

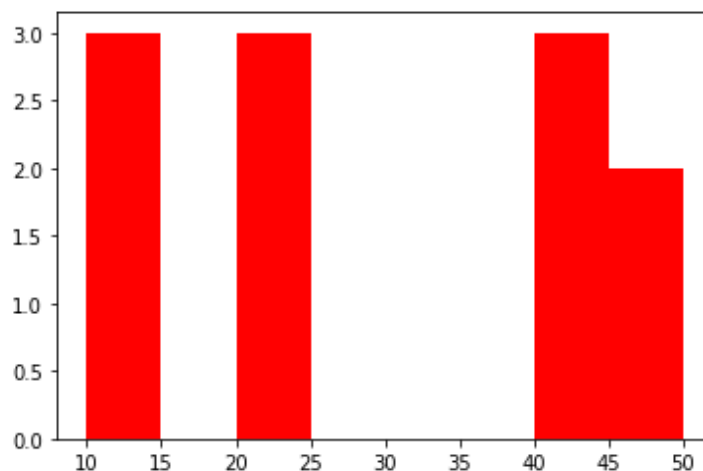
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MONTHLY TEST OCT 2019
Informatics Practice (XII C,D)

MM: 35

TIME:1:30 HRS

- Q.1 a) What will be the output of the following python codes: 2
- i) `import numpy as np`
`arr = np.arange(10)`
`print(arr[0:4])`
- ii) `import numpy as np`
`arr = np.linspace(start=10,stop=50,num=5,dtype='int8')`
`print(arr)`
- b) Write missing python code for the given output: 1
- `import numpy as np`
`arr = np.array([[1,2,3,4],[5,6,7,8],[9,10,11,12]])`
`print(_____)`
- `[[7 8]`
`[11 12]]`
- c) What will be the output of the following python codes: 1
- `import numpy as np`
`a = np.array([[3,4,2],[1,5,4]], dtype=np.int32)`
`b = np.array([[2,5,6],[3,7,8]], dtype=np.int32)`
`print(np.subtract(a,b))`
- d) Write python code to create a numpy 3x3 array to contain only 6 2
- `array([[6, 6, 6],`
`[6, 6, 6],`
`[6, 6, 6]])`
- Q.2 a) Write python codes to create the given histogram with following data. Compute 4
the number of bins from the figure and add to the code.

10	20	10	40	40	50	20	40	50	10	20
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- Q.3 a) Out of the following who is not a part of the Scrum Team 1
 i) Product Manager
 ii) Scrum Master
 iii) Development Team
 iv) Project Manager
- b) Push-Pull are terms related to _____ Version Control System. 1
- c) Draw a Use-case diagram of a basic bus ticket booking system. The system should check availability of seats in a bus. 3
- Q.4 a) Write a python statement to establish connection to MySQL database with the following credentials: 2
 host – localhost
 user – Scott
 password – Tiger
 Database – Test
- b) What is the difference between the functions fetchall() and fetchmany() in python-mysql? 1
- c) Write a python function that permanently saves the DML queries in to MySQL database 1
- d) Which python function is used to insert multiple rows in a MySQL table? 1
- Q.5 a) What is the full form of MVT in Django? 1
- b) Write a python statement to start the development server to test Django apps. 2
- c) What is the role of settings.py in Django environment? 2
- Q.6 a) What is the difference between degree and cardinality of a relation (table)? 1
- b) What is a Primary Key in a Table? How many primary keys a table can have? 2
- c) What is the difference between Count(*) and Count(column) in MySQL? 1
- d) Write SQL queries asked below for the given table. 6
 Table: Student

rollno	name	age	gender	Sports
1001	PAT	18	M	Soccer
1002	SID	17	F	Judo
1003	KIM	17	F	Judo
1004	JIM	18	M	Cricket
1005	TIM	16	M	Soccer
1006	ALI	17	M	Hockey
1007	ZIA	16	F	Hockey

i) Write SQL to display the detail of student in the descending order of age.

ii) Write SQL query to display the sports, and total number of students in each sports from student table.

iii) Write SQL query to display gender and minimum age for each gender in students table.