core I- Plant Diversity I Algae**

Date: 03.10.2022

Time: 9a.m. – 10a.m.

Course Code: 21UBOC11

Max.Marks:30

CIA III – October 2023

Section A (2 X 2 = 4)

Answer any Two in about 50 words each

1. Differentiate fragmentation and budding (K2)
2. Write any two algae as indicators of home sewage (K1)
3. Explain algal bioinoculants (K2)

Section B (2 X 5 = 10)

Answer the following questions choosing either (a) or (b) in about 150 words each

4. (a). Outline various types of vegetative reproduction in algae.(K4)

(OR)

- (b) Present the diplohaplontic life cycle with example (K3)

5. (a). Explain the role of algae in CO₂ sequestration. (K2)

(OR)

- (b). Present bioluminescence in algae. (K3)

Section C (2 X 8=16)

Answer any TWO in about 300 words each

6. Critique on the life history of *Gracilaria*. (K5)
7. Analyze phycoremediation in algae. (K4)
8. Critique the role of algae as pollution indicators. (K5)

St. Mary's College (Autonomous), Thoothukudi – 628001

I M.A. English Literature

Semester I

Core – IV

American Literature

Sub. Code: 21PENC14

Date: 04.11.2022

Time: 1 Hour

CIA III November 2022

Marks: 30

Section - A

(2x2=4)

Answer any TWO of the following in about 50 words each:

1. Describe how Arthur Miller reveals that individuals can be defined by a single event. (K1)
2. Recall what the narrator discovers on the surface of the wall in "The Black Cat." (K1)
3. Interpret Flannery O'Connor's reference in the first paragraph of the story "A Late Encounter with the Enemy" to the River Styx in Greek mythology. (K2)

Section - B

(2x5=10)

Answer the following choosing either 'a' or 'b' in about 150 words:

4. a) Investigate how Arthur Miller presents Willy Loman's home as a metaphor for his ambitions. (K4)

(Or)

- b) Analyse Edgar Allan Poe's portrayal of the ability of the human mind to assess itself in "The Black Cat." (K4)

5. a) Analyse the depiction of slavery in Randall's plantations as described in *The Underground Railroad*. (K4)

(Or)

- b) Appraise the character of Cora in *The Underground Railroad*. (K4)

Section - C

(2x8=16)

Answer any TWO of the following in about 400 words:

6. Judge Arthur Miller's exploration of Willy Loman's desperate quest for the American Dream which resembles a religious crusade in *Death of a Salesman*. (K5)
7. Validate Flannery O'Connor's use of the concept of history in "A Late Encounter with the Enemy." (K5)
8. Examine the life of the women belonging to the three different generations as portrayed by Colson Whitehead in *The Underground Railroad*. (K4)

St. Mary's College (Autonomous), Thoothukudi – 628 001

II M. A. History - Semester III

Core Elective II A

History of Modern West

Sub. Code: 21PHIE31

Date : 27.08.2022

Max. Marks: 30

Time : 1 hour

CIA - I August 2022

SECTION - A

(2x2=4)

I. Answer any TWO questions in about 50 words each:

1. Define Feudalism. (K1)
2. Write a note on Feudal Society. (K1)
3. Describe the origin of Renaissance. (K1)

SECTION - B

(2x5=10)

II. Answer the following questions in about 150 words each:

4. (a) Analyse the causes for the decline of Feudalism. (K4)
(or)
(b) Appraise the duties of Vassals in Feudalism. (K4)
5. (a) Illustrate the contribution of Leonardo Da Vinci to Renaissance paintings. (K2)
(or)
(b) Differentiate the paintings of Michelangelo and Raphael Sanzio. (K4)

SECTION - C

(2x8=16)

III. Answer any TWO in about 300 words each:

6. Estimate merits and demerits Feudalism. (K5)
7. Evaluate the rebirth of literature during Renaissance. (K5)
8. Estimate the progress of science during Renaissance. (K5)

ST. MARY'S COLLEGE (AUTONOMOUS) THOOTHUKUDI

III B.A English Literature (SSC)

Semester VI

Date: 19.03.2022

Core II – Women's Writing

Sub Code: 21UENC62

Time: 1 1/2 hours

CIA I – March 2022

Max: 40 Marks

Section – A

(5 X 2 = 10)

Answer any FIVE of the following in about 50 words each:

1. Discuss the major themes of the short story "Interpreter of Maladies." K2 (Un)
2. Explain the significance of symbols in the short story "Interpreter of Maladies."
K2 (Un)
3. Discuss the relationship of Anne Frank and her mother. K2 (Un)
4. Restate the importance of Anne Frank's diary. K2 (Un)
5. Explain the message of Maya Angelou's "Caged Bird." K2 (Un)
6. Discuss the tone of the poem "Caged Bird." K2 (Un)
7. List the name of the children of Sujatha. K2 (Un)

Section- B

(2 x 5 = 10)

Answer the following questions by choosing either (a) or (b) in about 150 words each:

8. a) Present the relationship of Mr. Das and Mrs. Das in the short story, "Interpreter of Maladies." K3 (Ap)

(or)

b) Present the restriction of freedom in the Secret Annex with reference to Anne Frank's *The Diary of a Young Girl*. K3 (Ap)

9. a) Compare and contrast "free bird" and "caged bird." K3 (Ap)

(or)

b) Present the character of Sujatha in *Mother of 1084*. K3 (Ap)

Section C

(2 x 10 = 20)

Answer any TWO of the following in about 400 words each:

10. a) Analyze the main message of “The Prevailing Opinion of a Sexual Character Discussed”

in Mary Wollstonecraft’s *A Vindication of the Rights of Woman*. K4 (An)

(or)

b) Examine the significance of the title of *The Dairy of a Young Girl*. K4 (An)

11. a) Critically analyze the poem “caged bird.” K5 (Ev)

(or)

b) Evaluate *Mother of 1084* as a saga of a bereaved mother. K5 (Ev)

Sample Question Paper OBE
ESE Questions

ST. MARY'S COLLEGE (Autonomous) – THOOTHUKUDI.
END SEMESTER EXAMINATION

III B.Sc. Botany and Zoology
Common Core 1 - Biotechnology Sub. Code: 18UBCC51
Semester V - November 2022

Time: 3 hours

Max. Marks: 75

(for those who joined in July 2018 and after)

Section A (10 x 1 = 10)

Answer all Questions

Choose the correct answer

1. _____ are small circular double stranded extra chromosomal DNA present in bacterial cell.
a. cosmid b. plasmid c. M13 vector d. phasmid
- 2 Which among the following is used in transient expression systems?
a. Agrobacterium b. Tobamo virus c. CaMV d. Gemini virus
3. Which among the following is not a step in PCR
a. Denaturation b. Annealing c. Extension d. Sublimation
4. Which among the following is not an application of cDNA library?
a. the production of new protein b. use to study gene regulatory elements
c. the production of modified proteins d. to determine tissue-specific expression of protein
5. The method used to deliver the genes directly into the nucleus of the cell using a micropipette is _____
a. transformation b. transduction c. transfection d. microinjection
6. Which of the following is not a source of stem cells?
a. sperm and eggs b. early embryos c. umbilical cord blood d. certain adult tissues
7. Ananda Chakraborty received the first U.S. patent for a GM entity. The entity was
a. The GloFish b. a transgenic mouse expressing the growth hormone gene
c. Cloned *E.coli* d. *Pseudomonas* engineered to degrade petroleum
8. After the fermentation process, penicillin is recovered as _____
a. Penicillin b. Sodium penicillin c. Calcium penicillin d. Potassium penicillin
9. Which one of the following is an example for live virus vaccine?
a. Vaccines for newcastle disease b. Recombivax HB
c. FMD vaccine d. Polyvalent vaccine

10. The Private Company involved in human genome sequencing parallel with HGP was ____
a. Roche b. Gilead c. Celera d. Genentech

Section B (5 x 2 = 20)

Answer any FIVE in about 50 words each

11. Name any two restriction enzymes and their recognition sites. K1 (Re)
12. List the features of a plasmid vector. K1 (Re)
13. Draw the structure of Ti plasmid and label its major segments? K1 (Re)
14. Differentiate cDNA and genomic DNA library. K2 (Un)
15. Define bioaugmentation. K1(Re)
16. Explain about interferons? K2 (Un)
17. Discuss - polyvalent vaccines? K2 (Un)

Section C (5 x 6 = 30)

Answer in about 200 words each choosing either (a) or (b)

18. (a) Summarize the salient features of pBR322 with a neat illustration. K2 (Un)
(or)
(b) Demonstrate the different types of restriction enzymes. K 3 (Ap)
19. (a) Explain the steps involved in bacterial transformation. K2 (Un)
(or)
(b) Briefly explain the retroviral method of gene delivery. K2 (Un)
20. (a) Discuss on various types of animal cell cultures and culture media? K2 (Un)
(or)
(b) Outline the various steps involved in plant tissue culture and describe. K4 (An)
21. (a) Explain role of genetically engineered microbes in human health care products. K2 (Un)
(or)
(b) Demonstrate the industrial production of penicillin. K3(Ap)
22. (a) Demonstrate the ex-vivo gene therapy with an example.K3(Ap)
(or)
(b) Categorize the potential benefits of HGP. K3 (An)

Section D (3 x 10 = 30)

Answer any THREE in about 400 words each:

23. Distinguish and describe various plant viruses with reference to their importance in gene transfer. K4 (An)
24. Compare and contrast the various hybridization techniques. K4 (An)
25. Embryonic stem cells are useful in the field of medicine justify with your answer. K5 (Ev)
26. Recommend the suitable biotechnological methods for sewage and waste water treatment and discuss. K5 (Ev)
27. Design and describe the methodology of DNA fingerprinting and its applications. K6 (Cr)

ST. MARY'S COLLEGE (Autonomous)-THOOTHUKUDI
END SEMESTER EXAMINATIONS

M.Sc. Botany

Core IV

Phytochemistry and Pharmacognosy

Sub. Code: 21PBOC14

Semester I – November 2022

(for those who joined in July 2021 and after)

Time: 3 Hours

Max.Marks.75

Answer all questions
Section A (10 x 1 = 10)

Choose the correct answer:

1. Flavonoides are biosynthetically derived from K1(Re)
(a) Shikimic acid Pathway (b) Mevalonic acid Pathway
(c) Acetate Pathway (d) None of the above
2. Which of the following saponin containing drug is used as sweetener? K1(Re)
(a) Liquorice (b) Ginseng (c) Brahmi (d) Fenugreek
3. Which sentence is true about resins? K1(Re)
(a) Resins are only found in nature. (b) They are soluble in water. (c) They are usually found in schizogen or schizolysigenous cavities or ducts. (d) They are insoluble in alcohol.
4. What do flavonoids (polyphenols), including isoflavones (phytoestrogens), inositol phosphates (phytates), lignans (phytoestrogens), isothiocyanates, indoles, phenols and sulphides and thiols, have in common? K1(Re)
(a) They are all sources of fibre (b) They are all derived from plant foods (c) They are all vitamins (d) They are all nutrients
5. What solvents are used to extract essential oils? K1(Re)
(a) petroleum (b) Ammonia (c) water (d) Double distilled water
6. IP commercialization can be done by K1(Re)
(a) Licensing (b) Assignment (c) Entrepreneurship (d) All the above
7. The study of crude drugs of natural origin is called K1(Re)
(a) Pharmacognosy (b) Pharmacology (c) Pharmacogenetics (d) Pharmaceutical
8. Traditional system of medicine practiced in India is K1(Re)
(a) Homeopathy (b) Ayurveda (c) Allopathy (d) Siddha
9. The fruit of Coriander is K1(Re)
(a) Cremocarp (b) Mesocarp (c) Drupe (d) Legume
10. The alkaloid drug vinblastine is marketed under the trade name K1(Re)
(a) Onconvin (b) Velban (c) Ominovin (d) Pinene

Section B (5x2=10)

Answer any FIVE in about 50 words each:

11. Define Glycosides and write any two properties. K1 (Re)
12. Differentiate primary and secondary metabolites. K2 (Un)
13. Write the classification of flavonoids. K1 (Re)

14. Write the biological sources and chemical constitution of lemon grass oil. K1 (Re)
15. Write the suitable examples bring out the morphological classification of crude drug K1 (Re)
16. Define crude drugs with an example. K1 (Re)
17. Summarize the therapeutic use of Aloe and Liquorice K2 (Un)

Section C (5x6=30)

Answer in about 200 words each choosing either (a) or (b)

18. (a) Classify glycosides according to aglycone with illustration. K3 (Ap)
or
(b) Explain the pharmacological and toxicological effects of terpenoids. K2 (Un)
19. (a) Compile the therapeutic applications of flavonoids. K3 (Ap)
or
(b) Summarize the medicinal uses of resins. K2 (Un)
20. (a) Distinguish the biological source, chemical constituents, properties, extraction and utilization of Vetiver oil and Lemon grass oil. K2 (Un)
or
(b) Discuss in Detail infusion and percolation methodology for natural drug. K2 (Un)
21. (a) Analyze the scope and importance of pharmacognosy? K4 (An)
or
(b) Demonstrate the method of collection, processing and storage of crude drugs. K3 (Ap)
22. (a) Discuss the therapeutic use of Senna and Vinca. K2 (Un)
or
(c) Explain about a drug Coriander. K2(Un)

Section D (3x10=30)

Answer any THREE in about 500 words each:

23. Evaluate the preliminary phytochemical screening of plant metabolites. K5 (Ev)
24. Justify-Flavonoids are secondary metabolites. K5 (Ev)
25. Estimate the Legislative and Practical Options for Protecting Traditional Medical plants. K5 (Ev)
26. Examine the classification of crude drugs with illustration. K4 (An)
27. Compare and Contrast Aloe and Pepper. K4 (An)

ST. MARY'S COLLEGE (Autonomous)-THOOTHUKUDI
END SEMESTER EXAMINATIONS

M.Sc. Botany

Core VII

Taxonomy of Angiosperms

Sub. Code: 21PBOC32

Semester I – November 2022

(for those who joined in July 2021 and after)

Time: 3 Hours

Max.Marks.75

Answer all questions
Section A (10 x 1 = 10)

Choose the correct answer:

1. In the rules of ICBN, which section includes discussion about names of different ranks of taxa? K1(Re)
(a) Section 1, 2 (b) Section 2, 1 (c) Section 4, 1 (d) **Section 2 to 4**
2. The type of key on which choice is made only between two alternate couplet are called---
----- K1(Re)
(a) **Dichotomous** (b) numerical (c) punched-card (d) circular-diagram
3. Arrange in the correct order.
1) Class
2) Kingdom
3) Phylum
4) Order
5) Genus
6) Family
7) Species K1(Re)

(a) 6, 2, 4, 1, 5, 7, 3 . (b) 7, 1, 3, 4, 5, 6, 1 (c) 1, 2, 3, 4, 5, 6, 7 (d) **2, 3, 1, 4, 6, 5, 7**
4. Phenetic classification is based on K2 (Un)
(a) The ancestral lineage of existing organisms (b) **Observable characteristics of existing entities** (c) Dendrograms based on DNA characteristics (d) Sexual characteristics
5. Tepenoids have been extensively used in the chemotaxonomy of----- K1(Re)
(a) **Citrus plants** (b) Hordeum plants (c) Papaver plants (d) Strychnos plants
6. Primary function of Botanical Survey of India is K1(Re)
(a) Ex-situ conservation of critically threatened species in botanical gardens.
(b) Survey and documentation of traditional knowledge (ethno-botany) associated with plants.
(c) Develop National database of Indian plants, including herbarium and live specimens, botanical paintings and illustrations, etc. (d) **All the above**
7. *Zizyphus jujuba* belongs to the family
(a) Tiliaceae (b) Rhamnaceae (c) Fabaceae (d) Sapotaceae
8. Odd sepal is anterior in the family
(a) Ranunculaceae (b) Fabaceae (c) Capparidaceae (d) Sapindaceae
(c) *Vitex, Solanum, Bignonia* (d) *Millingtonia, Lantana, Striga*

9. Find out the most suitable pair

- (a) *Cyperus* – Spike (b) *Casuarina* – Verticillaster
(c) *Tradescantia* – Capitulum (d) *Calanthe* – helicoid cyme

10. Systematically *Cyperus* is placed under the class monocots what would be the series to which it belongs

- (a) Thalamiflorae (b) Unisexuales (c) Glumaceae (d) Nudiflorae

Section B (5x2=10)

Answer any FIVE in about 50 words each:

11. Define botanical nomenclature. K1 (Re)
12. Differentiate lectotype and neotype. K2 (Un)
13. List out the ranks in the hierarchical system. K1 (Re)
14. Write the importance of cytology in plant classification K1 (Re)
15. Write notes on cladistics. K1 (Re)
16. Write the Systematic position of Verbenaceae K1 (Re)
17. Explain the Androecium in Commelinaceae K2 (Un)

Section C (5x6=30)

Answer in about 200 words each choosing either (a) or (b)

18. (a) Compile the ICN principles. K3 (Ap)
or
(b) Explain the use of floras and manuals. K2 (Un)
19. (a) Demonstrate ranks in the hierarchical system. K3 (Ap)
or
(b) Compile the salient features of Linnaeus classification system. K3 (Ap)
20. (a) Distinguish the chemotaxonomy and cytotaxonomy. K2 (Un)
or
(b) Discuss in detail the role of Botanical Survey of India. K2 (Un)
21. (a) Explain the floral characters of Rhamnaceae. K2 (Un)
(or)
(b) Describe the corolla and pollination mechanism in Fabaceae. K2 (Un)
22. (a) Analyse the vegetative and floral characters of Orchidaceae. K4 (An)
(or)
(b) Differentiate the flowers of Boraginaceae and Bignoniaceae. K4 (An)

Section D (3x10=30)

Answer any THREE in about 500 words each:

23. Construct dichotomous keys by using guidelines. K4 (An)
24. Angiosperm Phylogeny Group (IV) classification reflects the new knowledge about plant relationships discovered through phylogenetic studies. Justify with your answer. K5 (Ev)
25. Evaluate the technique and steps involved in herbarium preparation. K5 (Ev)
26. Analyse the vegetative and floral characters of Asteraceae. K4 (An)
27. Compare the families Solanaceae and Scrophulariaceae. K4 (An)

