Total No. of Questions: 3 *Total No. of Printed Pages:2*

Enrollment No.....

Faculty of Pharmacy

End Sem (Even) Examination May-2022

PY3CO33 Computer Applications in Pharmacy

Programme: B. Pharma. Branch/Specialisation: Pharmacy

Duration: 3 Hrs. **Maximum Marks: 50**

Note: All questions are compulsory. Internal choices, if any, are indicated.

Q.1	i.	Name of two input and output devices of computers.	**1**
	ii.	What is first generation year.	**1**
	iii.	What is the difference between binary and octal numbering system?	**1**
	iv.	Write short note on one's complement and two's complement method.	**1**
	v.	Write short note on planning project.	**1**
	vi.	How many types of DFDs are there?	**1**
	vii.	Define Bioinformatics.?	**1**
	viii.	Name any two databases used of bioinformatics.	**1**
	ix.	Give full form of LIMS and TIMS.	**1**
	x.	Define Data Analysis.	**1**

Q.2 Attempt any two:

i. Solve following questions. **5**

(a) Subtract binary number using 1's complement method:
$(111001\text{-}110010)_2=(?)_2$

(b) Subtract binary number using 2's complement method:
$(101010\text{-}100011)_2=(?)_2$

(c) Number conversion from octal to hexadecimal:
$(367)_8=(?)_{16}$

(d) Number conversion from Binary to decimal:
$(101001.101)_2=(?)_{10}$

(e) Binary Division:
$(1010110/101)_2=(?)_2$

P.T.O.

ii. Write HTML code for a student registration having following fields. **5**

(a) First Name- Textbox (max. 30 characters A-Z and a-z)
(b) Last Name- Textbox (max. 30 characters A-Z and a-z)
(c) Date of Birth- Drop Down list (Day/Month/Year)
(d) Email-Id- Textbox
(e) Mobile Number- Textbox (10-digit number)
(f) Gender- Radio
(g) Address- Description Box
(h) City- Textbox (max 30 characters A-Z and a-z)
(i) Pin code- Textbox (06-digit number)
(j) Submit- Button

iii. (a) Explain generation of Computer in detail. **5**
(b) How will you convert binary number system into decimal number system and vice versa? Give examples.

Q.3 Attempt any six: Two questions from each section is compulsory.

Section - A

i.	Briefly explain process of life cycle.	**5**
ii.	Describe data flow diagram in your own words.	**5**
iii.	What is the use of barcode in medicine identification? Also write its advantage and disadvantage.	**5**

Section - B

iv.	Give the objectives of bioinformatics.	**5**
v.	Write a note on the use of bioinformatics in Vaccine Discovery.	**5**
vi.	Give application of bioinformatics in Pharmacy.	**5**

Section - C

vii.	Write the difference between TIMS and LIMS.	**5**
viii.	Explain chromatographic data analysis and its importance.	**5**
ix.	Explain TIMS and its importance.	**5**

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Marking Scheme PY3CO33 Computer Applications in Pharmacy

Q.1	i.	Input devices	0.5 Mark	**1**
		output devices	0.5 Mark	
	ii.	1946-1959	1 Mark	**1**
	iii.	Difference between binary and octal	1 Mark	**1**
	iv.	one's complement	0.5 Mark	**1**
		two's complement method.	0.5 Mark	
	v.	Explain planning project.	1 Mark	**1**
	vi.	At least 2 names of DFD	1 Mark	**1**
	vii.	Define Bioinformatics	1 Mark	**1**
	viii.	Minimum two databases	1 Mark	**1**
	ix.	Full form of LIMS and TIMS.	1 Mark	**1**
	x.	Define Data Analysis.	1 Mark	**1**
Q.2		Attempt any two:		
	i.	Solve following questions.		**5**
		(a) 111	1 Mark	
		(b) 111	1 Mark	
		(c) F7	1 Mark	
		(d) 41.625	1 Mark	
		(e) 1001	1 Mark	
	ii.	HTML	1 Mark	**5**
		code for a student registration	4 Marks	
	iii.	(a) Generation of Computer	2 Marks	**5**
		(b) Binary to decimal conversion process	2 Marks	
		(c) Examples.	1 Mark	
Q.3		Attempt any six: Two questions from each section is compulsory.		
		Section - A		
	i.	Definition of OFD	3 Marks	**5**
		Different levels of OFD	2 Marks	
	ii.	What is BCMA	3 Marks	**5**
		Its advantages and disadvantages	2 Marks	
		Section - B		
	iii.	What is bioinformatics	3 Marks	**5**
		Objectives of bioinformatics.	2 Marks	
	iv.	What is bioinformatics	3 Marks	**5**
		Use in Vaccine Discovery.	2 Marks	
	v.	What is bioinformatics	3 Marks	**5**
		Application in Pharmacy.	2 Marks	
		Section - C		
	vi.	What is TIMS and LIMS	2 Marks	**5**
		Difference	3 Marks	
	vii.	Explain CDS	3 Marks	**5**
		Its application	2 Marks	
	viii.	Explain TIMS	3 Marks	**5**
		Its importance in pharmacy	2 Marks	

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