



**MODEL EXAM - JUNE 2022  
LATEX THEORY**

Class	: III B.Sc. Maths	Marks	: 75
Paper Code	: 19UMAS05	Time	: 3Hrs

**Section – A**

**I. Answer ALL the questions: (15x1=15)**

- Which is correct syntax for Latex?  
a)  $\backslash begin... \backslash stop$  b)  $\backslash begin\{...\}\backslash end\{...\}$  c)  $\backslash start\backslash stop\{...\}$  d)  $\backslash start\{...\}\backslash end\{...\}$
- Write the correct syntax for latex table  
a)  $|begin\{table\}$  b)  $|start\{tabular\}$  c)  $|open\{table\}$  d)  $|begin\{tabular\}$
- The syntax for latex text color is \_\_\_\_\_  
a)  $\backslash begin\{colour\}\{text\}$  b)  $set\{colour\}$  c)  $open\{colour\}$  d)  $\backslash\{colour\}$
- Correct syntax for inline formula  
a)  $\$f(x) = x^2$  b)  $\{f(x) = x^2\}$  c)  $[f(x) = x^2]$  d)  $(f(x) = x^2)$
- $\backslash cdot$  means \_\_\_\_\_ a)  $\cdot$  b)  $\dots$  c)  $,$  d)  $\therefore$
- The syntax for square root of 2 is \_\_\_\_\_  
a)  $\$\sqrt{2}$  b)  $\$\sqrt[2]{2}$  c)  $\$\sqrt{2}$  d)  $\$\sqrt{2}$
- The kronecker delta value is one when  $i =$  \_\_\_\_\_  
a)  $= j$  b)  $< j$  c)  $> j$  d)  $\infty$
- $\backslash bin\{5\}\{2\}$  stands for \_\_\_\_ a)  ${}^5C_2$  b)  ${}^5C_2$  c)  ${}^5C_2$  d)  ${}^5C_2$
- Who is the father of Latex?  
a) Leslie b) Lamport b) Leslie c) c. Lamport d) R. Lamport
- How to write percentage symbol in latex  
a)  $\backslash\%$  b)  $\%$  c)  $\backslash\%$  d)  $//\%$
- The common error for equation environment is \_\_\_\_\_  
a) Blank line b) spacing c) Dash d) None
- The syntax for stop the latex program is \_\_\_\_\_  
a) x b) q c) t d) s
- The symbol run quietly in a latex program is \_\_\_\_\_  
a) q b) g c) k d) None
- \_\_\_\_\_ is giving a slightly more helpful error messages.  
a) h b) r c) b d) None

15. The example for a document class is \_\_\_\_\_  
a) Article b) Word c) Sentence d) None

**Section – B**

**II. Answer any TWO questions: (2x5=10)**

- Derive type style and environments lists.
- Write brief notes on Sample document and Key concepts
- Explain the Centering and how to form the Tables in latex.
- Describe the Typesetting Mathematics with an example.
- Write brief notes on Customized commands and Theorem like Environments.

**Section – C**

**III. Answer ALL the questions: (5x10=50)**

- a) Write brief notes on Document classes and the overall structure  
(or)  
b) Explain Math Miscellany
- a) Derive Sectioning commands.  
(or)  
b) Write the commands for Bold Math and symbols of Number sets.
- a) Explain Binomial coefficient.  
(or)  
b) Derive Spacing, and Accented character.
- a) Explain Pinpointing error and Warning messages  
(or)  
b) Write brief notes on Dashes and Hyphens in Latex
- a) Describe Quotation mark and Trouble shooting in Latex  
(or)  
b) Write brief notes on Verbatim and Spacing in Latex

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**MODEL EXAMINATION – JUNE 2022**

**INDIRECT TAXES**

**Class : II M.Com. Marks: 75**

**Paper Code : 19PCM13 Time: 3 Hrs**

**SECTION – A**

**I. Choose the correct answer: (15X1=15)**

- Which one of the following is an indirect tax?  
a) Income tax b) Wealth tax  
c) Excise duty d) Corporation tax
- Provision for taxation is a part of \_\_\_\_\_.  
a) Operating activities b) Investing activities  
c) Financing activities d) None of these
- The main objective of the federal system is to \_\_\_\_\_.  
a) Accommodate regional diversity .  
b) Promote diversity .  
c) Make centre more powerful .  
d) Distribute finances to different organs .

**4. MODVAT is**

- Modern Value Added Tax
- Modified Value Added Tax
- Monopoly Value Added Tax
- Method of Deduction of VAT

**5. Excise Duty are levied on \_\_\_\_\_.**

- Income of the individual
- Export and import of goods
- Incomes of the corporate
- Production of goods

**6. What is the standard VAT rate generally payable on most consumer good?**

- 1%
- 4%
- 12.5%
- 15%

**7. Customs Act, 1962 extends to**

- Whole of India excluding Jammu & Kashmir
- Whole of India
- Whole of India excluding Jammu & Kashmir and Union Territories
- Whole of India excluding Jammu & Kashmir and Special Economic Zones

**8. Custom as a source has a very inferior place in the \_\_\_\_\_.**

- Hindu law
- Judicial decision
- Criminal law
- Mohammedan law

**9. Import and export are the two sides of \_\_\_\_\_.**

- Market equilibrium
- International trade
- Global currency valuations
- Balance of payments

**10. Central Sales Tax is \_\_\_\_\_**

- Fixed to 4%
- Fixed to 11%
- Various from 4% to 10%
- None of these

**11. International trade and domestic trade differ because of**

- Different government policies
- Immobility of factors
- Trade restrictions
- All of the above

**12. What are the taxes levied on an intra-State Supply?**

- CGST
- SGST \*
- CGST and SGST
- IGST

**13. Which of the following taxes have been subsumed in GST?**

- Central sales tax
- Central excise duty
- VAT
- All of the above

**14. GST was implemented in India from**

- 1st January 2017
- 1st April 2017
- 1st March 2017
- 1st July 2017

**15. The recommendation of the GST council will be**

- Mandatory
- Only Advisory power
- Mandatory and sometimes Advisory
- Mandatory on states only

**SECTION – B**

**II. Answer any TWO questions: (2X5=10)**

**16. State the salient features of indirect taxes.**

**17. Distinguish between excise duty and sales tax.**

**18. Briefly explain prohibited items of import and export**

**19. Write short a note on inter-state trade.**

**20. What are the objectives of GST?**

**SECTION – C**

**III. Answer ALL the questions: (5X10=50)**

**21. a) Explicate the merits and demerits of indirect taxes. (or)**

**b) Distinguish between direct taxes and indirect taxes.**

**22. a) Explain various kinds of excise duties. (or)**

**b) Differentiate between MODVAT and CENVAT.**

**23. a) Elucidate the various types of customs duty. (or)**

**b) What are the exemptions that can be granted within the customs act?**

**24. a) State the salient features of CST Act. (or)**

**b) Discriminate between inter-state sale and intra-state sale.**

**25. a) Types of GST.-Discuss in detail. (or)**

**b) List out the merits and demerits of GST.**

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## MODEL EXAM – JUNE 2022 GRAPH THEORY

CLASS : II - M.Sc. (Mathematics)  
PAPER CODE : 19PMA14

MARKS : 75  
TIME : 3 Hrs

### Part – A

- I. Answer ALL the questions (15X1=15)
- A set of two or more edges of a graph  $G$  is called ----- if they have same pair of distinct ends.  
a) Parallel edges b) adjacent edges c) simple d) unparallel
  - A simple graph with  $n$  vertices can have atmost ..... edges.  
a)  $n$  b)  $n-1$  c)  $n(n+1)/2$  d)  $n(n-1)/2$
  - A graph is called  $k$ - regular, if every vertex of  $G$  has degree.....  
a)  $k$  b)  $k-1$  c)  $k+1$  d)  $0$
  - If  $G$  is trivial then the vertex connectivity of  $G$  is.....  
a)  $0$  b)  $1$  c)  $2$  d)  $4$
  - A graph  $G$  is  $r$ - connected if.....  
a)  $K(G) \leq r$  b)  $K(G) = r$  c)  $k(G) \leq r$  d)  $K(G) = 0$
  - An  $M$ - alternating path in  $G$  is a path whose edges alternate between.....  
a)  $E$  and  $M$  b)  $E/M$  and  $M$  c)  $M/M$  d)  $E/M$  and  $E$
  - Konigs Berge bridge problem has..... solution.  
a) no solution b) one solution c) more than one solution.
  - A covering  $K$  is minimum, if there is no covering  $K^1$  of  $G$ , such that.....  
a)  $|K^1| \leq |K|$  b)  $|K^1| \geq |K|$  c)  $|K^1| \neq |K|$  d)  $|K^1| = |K|$
  - For any graph  $G$ , we have.....  
a)  $\Psi(G) \geq 1 + \Delta(G)$  b)  $\Psi(G) \leq 1 + \Delta(G)$   
c)  $\Psi(G) = 1 + \Delta(G)$  d)  $\Psi(G) \neq 1 + \Delta(G)$
  - A graph is said to be a Class 1 graph, if.....  
a)  $\Psi^1 = 1 + \Delta$  b)  $\Psi^1 = 1 - \Delta$  c)  $\Psi^1 \neq 1 + \Delta$  d)  $\Psi^1 \neq 1 - \Delta$
  - If  $G$  is Hamiltonian, then prove that for every nonempty proper subset  $S$ ,  
 $|\omega(G-S)| \dots \dots |S|$ .  
a) less than b) less than or equal c) greater than d) greater than or equal
  - A graph  $G$  is said to be a critical if .....for every proper subgraph of  $G$ .  
a)  $\Psi(H) \geq \Psi(G)$  b)  $\Psi(H) > \Psi(G)$  c)  $\Psi(H) < \Psi(G)$  d)  $\Psi(H) = \Psi(G)$ .

- A planar graph is self dual if.....  
a)  $G \approx G^*$  b)  $G \leq G^*$  c)  $G \geq G^*$  d)  $G \approx G$
- Heawood Five-color theorem, graph  $G$  is.....  
a) 5- colourable b) 6- colourable  
c) 5- not colourable d) 6- not colourable
- A graph  $G$  is a set of independent edges then  $G$  is said to be.....  
a) Matching b) coloring c) covering d) saturated

### Part – B

II. Answer ANY TWO questions: (2X5=10)

- If  $G$  is simple and  $\delta \geq \frac{n}{2}$ , then prove that  $G$  is connected.
- Show that a graph is Eulerian iff each edge  $e$  of  $G$  belongs to an odd number of cycles of  $G$ .
- A matching  $M$  of a graph  $G$  is maximum iff  $G$  has no  $M$ - augmenting path.
- Show that in a critical graph  $G$ , no vertex cut is a clique.
- State and prove Euler formula and Herschel graph  $G$  is non Hamiltonian.

### Part – C

III. Answer ALL the questions: (5X10=50)

- Show that  $G$  is Bipartite iff it contains no odd cycle.  
(or)  
b) Prove that the number of edges of a simple graph with  $\omega$  components cannot exceed  $\frac{(n-\omega)(n-\omega+1)}{2}$ .
- State and prove Cayley theorem.  
(or)  
b) Prove that for any loop less connected graph  $G$ ,  
 $k(G) \leq \lambda(G) \leq \delta(G)$  and Whitney theorem.
- State and prove Tutte 1- factor theorem.  
(or)  
b) (i) Prove that for any graph  $G$  for which  $\delta > 0$ ,  $\alpha' + \beta' = n$ .  
(ii) If  $G$  is a graph, then prove that  $Cl(G)$  is well defined.
- If a connected graph  $G$  is neither an odd cycle nor a complete graph, then prove that  $\Psi(G) \leq \Delta(G)$ .  
(or)  
b) If  $G$  is critical graph, then prove that  $\delta \geq K-1$  and  $\chi \leq 1 + \Delta$ .
- State and prove that Heawood Five-color theorem.  
(or)  
b) Prove that a graph is planar iff it is embeddable on a sphere.



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## MODEL EXAMINATION – JUNE 2022 MULTIMEDIA AND ITS APPLICATIONS

Class : III BCA Marks: 75  
Paper Code : 19UCAE04 Time : 2 Hrs

### SECTION – A

I. Choose the correct answer. (15 x 1 = 15)

- Moving picture experts group(MPEG) is used to compress.
  - Frames
  - Images
  - Audio
  - Video
- The MIDI standard specifies how many channels?
  - 16
  - 24
  - 32
  - 40
- MP3 is in which of the following MPEG standards?
  - MPEG1
  - MPEG2
  - MPEG3
  - MPEG21
- Rich text is known as
  - Un-formatted text
  - Formatted text
  - Hypertext
  - None of these
- Two parts of Morphing algorithms are
  - Warp & Tweening
  - Tweening & Wrap
  - Wrap & Dissolve
  - Tweening & Dissolve

6. A good example of hypermedia is

- The internet
- Level1 video disc
- Audiotape
- Videotape

7. Which of the file extension would be used quick time movie?

- AVI
- MPG
- MOV
- SGI

8. Example of analog to analog conversion is \_\_\_\_\_.

- Radio
- Video
- Internet
- All of the above

9. Parameter that refers to recording and broadcasting of picture is \_\_\_\_\_.

- Text
- Video
- Image
- Audio

10. Which files creates a perfect reproduction of the original images?

- Shockwave
- NX view
- GIF
- JPG

11. A series of slides displayed in a particular sequence is called

- Place holder
- Template
- Layout
- Slide show

12. One of the disadvantages of multimedia is

- Cost
- Usability
- Adaptability
- Relativity

13. A smaller version of an image is called a

- Clipart
- Bitmap
- PNG
- Thumbnail

14. A typical CD-R disc can hold approximately.

- 200 MB
- 700 MB
- 500 MB
- 100 MB

15. A type of virtual reality environment in which subjects are visually isolated from the red environment is called \_\_\_\_\_.

- Immersive
- Semi immersive
- Non immersive
- Augmented

### SECTION - B

II. Answer any TWO questions. (2 x 5 = 10)

16. Explain the uses of cell animation.

17. Differentiate between MIDI vs. Digital Audio.

18. Elucidate the animation techniques.

19. Describe multimedia project estimation.

20. Which are the hardware needs of multimedia?

### SECTION – C

III. Answer ALL the questions. (5 x10 = 50)

21. a) Elucidate use of text in multimedia.

- Write short notes Hypermedia structures.

22. a) Describe the various image file formats.

- What is vaughan's law in multimedia minimums?

23. a) How to create animation? Give an example.

- Who are playing the role in multimedia skill?

24. a) Illustrate designing and producing.

- Examine painting and drawing tools.

25.a) Explain the multimedia system sound with examples.

- Detail about intangibles in multimedia.

**MODEL EXAMINATION – JUNE 2022****PROGRAMMING IN C++****Class : I BCA****Marks : 75****Paper Code : 21UCA02****Time : 3 Hrs****SECTION – A****Answer all the questions: (15 X 1 =15)**

1. Which was the first purely object oriented programming language developed?

- a) Kotlin  
b) Smalltalk  
c) Java  
d) C++

2. Which of the following keyword supports dynamic method resolution?

- a) Abstract  
b) Virtual  
c) Dynamic  
d) Typified

3. Value of a in  $a = (b = 5, b + 5)$ ; is

- a) Junkvalue  
b) Syntax error  
c) 5  
d) 10

4. Constructor is executed when \_\_\_\_\_.

- a) A class is declared  
b) An object is created  
c) An object is used  
d) An object is goes out of scope

5. Which operator cannot be overloaded? the function?

- a) +  
b) ::  
c) -  
d) \*

6. Which of the following is not one of the sizes of the floating point types?

- a) Short float  
b) Float  
c) Long double  
d) Double

7. The operator used for dereferencing or indirection is \_\_\_\_\_.

- a) \*  
b) &  
c) ->  
d) -->>

8. When the inheritance is private, the private methods in the base class are \_\_\_\_\_ in derived class.

- a) Inaccessible  
b) Accessible  
c) Protected  
d) Public

9. Where does the abstract class is used?

- a) Base class  
b) Derived class  
c) Both a & b  
d) Virtual class

10. Which of the following is correct way to declare a pointer?

- a) int \*ptr  
b) int &ptr  
c) int ptr  
d) All the above

11. Where the virtual function should be defined?

- a) Base class  
b) Derived class  
c) Constructor  
d) Destructor

12. Which of the following header file does not exist?

- a) <iostream>  
b) <string>  
c) <sstring>  
d) <sstream>

13. Which of these keywords is not a part of exception handling?

- a) Try  
b) Finally  
c) Thrown  
d) Catch

14. What is the validity of template parameters?

- a) Inside that block only  
b) Inside the class  
c) Whole program  
d) Main class

15. What does the function objects implement?

- a) operator  
b) operator()  
c) operand  
d) operand<>

**SECTION – B****Answer any two questions (5 X 2 = 10)**

16. Discuss about inline function.

17. Write a short note on friendly function.

18. Explain operator overloading.

19. Discuss about pointer with example.

20. Explain binary and ASCII files.

**SECTION – C****Answer all the questions (5 X 10 = 50)**

21. a) Explain the control structures of C++.

(or)

b) Elaborate function overloading.

22. a) Describe briefly about constructor and destructor with an example program.

(or)

b) Discuss about static member function.

23. a) Discuss about the types of inheritances with suitable example.

(or)

b) Elaborate abstract class.

24. a) Describe the array of pointer.

(or)

b) Explicate virtual functions.

25. a) Explain the syntax of specifying exceptions handling in c++.

(or)

b) Write a short note on function templates.



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**LANGUAGE AND LINGUISTICS**

**MODEL EXAM – JUNE- 2022**

**Class: I.M.A.ENGLISH**

**Marks: 75**

**Paper Code: 21PEN07**

**Time : 3Hrs**

**SECTION - A**

**I. Answer ALL the questions (15x1=15)**

1. Semantics deals with-----  
a. meaning b. syntax c. discourse d. sound
2. English belongs to ----- languages  
a. G6 b. G7 c. G8 d. G5
3. 'beautiful house' is an example for ----collocation  
a. Adj+Adj b. Adj+Nn c. Adj+Adv d. Nn+Nn

4. The basic sound unit is -----

- a. phoneme b. morpheme c. lexis d. word
5. British and American English are --- varieties  
a. regional b. national c. global d. dialectic

6. ----English is the International variety of English

- a. Good b. Normal c. Indian d. Neutral

7. Which of these words best describes the focus of Pragmatics?

- a. Sense b. choice c. Structure d. syntax

8. ----represents Maxim of quantity

- a. Amount of information b. True information  
c. Relevance d. Ambiguity

9. Which one is not a constitute of speech act

- a. Speaker b. hearer c. utterance d. medium

10. Tautology stands for a statement to be

- a. invariably false b. invariably true  
c. synonymous d. contradictory

11. Which one is not a branch of linguistics?

- a) Psycholinguistics  
b) Sociolinguistics  
c) Anthropological Linguistics  
d) Diachronic study
12. Studying internal structures of words  
a.Morphology b.Phonetics c.Syntax d.Lexis
13. ---is a variety of language used by one individual speaker

- a.Isogloss b.Dialect c.Idiolect d.Semantics

14. In linguistics, it is a variety of language used for a particular purpose or in a particular social setting.

- a. Register b. Diatype c. Dialect d. Creole

15. It is evident in a literary piece through the use of words or phrases to create mental images for the reader.

- a.Imagery b.Internal Rhymec c. Juxtaposition  
d. Malapropism

**SECTION – B**

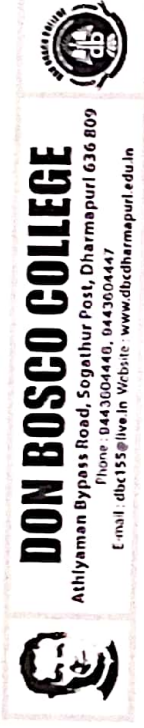
**II. Answer any TWO of the following: (2x5=10)**

16. Give a short description of Psycholinguistics.
17. Present the concept of Socio Linguistics.
18. Write the various forms of deixis.
19. Write a short paragraph about Applied Linguistics
20. What is Language and Literature? Explain.

**SECTION – C**

**III. Answer the following: (5x10=50)**

21. a. Write about the emergence of Pragmatics  
(or)  
b. Critically analyse the development of Gesture, Sign, Words, Speech and Writing.
22. a. Elaborate on various Branches of Linguistics.  
(or)  
b. Attempt an essay on the Theories of Semantics.
23. a. Elaborate on Deixis.  
(or)  
b. Write in detail the Varieties of English.
24. a. What are the Branches of Linguistics?  
(or)  
b. Bring out the difference between Language and Literature.
25. a. What are the different Narration Techniques in Discourse? Elaborate.  
(or)  
b. Elaborate on Stylistics.



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**MODEL EXAMINATION – JUNE - 2022**  
**SBEC - I**

**CLASS : II B.Sc., MATHS**  
**PAPER CODE : 19UMAS01**

**MARKS: 75**  
**TIME :3Hrs**

**SECTION – A**

**I. Answer all the questions:**

**(15 × 1 = 15)**

- An athlete runs 200 meters race in 24 seconds. His speed is---  
(a) 20 km/hr (b) 24 km/hr (c) 28.5 km/hr (d) 30 km/hr
- A person crosses a 600m long street in 5 minutes. What is his speed in km per hour?  
(a) 3.6 (b) 7.2 (c) 8.4 (d) 10
- A car is running at a speed of 108kmph. What distance will it cover in 15 seconds?  
(a) 45m (b) 55m (c) 65m (d) none of these
- A truck covers a distance of 550m in 1 minute where as a bus covers a distance of 33kms in 45minutes. The ratio of their speeds is ---  
(a) 3:4 (b) 4:3 (c) 3:5 (d) 50:3
- A train moves with a speed of 108kmph. Its speed in meters per second is---  
(a) 10.8 (b) 18 (c) 30 (d) 38.8
- A speed of 14 meters per second is the same as ----  
(a) 28 kmph (b) 46.6 km/hr (c) 50.4 km/hr (d) 70 km/hr
- In what time will a train 100 meters long cross a electric pole, if its speed be 144km/hr?  
(a) 2.5 seconds (b) 4.25 seconds (c) 5 seconds (d) 12.5 seconds
- A train 280 m long, running with a speed of 63 km/hr will pass a tree in ---  
(a) 15 sec (b) 16 sec (c) 18 sec (d) 20 sec
- A does a work in 10 days and B does the same work in 15 days. In how many days they together will do the same work?  
(a) 5 days (b) 6 days (c) 8 days (d) 9 days
- In one hour, a boat goes 11km along the stream and 5 km against the stream. The speed of the boat in still water (in km/hr) is---  
(a) 3 (b) 5 (c) 8 (d) 9
- It was Sunday on Jan 1, 2006. What was the day of the week Jan 1, 2010?  
(a) Sunday (b) Saturday (c) Friday (d) Wednesday
- Today is Monday. After 61 days, it will be  
(a) Tuesday (b) Saturday (c) Thursday (d) Wednesday
- An accurate clock shows 8 o' clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 o' clock in the afternoon?  
(a) 144 degree (b) 150 degree (c) 168 degree (d) 180 degree
- A person crosses a 600m long street in 5 minutes. What is his speed in km per hour?  
(a) 3.6 (b) 7.2 (c) 8.4 (d)10
- If a person walks at 14 kmph instead of 10 kmph, he would have walked 20 km more. The actual distance travelled by him is  
(a) 50 km (b) 56 km (c) 70 km (d) 80 km

## SECTION – B

### II. Answer any TWO questions:

$$(2 \times 5 = 10)$$

16. If 9 engines consume 24 metric tones of coal, when each is working 8 hours a day, how much coal will be required for 8 engines, each running 13 hours a day, it being given that 3 engines of former type consume as much as 4 engines of latter type?
17. An aero plane flies along the four sides of a square at the speeds of 200, 400, 600 and 800 kmph. Find the average speed of the plane around the field.
18. Two trains 137 m and 163 m in length are running towards each other on parallel line, one at rate of 42 km/hr & another at 48 km/hr. In what time will they clear of each other from the moment they meet?
19. In a stream running at 2 km/hr, a motorboat goes 6 km upstream and back again to the starting point in 33 minutes. Find the speed of the motorboat is till water.
20. The minute hand of a clock overtakes the hour hand at interval of 65 minutes of the correct time. How much a day does the clock gain or loss?

## SECTION – C

### III. Answer ALL the questions:

$$(5 \times 10 = 50)$$

21. (a) 45 men can complete a work in 16 days. Six days after they started working, 30 more men joined them. How many days will they now take to complete the remaining work?  
(or)
- (b) A contract is to be completed in 46 days and 117 men were set to work, each working 8 hours a day, it being given that 3 engines of former type consume as much as 4 engines of latter type?
22. (a) A goods train leaves a station at a certain time and at a fixed speed. After 6 hours, an express train leaves the same station and moves in the same direction at a uniform speed of 90 kmph. This train catches up the goods train in 4 hrs. Find the speed of the goods train.  
(or)
- (b) I walk a certain distance and ride back taking a total time of 37 minutes. I could walk both ways in 55 minutes. How long would it take me to ride both ways?
23. (a) A train running at 54 kmph takes 20 seconds to pass a platform. Next it takes 12 seconds to pass a man walking at 6 kmph in the same direction in which the train is going. Find the length of the train and length of the platform.  
(or)
- (b) A man sitting in a train which is travelling at 50 kmph observes that a goods train, travelling in opposite direction, takes 9 seconds to pass him. If the goods train is 280 metres long, find its speed.
24. (a) There is a road beside a river. Two friends started from a place A, moved to a temple situated at another place B and then returned to A again. One of them moves on a cycle at a speed of 12 km/hr, while the other sails on a boat at a speed of 10 kmph. If the river flows at the speed of 4 kmph, which of the two friends will return to place A first?  
(or)
- (b) A man can row 40 km upstream and 55 km downstream in 13 hours. Also he can row 30 km upstream and 44 km downstream in 10 hours. Find the speed of the man in still water and the speed of the current.
25. (a) (i) Prove that the calendar for the year 2003 will serve for the year 2014?  
(ii) On what dates of March 2005 did Friday fall?  
(or)
- (b) A clock is set right at 8 a.m. The clock gains 10 minutes in 24 hours. What will be the true time when the clock indicates 1 p.m. on the following day?  
\*\*\*\*\*





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**MODEL EXAMINATION - 2022  
RELATIONAL DATABASE  
MANAGEMENT SYSTEM**

**Class : II B.Sc., CS A & B/II BCA Marks : 75**

**Paper Code : 21UCS05 Time : 3 Hrs**

**SECTION - A**

**I. Multiple choice questions. (15 x 1 = 15)**

- Who has invented Relational Model?  
A. Thomas Jefferson B. Edgar F. Codd  
C. Edgar Deny D. Denis Ritchie
- Choose the view that indicates how the end user view the data.  
A. Internal View B. Conceptual View  
C. External View D. All of the above
- Existence of same data in more than one cells of the same attribute is called as \_\_\_\_\_.  
A. Omni present B. Data Redundancy  
C. Dependency D. Anomalies
- A Primary Key is a combination of one or more attributes

of the table. In that case, primary key could be selected--  
--.

- candidate key B. secondary key  
C. compound key D. composite key
- Identify the primary key -----.  
A. Name B. Place  
C. Id D. District
- The ----- cannot be taken as a primary key?  
A. Id B. Register number  
C. Dept\_id D. Street
- A property of entire relation, rather than of individual tuple is known as-----  
A. Attribute B. Tuple  
C. Domain D. Key

8. When a relation in the relational model is not in appropriate normal form, then the -----of a relation is required.

- Composition B. Decomposition  
C. Analyzing D. None of the above
- Find the term referred as tuple in the table-----.  
A. Column B. Row  
C. Domain D. Relation

10. The maximum number of super keys for the relation schema R (E,F,G,H) with E as the key is-----.

- 5 B. 6  
C. 8 D. 10

11. The functional dependency will occur on

- 1 NF B. 2 NF  
C. 3 NF D. None of the above

12. Which of the following is NOT a super key in a relational schema with attributes V, W, X, Y, Z and primary key V Y ?  
A. V X Y Z B. V W X Z  
C. V W X Y D. V W X Y Z

13. Which of the following Functional Dependencies will make transitive dependency?  
A. A -> B and D->E B. B->D,E and A->F  
C. A->B and B->C D. C -> A and D -> B

14. In RDBMS, different classes of relations are created using \_\_\_\_\_ technique to prevent modification anomalies.  
A. Functional Dependencies B. Data integrity  
C. Referential integrity D. Normal Forms

15. If every non-key attribute is functionally dependent on the primary key, then the relation is in \_\_\_\_\_.  
A. First normal form B. Second normal form  
C. Third normal form D. Fourth normal form

**SECTION - B**

**II. Answer any two questions. (2 x 5 = 10)**

- Explain about Structured Query Language.(K2)
- Demonstrate Set Operation. (K3)
- Explain about encryption and authentication.(K2)
- Describe the third normal form .(K2)
- Explain phase locking protocol.(K2)

**SECTION - C**

**III. Answer all the questions. (5 x 10 = 50 )**

- Elucidate the concepts of ER-Model.(K2)  
(or)  
b) Discuss database system architecture with diagram.(K2)

22. a) Illustrate the data models in DBMS.(K3)

(or)

b) Elucidate the database design.(K2)

23. a) Describe briefly about Normalization.(K2)

(or)

b) Write the PL/SQL program for student information system.(K3)

24. a) Illustrate database design and relational model.(K3)

(or)

b) Explain about security and authorization.(K2)

25. a) Illustrate deadlock handling.(K2)

(or)

b) Summarize the transaction State and serializability.(K2)

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MODEL EXAMINATION – JUNE 2022

GENERAL CHEMISTRY – IV

Class : II - B.Sc., Chemistry Marks: 75

Sub. Code : 19UCH04 Time : 3 Hrs

SECTION – A

I. Choose the correct answer:

1. The S.I. unit of radioactivity is \_\_\_\_\_ (15X1=15)

- a) Becquerel
- b) Curie
- c) Rutherford
- d) Roentgen

2. The penetrating powers of  $\alpha$ ,  $\beta$  and  $\gamma$  radiations are in the order is \_\_\_\_\_

- a)  $\alpha > \beta > \gamma$
- b)  $\alpha < \beta < \gamma$
- c)  $\alpha = \beta = \gamma$
- d)  $\beta > \gamma > \alpha$

3. Name the moderator used in the nuclear reactor \_\_\_\_\_

- a) Plutonium
- b) Thorium
- c) Graphite
- d) Beryllium

4. Which of the following five membered rings is most resonance stabilized?

- a) Furan
- b) Thiophene
- c) Pyrrole
- d) Pyridine
- a) p-orbital
- b) sp<sup>2</sup>-orbital
- c) sp<sup>3</sup>-orbital
- d) sp<sup>-</sup>orbital

6. What is the correct order of reactivity (most reactive first) of pyrrole, furan and thiophene towards electrophiles?

- a) Furan > Thiophene > Pyrrole
- b) Thiophene > Pyrrole > Furan
- c) Furan > Pyrrole > Thiophene
- d) Pyrrole > Furan > Thiophene

7. Which of the following is the correct order of basic strength of amines in aqueous solution?

- a)  $(\text{CH}_3)_2\text{NH} > \text{CH}_3\text{NH}_2 > (\text{CH}_3)_3\text{N}$
- b)  $(\text{CH}_3)_3\text{N} > \text{CH}_3\text{NH}_2 > (\text{CH}_3)_2\text{NH}$
- c)  $(\text{CH}_3)_2\text{N} > (\text{CH}_3)_2\text{NH} > \text{CH}_3\text{NH}_2$
- d)  $\text{CH}_3\text{NH}_2 > (\text{CH}_3)_2\text{NH} > (\text{CH}_3)_3\text{N}$

8. Which of the following is Hinsberg reagent ?

- a)  $\text{C}_6\text{H}_5\text{SO}_2\text{CH}_3$
- b)  $\text{C}_6\text{H}_5\text{SO}_2\text{Cl}$
- c)  $\text{SnCl}_2$
- d)  $\text{CoCl}_2$

9. The substrate used to prepare for Diazocoupling \_\_\_\_\_

- a) Pesticides
- b) Dyes
- c) Proteins
- d) Vitamins

10. The limitation of the first law is

- a) Does not indicate the possibility of a spontaneous process proceeding in a definite direction
- b) It assigns a quality to different forms of energy
- c) Indicates the direction of any spontaneous process
- d) None of the mentioned

11. The number of Reversible cycle process is \_\_\_\_\_

- a) 4 isothermal processes
- b) 4 adiabatic processes
- c) 2 isothermal and 2 adiabatic processes
- d) None of the mentioned

12. For any reversible process, the change in entropy of the system & surroundings is

- a) zero
- b) unity
- c) negative
- d) positive

13. What is the relation between Gibbs free energy and the EMF of the cell?

- a)  $\Delta G = -nFE_{\text{cell}}$
- b)  $G = -nFE_{\text{cell}}$
- c)  $\Delta G = -nE_{\text{cell}}$
- d)  $\Delta G = -nF_{\text{cell}}$

14. The Clausius-Clapeyron equation is

- a)  $\log_{10}(P_1/P_2) = 2.303R\Delta H_{\text{vap}}[T_1^{-1} - T_2^{-1}/T_1T_2]$
- b)  $dP/dT = \Delta S/\Delta V$
- c)  $dP/dT = q/T\Delta V$
- d) All the above

15. Gibb's free energy ( $\Delta G$ ) is \_\_\_\_\_

- a)  $\Delta G = \Delta H - T\Delta S$
- b)  $\Delta G = \Delta H + \Delta ST$
- c)  $\Delta H = \Delta G - T\Delta S$
- d)  $\Delta G = \Delta H + T \times CP$

SECTION – B

Answer any TWO questions:

(2X5=10)

16. Discuss the nuclear stability and artificial transmutation.  
17. How will you synthesize Quinine and its electrophilic substitution reaction?

18. Write the mechanism of Diazotization.

19. Explain the Clausius inequality and physical significance of entropy.

20. Derive the Gibbs-Helmholtz equation and Nernst heat theorem.

SECTION – C

Answer ALL the questions: (5X10=50)

21. a) i) Mention the Applications of Radioactive isotopes.  
ii) Write the kinetics of Half life and average life period.

b) i) Illustrate the Nuclear reactor of various field in India.

ii) Draw and explain the components of Nuclear reactor.

22. a) Briefly discuss about the preparation, properties and uses of Furan and Pyridine.

(or)

b) Write down the the preparation, properties and uses of Isoquinoline and Indole.

23. a) Comment on

- i) Ethylene diamine
- ii) Dimethylamine

(or)

b) Give different methods in separation of amines and Diazomethane.

24. a) Outline of Carnot cycle and its efficiency.

(or)

b) i) State that the Entropy changes in Reversible and Irreversible process.

ii) Explain the Temperature scale and limitations of First law of thermodynamics.

25. a) Derive the Clausius-Clapeyron equation and its applications .

(or)

b) Discuss about the Maxwell's relationship in free energy.

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## MODEL EXAM – JUNE - 2022 COMMUNICATION ELECTRONICS

Class : II- M.Sc., PHYSICS

Paper Code: 19PPH12

Marks: 75

Time : 3Hrs

### SECTION – A

#### I. Choose the correct answer:

(15 X 1 = 15)

- When the length of antenna is a whole wavelength
  - radiation at right angles is zero
  - radiation at right angles is maximum
  - radiation is zero in all directions
  - radiation is maximum in all directions
- Self impedance of an antenna is basically \_\_\_\_\_
  - Its input impedance during the removal of all other antennas
  - Its impedance by taking into consideration the consequences of other antennas
  - Both a and b
  - None of the above
- Which among the following elucidate the generation of electromagnetic waves?
  - Ampere's law
  - Faraday's law
  - Gauss's law
  - Kirchoff's law
- DPCM encodes the PCM values based on
  - Quantization level
  - current and predicted value
  - Interval between levels
  - None of the mentioned
- The length of the code-word obtained by encoding quantized sample is equal to
  - $l = \log(\text{to the base } 2)l$
  - $l = \log(\text{to the base } 10)l$
  - $l = 2\log(\text{to the base } 2)l$
  - $l = \log(\text{to the base } 2)l/2$
- In PCM encoding, quantization level varies as a function of \_\_\_\_\_
  - Frequency
  - Amplitude
  - Square of frequency
  - Square of amplitude
- In microwave transmission using digital radio, what causes most intersymbol interference?
  - Delayed spreading
  - Rayleigh fading
  - Random Doppler shift
  - Slow fading
- At what position is the input signal inserted into a traveling-wave tube?
  - At the cathode end of the helix
  - At the collector
  - At the control grid of the electron gun
  - At the collector end of the helix
- The radar in which both transmission and reception is done using the same antenna are called
  - Monostatic radar
  - Bistatic radar
  - Monopole radar
  - Dipole radar

- The resolution of a pulsed radar can be improved by
  - increasing pulse width
  - decreasing pulse width
  - increasing the pulse amplitude
  - decreasing pulse repetition
- The minimum range of detection a pulse radar depends on
  - pulse width
  - average transmitted power
  - beam width of the antenna
  - all of the above
- A duplexer is a
  - signal side band filter
  - transmit- receive switch
  - balanced mixer
  - IF- log amplifier
- In an optical fiber, the fiber core \_\_\_\_\_ the cladding.
  - is denser than
  - has the same density as
  - is less dense than
  - is another name for
- A step- index fiber has specified parameter for refractive index of fiber core and cladding as 1.50 and 1.46 respectively, its numerical aperture value is \_\_\_\_\_.
  - 0.344
  - 0.156
  - 0.486
  - 0.244
- In optical fibers, the index of refraction in the fiber core is always
  - greater than the cladding
  - less than the cladding
  - equal to the cladding
  - none of the above

### SECTION – B

#### II. Answer any two questions:

(2X5 =10)

- Explain the board side and end side antenna arrays.
- Explain the sampling theorem of pulse code modulation technique.
- Write a note on TWT.
- Explain in detail about color mixing principle of the TV.
- Write a short note on acceptance angle and numerical aperture.

### SECTION – C

#### III. Answer ALL the questions:

(5X10=50)

- (a) Write a short note on directional high frequency antennas.  
(or)  
(b) Explain Eccles and Larmor theory of ground wave propagation.
- (a) Describe PCM transmission.  
(or)  
(b) Discuss in detail about the adaptive delta modulation and CVSD.
- (a) Explain the principle, construction and working of MASER.  
(or)  
(b) Discuss the principle, construction and applications of submarine cables.
- (a) Explain in detail about principle, construction and working of the CCTV.  
(or)  
(b) Describe the working principle of PIL and delta gun picture tube.
- (a) Derive the link equation for the different satellite system.  
(or)  
(b) Discuss the success and failures of INSAT communication satellites.

**PHONETICS AND TRANSCRIPTION**

**MODEL EXAM - EVEN SEM-JUNE-2022**

**Class : II B.A.ENGLISH    Marks: 75**

**Paper Code: 19UENA04    Time : 3Hrs**

**SECTION A**

**I. Answer the following either by choosing or filling up (15 x 1 = 15)**

1. .... is the scientific study of language.  
 a. Linguistics    b. Syntax    c. Semantics  
 d. Discourse

2. There are ----- pure vowels in English phonetics.  
 a. 8    b. 12    c. 44    d. 18

3. Gliding vowels are called as -----  
 a) Back vowels    b) Diphthongs  
 c) Front Vowels    d) Pure vowels

4. Which of the following air stream is used for production of speech sounds?

- a) egressive
- b) ingressive
- c) velaric
- d) glottalic

5. Example for rounded vowel -----

- a. [u]    b. [ʊ]    c. [o]    d. All the above

6. What does the phonetic symbol **d** represent?

- a) Voiced bilabial plosive
- b) Voiceless palatal plosive
- c) Voiced alveolar plosive
- d) Voiced dental fricative

7. What is the full form of **IPA**? -----

8. The number of diphthongs in English ?  
 a) 8    b) 12    c) 44    d) 6

9. The nucleus of the syllable is the vowel.

- a) True
- b) False

10. Which of these refer to the sound features of a language?

- a) Morphemics
- b) discourse
- c) Phonetics
- d) Syntax

11. In English Phonetics there are ----- sounds

- a) 34    b) 44    c) 48    d) 54

12. According to the placement of the tongue, which of these is not a type of vowel?

- a) Cross vowels
- b) Front vowels
- c) Back vowels
- d) Central vowels

13. Give an example for Primary accent on second Syllable in a compound word -----

14. As per quality, vowels sounds can be differentiated as Monophthongs and Diphthongs.

- a) True
- b) False

15. Which of the following vowels is an example of back vowel?

- a) i    b: e:    c) u    d) a

**SECTION B**

**II. Answer ANY TWO of the following questions in about 100 words: (2x5=10)**

16. Write in short about the articulatory system.

17. Write a note on pure Vowels.

18. How are English Consonants classified?

19. What is the difference between Primary and Secondary accent? Give some examples.

20. Transcribe the following words: English, and, number, about, must

**SECTION C**

**III Answer ALL THE QUESTIONS in about 200 words: (5x10=50)**

21. a. Explain the organs of speech with relevant diagrams. (or)

b. Explain Air-Stream Mechanism of speech production.

22. a. Write in detail about the classification and description of Pure vowel sounds. (or)

b. Attempt a short note on Central Vowels.

23. a. Give a detailed description of classification of consonant sounds. (or)

b. Describe stricture types.

24. a. Explain the Word –accentual patterns in English. (or)

b. What are the problems involved in fixing the accent?

25. a. **Transcribe the following:**

There was an old owl that lived in an oak. Every day he saw incidents happening around him. Yesterday he saw a boy helping an old man to carry a heavy basket. Today he saw a girl shouting at her mother. The more he saw the less he spoke.

b. **Transcribe the following sentences:** (or)

- (i) I ate an apple.
- (ii) He is in Chennai.
- (iii) She will meet you in Dubai.
- (iv) They are in a remote village.
- (v) You may colour this picture in black.



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MODEL EXAM – JUNE - 2022

MECHANICS

Class : I- B.Sc., PHYSICS

Paper Code: 21UPH02

Marks: 75

Time : 3Hrs

## SECTION – A

I. Choose the correct answer:

(15 X 1 = 15)

- The maximum loss of kinetic energy on impact of \_\_\_\_\_ bodies.  
a) elastic    b) plastic    c) rigid    d) none of the above
- The restitution of the elastic bodies is \_\_\_\_\_.  
a)  $e = 1$     b)  $e = 2$     c)  $e = 0$     d)  $e = 3$
- When a particle is projected up the plane, the range on an incline plane is \_\_\_\_\_.  
a)  $R = \frac{2u^2 \sin(\alpha - \beta) \cos \alpha}{g \cos^2 \beta}$     b)  $R = \frac{2u^2 \sin(\alpha - \beta) \cos \alpha}{g \cos^2 \beta}$   
c)  $R = \frac{2u^2 \sin(\alpha - \beta) \cos \alpha}{g \cos^3 \beta}$     d)  $R = \frac{2u^2 \sin(\alpha - \beta) \cos \alpha}{g \cos^2 \beta}$
- The C.G of solid cone is along its axis at a distance of \_\_\_\_\_ from the vertex.  
a)  $\frac{3}{4}h$     b)  $\frac{3}{4}2h$     c)  $\frac{3}{43}h$     d)  $\frac{35}{4}h$
- C.G of uniform tetrahedron lies at a point G on the line ratio is \_\_\_\_\_.  
a) 3:2    b) 3:1    c) 3:5    d) 3:4
- Lissajou's figures depends upon \_\_\_\_\_.  
a) frequency    b) amplitude  
c) square of frequency    d) square of amplitude
- In the solid hemisphere the C.G is on its axis at a distance is \_\_\_\_\_.  
a)  $\frac{3}{8}r$     b)  $\frac{5}{4}r$     c)  $\frac{3}{4}h$     d)  $\frac{35}{4}h$
- S.H.M is the simplest form of  
a) periodic motion    b) non periodic motion  
c) helical motion    d) none of the above
- The simple pendulum is example for \_\_\_\_\_ type S.H.M.  
a) angular    b) linear    c) parallel    d) none parallel
- Unit of pressure  
a)  $Nm^{-3}$     b)  $Nm^{-4}$     c)  $Nm^{-2}$     d)  $Nm^2$

- The centre of pressure of a triangular lamina is  
a)  $H = \frac{3}{4}b$     b)  $H = \frac{3}{0}b$     c)  $H = \frac{3}{6}b$     d) all of the above
- C. P of the rectangular lamina is  
a)  $H = \frac{2}{0}b$     b)  $H = \frac{2}{4}b$     c)  $H = \frac{2}{6}b$     d)  $H = \frac{2}{3}b$
- If the generalized co-ordinates  $q_k$  is cyclic, then the Lagrangian becomes,  
a) 0    b) 2    c) 1    d) 3
- The dimensional formula for the linear momentum  
a)  $MLT^{-6}$     b)  $MLT^{-3}$     c)  $MLT^{-1}$     d)  $MLT^{-2}$
- The dimensional formula for the angular momentum is  
a)  $ML^3T^{-2}$     b)  $ML^2T^{-2}$     c)  $ML^2T^{-1}$     d) none of the above

## SECTION – B

II. Answer any two questions:

(2X5 =10)

- Express the equation for the direct impact between the two smooth spheres.
- Derive an equation for centre of buoyancy.
- Write different applications of Lissajou's figures.
- Deduce the equation for centre of pressure of rectangular lamina immersed vertically in a liquid with one edge in the surface of the liquid.
- Write a short note on principle of virtual work.

## SECTION – C

III. Answer ALL the questions:

(5X10=50)

- (a) Derive an expression for loss of K.E due to direct impact of two smooth spheres.  
(or)  
(b) Discuss the different laws of impact.
- (a) Explain in detail about static, dynamic, rolling and limiting friction.  
(or)  
(b) Deduce the equation of a body equilibrium in an inclined plane under the action of a force.
- (a) Explain: how do you determine  $g$  and  $k$  by using compound pendulum.  
(or)  
(b) Derive an equation for bifilar pendulum parallel and non parallel threads.
- (a) Deduce the equation for centre of pressure of triangular lamina.  
(or)  
(b) Explain Euler's equation of motion.
- (a) Derive Lagrangian formulation for conservation theorems.  
(or)  
(b) Deduce an expression for Hamilton's equation of motion.



**MODEL EXAMINATION - 2022**

**RELATIONAL DATABASE**

**MANAGEMENT SYSTEM**

**Class : II B.Sc.,CS A & B/II BCA Marks : 75**

**Paper Code : 21UCS05 Time : 3 Hrs**

**SECTION - A**

**I. Multiple choose questions. (15 x 1 = 15)**

- Who has invented Relational Model?  
A. Thomas Jefferson B. Edgar F. Codd  
C. Edgar Deny D. Denis Ritchie
- Choose the view that indicates how the end user view the data.  
A. Internal View B. Conceptual View  
C. External View D. All of the above
- Existence of same data in more than one cells of the same attribute is called as \_\_\_\_\_.  
A. Omni present B. Data Redundancy  
C. Dependency D. Anomalies
- A Primary Key is a combination of one or more attributes of the table. In that case, primary key could be selected----.  
A. candidate key B. secondary key  
C. compound key D. composite key
- Identify the primary key -----.  
A. Name B. Place  
C. Id D. District
- The ----- cannot be taken as a primary key?  
A. Id B. Register number  
C. Dept\_id D. Street

- A property of entire relation, rather than of individual tuple is known as----  
A. Attribute B. Tuple  
C. Domain D. Key
- When a relation in the relational model is not in appropriate normal form ,then the -----of a relation is required.  
A. Composition B. Decomposition  
C. Analyzing D. None of the above
- Find the term referred as *tuple* in the table-----.  
A. Column B. Row  
C. Domain D. Relation
- The maximum number of super keys for the relation schema R (E,F,G,H) with E as the key is-----.  
A. 5 B. 6  
C. 8 D. 10
- The functional dependency will occur on  
A. 1 NF B.2 NF  
C.3 NF D. None of the above
- Which of the following is NOT a super key in a

relational schema with attributes V, W, X, Y, Z and primary key V Y ?  
A. V X Y Z B. V W X Z

C. V W X Y D. V W X Y Z

13. Which of the following Functional Dependencies will make transitive dependency?

A. A -> B and D->E B. B->D,E and A->F  
C. A->B and B->C D. C -> A and D -> B

14. In RDBMS, different classes of relations are created using \_\_\_\_\_ technique to prevent modification anomalies.

A. Functional Dependencies B. Data integrity  
C. Referential integrity D. Normal Forms  
15. If every non-key attribute is functionally dependent on the primary key, then the relation is in \_\_\_\_\_.

A. First normal form B. Second normal form  
C. Third normal form D. Fourth normal form

**SECTION - B**

**II. Answer any two questions. (2 x 5 = 10)**

- Explain about Structured Query Language.(K2)
- Demonstrate Set Operation. (K3)
- Explain about encryption and authentication.(K2)
- Describe the third normal form .(K2)
- Explain phase locking protocol.(K2)

**SECTION - C**

**III. Answer all the questions. (5 x 10 = 50)**

- a) Elucidate the concepts of ER-Model.(K2)  
(or)  
b) Discuss database system architecture with diagram.(K2)
- a) Illustrate the data models in DBMS.(K3)  
(or)  
b) Elucidate the database design.(K2)
- a) Describe briefly about Normalization.(K2)  
(or)  
b) Write the PL/SQL program for student information system.(K3)
- a) Illustrate database design and relational model.(K3)  
(or)  
b) Explain about security and authorization.(K2)
- a) Illustrate deadlock handling.(K2)  
(or)  
b) Summarize the transaction State and serializability.(K2)  
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காலம்: 3 மணி நேரம் 21PTA09 மதிப்பெண்: 75

பகுதி - அ

I. அனைத்து வினாக்களுக்கும் விடையளி. (15X1=15)

1. மானிடவியல் சார்ந்த கருத்துகளை முதன் முதலில் சிந்தித்தவர்?  
அ) போப் ஆ செனோபேன்ஸ் இ) டெமோகிரிட்டஸ்  
ஈ) ஹேரோடாட்டஸ்  
ஐ) கெடோகிரிட்டஸ் ஆ) ஹேரோடாட்டஸ்
2. கிரேக்க இனவணர்வியலின் தந்தை யார்?  
அ) டெமோகிரிட்டஸ் ஈ) சாக்ரட்டீஸ்  
இ) செனோபேன்ஸ்
3. இந்தியாவில் மானிடவியல் தோற்றம் பெற்ற ஆண்டு?  
அ) 1951 ஆ) 1921 இ) 1999 ஈ) 1920
4. 'ANTHROPOLOGY' எனும் தலைப்பில் நூல் வெளியிட்டவர்?  
அ) அரிஸ்டாட்டில் ஆ) இமாணுவல் கரண்ட்  
இ) குரோபர் ஈ) சாக்ரட்டீஸ்
5. உடல்சார் மானிடவியல் எந்தப் பிரிவைச் சார்ந்தது?  
அ) தமிழியல் ஆ) உளவியல்  
இ) சமூகவியல் ஈ) அறிவியல்
6. ETHNOGRAPHY எனும் ஆங்கிலச் சொல்லுக்குத் தமிழ் பொருள் யாது?  
அ) பழங்குடி ஆ) மலையாளி  
இ) இனக்குழுவியல் ஈ) நாடோடிகள்
7. தற்கால மானிடவியலின் களப்பணிக்கு வித்திட்டவர்?  
அ) போவான்ஸ் ஆ) சுவரஸ் இ) மாலினோஸ்கி ஈ) ஹன்றி
8. ஒப்பீட்டு முறைக்கான தனிபெரும் தகுதியை ஏற்படுத்தியவர்?  
அ) ஜார்ஜ் பீட்டர் ஆ) மீடாக்கின் இ) மீடாக் ஈ) எக்கான்
9. சமுதாய மானிடவியல் என்ற நூலை எழுதியவர்?  
அ) பரிட்சேல் ஆ) சுவரஸ்  
இ) ராட்கிள்ப் பீடுளனின் ஈ) லெமான்ஸ்
10. பண்பாட்டின் உட்கூறுகள் எத்தனை வகைப்படும்?  
அ) 5 ஆ) 7 இ) 3 ஈ) 2

காலம்: 3 மணி நேரம் 21PTA09 மதிப்பெண்: 75

பகுதி - அ

I. அனைத்து வினாக்களுக்கும் விடையளி. (15X1=15)

1. மானிடவியல் சார்ந்த கருத்துகளை முதன் முதலில் சிந்தித்தவர்?  
அ) போப் ஆ) செனோபேன்ஸ் இ) டெமோகிரிட்டஸ்  
ஈ) ஹேரோடாட்டஸ்
2. கிரேக்க இனவணர்வியலின் தந்தை யார்?  
அ) டெமோகிரிட்டஸ் ஆ) ஹேரோடாட்டஸ்  
இ) செனோபேன்ஸ் ஈ) சாக்ரட்டீஸ்
3. இந்தியாவில் மானிடவியல் தோற்றம் பெற்ற ஆண்டு?  
அ) 1951 ஆ) 1921 இ) 1999 ஈ) 1920
4. 'ANTHROPOLOGY' எனும் தலைப்பில் நூல் வெளியிட்டவர்?  
அ) அரிஸ்டாட்டில் ஆ) இமாணுவல் கரண்ட்  
இ) குரோபர் ஈ) சாக்ரட்டீஸ்
5. உடல்சார் மானிடவியல் எந்தப் பிரிவைச் சார்ந்தது?  
அ) தமிழியல் ஆ) உளவியல்  
இ) சமூகவியல் ஈ) அறிவியல்
6. ETHNOGRAPHY எனும் ஆங்கிலச் சொல்லுக்குத் தமிழ் பொருள் யாது?  
அ) பழங்குடி ஆ) மலையாளி  
இ) இனக்குழுவியல் ஈ) நாடோடிகள்
7. தற்கால மானிடவியலின் களப்பணிக்கு வித்திட்டவர்?  
அ) போவான்ஸ் ஆ) சுவரஸ் இ) மாலினோஸ்கி ஈ) ஹன்றி
8. ஒப்பீட்டு முறைக்கான தனிபெரும் தகுதியை ஏற்படுத்தியவர்?  
அ) ஜார்ஜ் பீட்டர் ஆ) மீடாக்கின் இ) மீடாக் ஈ) எக்கான்
9. சமுதாய மானிடவியல் என்ற நூலை எழுதியவர்?  
அ) பரிட்சேல் ஆ) சுவரஸ்  
இ) ராட்கிள்ப் பீடுளனின் ஈ) லெமான்ஸ்
10. பண்பாட்டின் உட்கூறுகள் எத்தனை வகைப்படும்?  
அ) 5 ஆ) 7 இ) 3 ஈ) 2

I. பண்பாட்டுப் பொதுமைகள் குறித்து முதலில் சிந்தித்தவர்?  
அ) எபிசுசுரஸ் ஆ) எக்சான்

2. அனைத்து வினாக்களுக்கும் விடையளி. (2X5=10)
16. அரிஸ்டாட்டீலின் மானிடவியல் சிந்தனைப் பற்றி எழுதுக.
17. இனவியல் குறித்து விளக்குக.
18. ஒப்பீட்டு முறை பற்றிக் கூறுக.
19. உட்கூறுகளின் தன்மைகள் யாவை?
20. சாதி பற்றிய நவீன கோட்பாடுகள் பற்றிப் பகுத்தாய்க்க.

பகுதி - இ

- III. அனைத்து வினாக்களுக்கும் விடையளி (5X10=50)
21. அ) மானிடவியல் தோற்றமும் வளர்ச்சியும் குறித்து விரித்து எழுதுக.
22. அ) உடல்சார் மானிடவியல் வளர்ச்சி நிலைப் பற்றி விவரி. (அல்லது)  
ஆ) உளவியல் சார் மானிடவியல் குறித்து விளக்கி எழுதுக.
23. அ) களப்பணியில் தரவுகளைப் பெறுதல் முறைக் குறித்து விளக்குக. (அல்லது)  
ஆ) இக்காலக் களப்பணி முறைக் குறித்து விவரிக்க.
24. அ) பண்பாட்டு உட்கூறுகளின் தன்மைகளை எடுத்துரைக்க. (அல்லது)  
ஆ) பண்பாட்டுப் பொதுமைக் குறித்துக் கட்டுரை வரைக.
25. அ) தமிழகப் பழங்குடியின் பண்பாட்டு மாற்றம் குறித்து தொகுத்துரைக்க. (அல்லது)  
ஆ) இனக்குழு சாதிகள் மற்றும் சாதிக்கொள்கைகள் பற்றி விவரி.

II. இரண்டு வினாக்களுக்கும் விடையளி. (2X5=10)

16. அரிஸ்டாட்டீலின் மானிடவியல் சிந்தனைப் பற்றி எழுதுக.
17. இனவியல் குறித்து விளக்குக.
18. ஒப்பீட்டு முறை பற்றிக் கூறுக.
19. உட்கூறுகளின் தன்மைகள் யாவை?
20. சாதி பற்றிய நவீன கோட்பாடுகள் பற்றிப் பகுத்தாய்க்க.

பகுதி - இ

- III. அனைத்து வினாக்களுக்கும் விடையளி (5X10=50)
21. அ) மானிடவியல் தோற்றமும் வளர்ச்சியும் குறித்து விரித்து எழுதுக. (அல்லது)  
ஆ) இந்தியாவில் மானிடவியல் வளர்ச்சி நிலைப் பற்றி விவரி. (அல்லது)  
ஆ) உடல்சார் மானிடவியல் பற்றிக் கட்டுரை வரைக. (அல்லது)  
ஆ) உளவியல் சார் மானிடவியல் குறித்து விளக்கி எழுதுக.
23. அ) களப்பணியில் தரவுகளைப் பெறுதல் முறைக் குறித்து விளக்குக. (அல்லது)  
ஆ) இக்காலக் களப்பணி முறைக் குறித்து விவரிக்க.
24. அ) பண்பாட்டு உட்கூறுகளின் தன்மைகளை எடுத்துரைக்க. (அல்லது)  
ஆ) பண்பாட்டுப் பொதுமைக் குறித்துக் கட்டுரை வரைக.
25. அ) தமிழகப் பழங்குடியின் பண்பாட்டு மாற்றம் குறித்து தொகுத்துரைக்க. (அல்லது)  
ஆ) இனக்குழு சாதிகள் மற்றும் சாதிக்கொள்கைகள் பற்றி விவரி.