



Use for rough work

Q. No. 2 Part (i) **Data Science :-**

Data Science is the inter dicplinary of multiple fields like Mathamatics, statitcs, and Science. Data Science is widely used in Bosiness, engineering.

purpose :-

Following are the main purposes of Data Science are:-

- Data Science is used to get meaningful information from hyge about of data.
- Data Science is used to find new, trends and Conclusions ~~from~~ by using data Analytics.
- Data Science is used to Solve Complex Computer problems.

Q. No. 2 Part (ii) **System Software:-**

System Software is Software that is designed for a Computer System are called System Software. System Software in a Computer System act as a linked between the hardware components by providing way of Communication the common System Software is (Device Driver). System Software helps to protect System from (threats), so we used (Anti-virues) System software to protect System of computer by using Software.

Q. No. 2 Part (iii) **Signed and unsigned numbers:-**

Signed nombers and unsigned are also known as (Floating-point) numbers. Unsigned numbers are those number they don't have (sign) they have Only magnitude of a numbers. like 742. while Signed numbers are those numbers that have (sign) and shows the difference between (positive) or (negative) number. like -128

Q. No. 2 Part (iv) **Front-end Development :-**

In a website Front-end is defined as everthing you see and interact with it. Front-end like (images) and (buttons). The developer of the Frontend are responsible to make website (Attractive) and (user-Friendly). The common tools used for Frot-end is (HTML, phytool, javascript).

Q. No. 2 Part (v) **Internet of Things (IoT) :-**

Internet of things is an infrastructure that have (networks) of servers (It provide (Connectivity) between multiple IOt devices. It enables (man) to machine and (machine) to man Interaction. Internet of things is widely used in healthcare, Industries to provide (automation).

Q. No. 2 Part (vi) **Data Science :-**

Data Science is the (interdisciplinery) Fields of multiple diplines like mathamatics, statics and Science. Data Sience is used to get (meagniful) information from hoge amoont of data. Data Sicience helps to find new (Trends, Conclusion) from given Data. **Scope** Data Science is widely used in :-

- Health care
- Business
- Entertainment
- Airlines

Q. No. 2 Part (vii) **Binary research :-**

Binary research is the type of (Search Algo^thm). In which we need to Convert information or data into the (unsorted) and (sorted) and then we need to find (Value) targets by using (Array).

Condition :-

- Convert the data into (sorted) and (unsorted).
- By using (Array) point-out the value targets.

Q. No. 2 Part (viii) **Abstraction :-**

Abtraction is the process to (remove) (unnecessary) Information from huge amount of data or to solve (complex) problems.

Importance :-

Abstraction is the process to removing unnessary details from data. In progaming it is very useful to protect program from (Errors). Abstraction helps to generate (Accurate) results.

Q. No. 2 Part (ix) **Data visualization :-**

Data visualization is the (graphical) representation of (Data) and Information. Data visualization is widely used in Business, healthcare and (engineering).

Types :-

There are multiple type of data visualization But commonly used :-

- Quantative visualization
- Catogrial visualization

Q. No. 2 Part (x) **Churn prediction :-**

Churn prediction is defined as a following (possibilities) why the Customer are not (Buying) there (product) or services from specific shop or mart.

Importance :-

Churn prediction is widely used in (Business). Because it helps to Business holder (why customer not Buying there products and where the Company needs (Improvement) to fill there (gaps).

Q. No. 2 Part (xi) **Information Security :-**

Information Security refers to secure your (personal Information) from anyone. In the digital world to secure information is very important.

- To protect ourselves from (malware) users (or (Hackers).
- Information security is very important to protect ourself from (Cyber Bullying) and en(ethical) usage of (data).

Q. No. 3 (Page 1) **Data visualization:-**

Data visualization refers to the (graphical) representation of huge amount of (data) and information. Data visualization is widely used in (business), healthcare, Data Science and (engineering).

Explaing Data visualization generally:-

Data visualization is very helpful in all field and they provide there (results) According to there usage. Data visualization types like Quantative visualization, categorial visualization, temperial visualization and information visualization. Assuming the company work with hyge data.

- Data visualization helps to the organization to easily (deals) with the large data. It make easy for organization to remove unnessrily details and showing main (Aspects)
- Data visualization type (Categrial) visualization helps a organization to deals withe Catogrial information, By using this visualization the organization easily get (Expected) results.
- (Information) visulaization help organization to arranging data (efficintly) and finding trends, Conclusion and Expected results.
- (Quantative) visualization is the types of Data visualization it helps organization or company to Arranging or shows (nomeric) values (easily) By using (Bar graphs).
- Data visualization is very (useful) when you dealing with large data. Becuse it (shows) the common and (details) main (Aspects) by (carefal) (evaluation) of data.

Q. No. 3 (Page 2)

Q. No. 4 (Page 1) **Software methods:-**

Software methods mean to (protect) your Computer System from (treats) and from (uneven) acess It is very useful to keep Save your (priracy). In Digital Age to protect your System is very crucial and (Important).

⇒ **Methods:-**

Following are the methods to keep Save your privacy and personal information.

- **Keep System updated:-** It is the common methods that is used to protect your computer from (threats), keep System updated help us to moving from one old version to the next (version) and protect system or file from (Crypting).
- **Biometric authentication:-** It is the powerful and (reliable) methods to protect your System from (uneven) from Computer System. It use finger line charateristic It helps to (Because) from the (uneven) access.
- **Fire wall:-** Fire wall is an Software methods to (protect) System, Because it act as (Barrier) when someone (trying) to access your (Computer), It create a Strong barrier person cannot be (access) it.
- **Anti-virues:-** Anti virues is an software that is used to protect your System Because (Before) stealing your, (Computer, It remove the all (harmful files) and remove (threats) from the computer.
- **hiding methods:-** It is a Software methods to protect your System or personal Information, By (hiding) and (Intergrating) Into the another (Software).

Q. No. 4 (Page 2)

Q. No. 5 (Page 1) **Internet of Things (IoT) :-**

Internet of things is an Infrastrodure that have (networks) of Servers and It provide (Connectivity) between the multiple Iot devices. It enables the (man) to machine and (machine) to man (Interaction).

Components of Iot :-

- Sensores
- Connectivity
- User-Interface
- data processing.

Sensores :-

Sensores is an devices that is used in (Internet of things) to (gathered) Information from Surrounding. Sensores have many types like Temperial Sensores, Criminal Sensores, Temperial Sensores is used to check the (Temperature) (humidity) inthe area. Criminal Sensores (detect) the Criminal and give (Alarming) to give the (Attention).

Connectivity :-

Connetivity is the Componet of (Internet of things) It enables to (easily) (Communicate) Iot devices with each other and share (Information) and details. i.e. The traffic Signal can be handle by Signal Server and they easily Communicate with each others.

Data processing :-

Data processing is an Compount of the (Internet of things). when the data is (gathered) by (Sensores) and stored into the (cloud), the (evaluation) of data called Dataprocessing. i.e to check the result or information of Sensores collector it is correct or (not).

Q. No. 5 (Page 2)

Q. No. 6 (Page 1) **Digital Communication :-**

Digital Communication refers to Sharings of (Information) and vides and (News) by using digital technology or digital devices called digital Communication.

Digital Communication Tools :-

following are the Common tools used by the people to share (ideas) and (thoughts).

- Facebook
- X-Twitter
- Instagram
- youtube
- Google

- **Facebook :-** Facebook is a digital Communication designed in (Feb, 4, 2004). Facebook is used to Entertan (purpose) and Sharing new (News) and what is going on in Country.
- **X-Twitter:** X- Twitter is an digital tool that was design in (21, March, 2006). X-Twitter is used to give (News) about country and famous personality (Twittes) that shares the belikes and thoughts of person.
- **youtube :-** youtube is designed in (2005). youtube is used to show (videos), (Streming) and for (entertainment) porpose. It involves creating (Content) to faitake (audience).
- **Instagram :-** Instagram is a digital tool that is developed in (oct, 6, 2010). It is used for (Entanment) porpose and It enables to (Communicat with) the audience.
- **Google :-** Google is developed in (1971). It is very useful the art as as (web) browser and give information about any topics. It also give the new Information, tell about (Wheather forcast).

Q. No. 6 (Page 2)