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| **PT1/CSQP/1222/A 09-MAY-2022** | | | |
| **PERIODIC TEST I - (2022-23)** | | | |
| **Subject: Computer Science (PYTHON)**  **Grade: XII** | | Max. Marks: 35Time: 80 mins | |
| ***General Instructions:***   * This question paper contains three sections – A , B and C. * Section A has 7 MCQ questions of 1 mark each. * Section B has 7 questions carrying 2/3 marks each. * Section C has 2 questions of 5 mark each. * All programming questions are to be answered using Python Language only. * Question paper contains 4 printed pages. | | | |
| **Qno** | **SECTION A** | | Mark |
| 1. | In python we do not specify types, it is directly interpreted by the compiler. Keeping this in mind consider the following operation:  x = 13 ? 2  The objective is to make sure that x gets an integer value as an output.  Select all correct options that will satisfy the objective.   1. x = 13 // 2 2. x = int(13 / 2) 3. x = 13 % 2 4. All of the mentioned | | 1 |
| **2.** | What is the output of the following?  i = 1  while True:  if i%3 == 0:  break  print(i,end=' ')  i+=1  a) 1 2  b) 1 2 3  c) error  d) infinite loop | | 1 |
| **3.** | What is the output of the following?  x = 'abcd'  for i in range(len(x)):  print(x,end=' ')  x = 'a'  a) a  b) abcd abcd abcd abcd  c) a a a a  d) abcd a a a | | 1 |
| **4.** | What is the output of the following?  print("xyyzxyzxzxyy".count('yy', 2))  a) 2  b) 5  c) 1  d) 0 | | 1 |
| **5.** | Which of the following function headers is correct?  a) def fun(a = 2, b = 3, c): b) def fun(a = 2, b, c = 3): c) def fun(a, b = 2, c = 3): d) def fun(a, b, c = 3, d): | | 1 |
| **6.** | What is the output of the following?  def fun (n):  if (n % 100==0):  return n - 5  else:  return (8+n//5\*2-4)  print(fun(450))  a) 445  b) 184  c) 49  d) 192 | | 1 |
| **7.** | Which of the given argument types can be skipped from a function call?  a) positional arguments  b) keyword arguments  c) named arguments  d) default arguments | | 1 |
|  | **SECTION B** | |  |
| **8.** | Differentiate between mutable and immutable datatypes with examples. | | 2 |
| **9.** | Choose the correct output/s for the following? Also find the maximum and minimum value of variable Num.  import random as r  Message = "PERIODIC TEST1"  Num = r.randint(0, 5)  N = len(Message) - 1  while Message[N] != 'C':  print(Message[N] + Message[Num] + "#", end = "")  Num=Num-1  N = N – 1  Options  a) 1I#TR#SE#EP#T1# T#  b) 1O#TC#SR#EE#TP# 1#  c) 1D#TO#SI#ER#EE# P#  d) 1P#T1#ST#ES#TE# T# | | 2 |
| **10.** | What is the output of the following?  text="EXAM"  S=''  ct=0  lst=[]  for word in text:  if word not in ['A','E','I','O','U']:  ct=ct+1  S=word+str(ct)  lst.append(S)  print(lst) | | 2 |
| **11.** | Underline the error and rewrite the correct program  def pgmfn(x,y=2,z):  if x%2=0:  x=+z  if x+y>z:  return x,y,z  elif:  return x,y,z  a,b=pgmfn(z=5,x=8)  print(a) | | 3 |
| **12.** | Find the output of the following program segment:-  x=5  def Show(ARR,Size):  for L in range(Size):  if (L%2!=0):  print(ARR[L]+x ,end=”#”)  else:  print(ARR[L]-x)  def Change(Number,ARR,Size):  global x  for L in range(Size):  if (L<Number):  ARR[L]+=x  x=x+1  else :  ARR[L]\*=L  Show(ARR,3)  Array = [120,45,78,23,70]  Change(2, Array, 5)  print(“value of x is” , x) | | 3 |
| **13.** | Find the output of the following:-  def changeIt(Text,C):  Text1=''  for K in range(len(Text)):  if(Text[K]>='F' and Text[K]<='P'):  Text1=Text1+Text[K].lower()  elif (Text[K]=='3' or Text[K]=='n'):  Text1+=C  elif(K%2==0):  Text1=Text1+Text[K].upper()  else:  Text1=Text1+Text[K-1]  print(Text1)  oldText="PYthON 3.6"  changeIt(oldText,'#')  print("New TEXT:",oldText) | | 3 |
| **14.** | a) Differentiate between actual argument and formal parameter with examples.  b) Explain docstring in Python. | | 3 |
|  | **SECTION C** | |  |
| **15.** | Write a function hcf(a,b) to find the hcf of 2 user entered nos passed as parameters. From this function , call the convdecbin() function.  Write a function convdecbin(x) to convert the hcf obtained as parameter to binary format and display it.  The main program accepts two integer numbers and calls the hcf() function  Eg: If the user entered numbers are 4 and 12 , the hcf() function will find the hcf as 4. The convdecbin() function will convert the decimal number(hcf) to binary format - 1002 and display it. | | 5 |
| **16.** | Write a function cwords(st) which will display all the common words and their count present in the user entered string.  Write a function ucwords(st) which will display all the uncommon words starting with a vowel present in the user entered string.  The main program accepts a user entered string and calls both the functions.  Eg: If the user entered string is “Education is the premise of progress, in every society, in every family”  The output of cwords() function will be {“in”:2 , “every”:2}  The output of ucwords() functions will be [‘Education’ , ‘is’, ’of’] | | 5 |

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