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| **HY/1PCAK/1222/C 22-SEP-2022** | | |
| **HALF YEARLY EXAMINATION (2022-23)** | | |
| **Subject: INFORMATICS PRACTICES (C) -ANSWER KEY**  **Grade: XII** | | Max. Marks:70Time:3 Hrs. |
|  | **Section A(1 mark each)** | |
| **1.** | b | |
| **2.** | Print(s1\*\*2+s2\*\*2) | |
| **3.** | c | |
| **4.** | d | |
| **5.** | b | |
| **6.** | c | |
| **7.** | a | |
| **8.** | b | |
| **9.** | Name Age  rank1 Tom 28  rank2 Jack 34  rank3 Steve 29  rank4 Ricky 42 | |
| **10.** | a | |
| **11.** | Give the output of the above code. | |
| **12.** | a | |
| **13.** | Cookies **are text files with small pieces of data — like a username and password — that are used to** identify your computer as you use a computer network. | |
| **14.** | A personal area network (PAN) is **a group of devices connected without the use of wires or cables**. Today, most PANs for everyday use are wireless. | |
| **15.** | Write the full form of following   1. Nan- Not a number 2. Pandas- Panel Data System | |
| **16.** | 1. True 2. False | |
|  | **Section B(2 marks each)** | |
| **17.** | import pandas as pd  d={1:"Apple",2:"Banana",3:"Kiwi",4:"Orange"}  s1=pd.Series(d)  print(s1) | |
| **18.** | import pandas as pd  A.index=range(0,4)  print(A) | |
| **19.** | Spam. Use a spam filter. | |
| **20.** | i)A  ii)C | |
| **21.** | 1. Nothing hqppens to the network 2. Network fails | |
| **22.** | Netiquette is a made-up word from the words net and etiquette. Netiquette thus **describes the rules of conduct for respectful and appropriate communication**  **Don’t call at night**  **Use lowercase letters.** | |
| **23.** | Hubs are basic network devices that operate at the Physical Layer and they do not perform packet filtering or addressing function; they send the data packets to all the connected devices. Switches, on the other hand, function at the Data Link Layer to connect several devices in a network.Hub is intelligent. | |
| **24.** | ii) | |
| **25.** | 1. b | |
| **26.** | Consider a given Series , M1:  Marks  Term1 45  Term2 65  Term3 24  Term4 89  Write a program in Python Pandas to create the series. | |
| **27.** | import matplotlib.pyplot as plt  y=[45,40,30,35,30]  x=['jan','feb','march','april','may']  m=[40,45,35,45,25]  plt.xlabel("month")  plt.ylabel("number of classes")  plt.title("monthwise report")  plt.plot(x,y)  plt.plot(x,m,color='r',linestyle='dashed')  plt.show() | |
| **28.** | Give the output of the above code. | |
| **29.** | She should ignore these emails | |
| **30.** | |  |  | | --- | --- | | Star topology is a topology in which all devices are connected to a central hub. | Bus topology is a topology where each device is connected to a single cable which is known as the backbone. | | In star topology, if the central hub fails then the whole network fails. | In a Bus topology, the failure of the network cable will cause the whole network to fail. |  | | |
| **31.** | A **digital footprint** – sometimes called a digital shadow or an electronic footprint – refers to the trail of data you leave when using the internet.Active and paasive | |
|  | **Section C(3 marks each)** | |
| **32.** | teams=['MUMBAI', 'DELHI', 'RAJASTAN', 'KOLKATA', 'GOA']  runs=[88, 78, 102, 43, 85]  plt.xlabel("teams")  plt.ylabel("Runs")  plt.title("ODI SCORES")  plt.plot(teams,runs) | |
| **33.** | Write the purpose of the following devices :  1) Network Interface Card  2) Repeater  3) Modem | |
| **34.** | 1.a  2 d  3 a | |
|  | **Section D(5 marks each)** | |
| **35.** | Consider the following datafroame. Find out the following  d={"Name":['Abbas','Jithin','Rahul','Pranav'], "Marks":[100,72,14,16]}  df3=pd.DataFrame(d,index=['R1','R2','R3','R4'])   1. R3 RAHUL 14 2. R3 RAHUL 14 3. R1 ABBAS 100 4. 100 5. R1 2   R2 2  R3 2  R4 2 | |
| **36.** | 1. STAR 2. MUMBAI HO 3. 1 SWITCH PER HO   IV. C  v.A | |
| **37.** | |  | | --- | | Consider the following DataFrame df and answer all questions from (i)-(v)  1 c  2 a  3 iv  4 d  5 d | | |

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