

(1) Which of the following is not usually associated with a Wide Area Network

- (a) The computers are geographically dispersed
- (b) The organisation can be connected permanently or not to the WAN
- (c) The shape usually represents a Ring Network Topology
- (d) WAN's are usually controlled by a specialised company such as BT or PTT
- (e) Wide Area Networks can provide access to VAN's.

(2) One of the uses of a spreadsheet model is to ask 'what if' questions and carry out analysis. Which of the following is a correct description of a 'what if' analysis?

- (a) All the cells in a spreadsheet will be updated whenever an entry is changed
- (b) Numerical cells in a spreadsheet can be formatted in a variety of ways
- (c) The model can be emptied of data when circumstances require it to be changed
- (d) Changes in data input will cause the model to recalculate giving an indication of the possible results of the change
- (e) A management technique which is just a management fad

(3) The link between the logical view and the physical view of data is the?

- (a) application program
- (b) the database management system
- (c) the database
- (d) programming
- (e) the data dictionary

(4) Who usually writes computer viruses?

- (a) Disgruntled workers
- (b) Terrorists
- (c) Hackers
- (d) Academic Experience
- (e) All of the above

(5) All of the following are types of tangible software except:

- (a) systems software
- (b) operating software
- (c) management decision making software
- (d) application software
- (e) cyberspace software

(6) Which language is the hardest for humans to write and understand

- (a) machine code (Binary)
- (b) assembly language
- (c) COBOL
- (d) BASIC
- (e) PASCAL

- (7) **Which of the following has limited facilities for mathematical notation but has excellent facilities for character data processing and business use?**
- (a) FORTRAN
 - (b) COBOL
 - (c) PASCAL
 - (d) ADA
 - (e) VORGON
- (8) **What is the essence of object-oriented programming?**
- (a) versatility
 - (b) objectivity
 - (c) inheritance
 - (d) all of the above
 - (e) removing the human from computer programming
- (9) **The basic data storage hierarchy consists of (in order from the smallest upwards):**
- (a) byte, bit, record, file, field and database
 - (b) byte, bit, field, record, database, file
 - (c) bit, byte, field, record, file, database
 - (d) bit, byte, field, file, record, database
 - (e) data, information, knowledge, wisdom
- (10) **A file in database terms is:**
- (a) the field which uniquely identifies a record
 - (b) a collection of related records
 - (c) all the files of an organisation
 - (d) a character of information
 - (e) a collection of meaningful information

- (11) **In file management systems, the duplication of items of data, so that they appear in two or more data files is known as:**
- (a) data integrity
 - (b) data redundancy
 - (c) data duplication
 - (d) data manipulation
 - (e) data entry
- (12) **Which of the following is not usually associated with computer networks?**
- (a) Local Area Network
 - (b) Value Added Network
 - (c) Multi-purpose Network
 - (d) Metropolitan Network
 - (e) Wide Area Network
- (13) **A _____ is a set of rules governing information flow in a communication system.**
- (a) message envelope
 - (b) standard
 - (c) communication protocol
 - (d) transmission mode
 - (e) modem
- (14) **The Hybrid Network is the best network (e.g.: Ethernet) to have for every organisations.**
- Is this statement:
- (a) True
 - (b) False
 - (c) Don't Know
- (15) **The logical data structure with a one to many relationship is the:**
- (a) tree structure
 - (b) network structure
 - (c) tabular structure
 - (d) none of the above
 - (e) all of the above
- (16) **Due to its conceptual simplicity and powerful data manipulation capabilities, the use of this type of database is increasing in popularity.**
- (a) network structure
 - (b) tree structure
 - (c) graphical structure
 - (d) relational structure
 - (e) a big one

- (17) **The most widely used application on personal computers today is?**
- (a) databases
 - (b) electronic spreadsheets
 - (c) word processing
 - (d) graphics
 - (e) none of the above
- (18) **Which one of the following is NOT a 3rd Generation Computing Language?**
- (a) ASSEMBLER
 - (b) FORTRAN
 - (c) COBOL
 - (d) BASIC
 - (e) ADA
- (19) **Which of the following is an example of a LAN network topology?**
- (a) The Chain
 - (b) The Plug
 - (c) The Ring
 - (d) The Slot
 - (e) The Ring Pull
- (20) **Which is the correct definition of the Open Systems Interconnection Seven Layer Reference Model**
- (a) Data Link Layer, Transport Layer, Physical Layer, Application Layer, Session Layer, Presentation Layer, Network Layer
 - (b) Transport Layer, Network Layer, Data Link Layer, Presentation Layer, Application Layer, Physical Layer, Session Layer
 - (c) Physical Layer, Data Link Layer, Network Layer, Transport Layer, Session Layer, Presentation Layer, Application Layer
 - (d) Presentation Layer, Transport Layer, Physical Layer, Application Layer, Session Layer, Network Layer, Data Link Layer
 - (e) Physical Layer, Data Link Layer, Network Layer, Transport Layer, Presentation Layer, Session Layer, Application Layer
- (21) **If we were to add these two numbers together $5 + 9$ we would get 14. How would a computer show the number 14 in binary code?**
- (a) 101
 - (b) 111
 - (c) 1100
 - (d) 1110
 - (e) 0101
- (22) **Which of the following is a characteristic of a Local Area Network**
- (a) Computers are geographically dispersed
 - (b) Usually connected together by satellite link
 - (c) Allows the sharing of data with other organisations
 - (d) Must confirm to industry standards
 - (e) Does not have to confirm to industry standards

- (23) Which of the following is not an advantage of the database approach?
- (a) elimination of data redundancy
 - (b) ability to associate related data
 - (c) increased security
 - (d) program data independence
 - (e) all of the above are advantages
- (24) Which is NOT normally associated with being one of the main functions of Spreadsheets?
- (a) cash flow forecasting
 - (b) What if analysis
 - (c) Goal Seeking
 - (d) Storing price lists of information
 - (e) Sensitivity analysis

Data for questions: 25 and 26

<i>Name</i>	<i>Address</i>	<i>Account No</i>	<i>Balance Owing</i>
Duncan	Glamis	100	£2000
Banquo	Glamis	200	£500

- (25) Which of the following statements relating to the print-out extract is correct?
- (a) Duncan is a field entry
 - (b) The extract from the print out is a single record
 - (c) Banquo is a character
 - (d) The extract from the print-out is a field
 - (e) None of the above
- (26) Which field will be the key field in the records?
- (a) address
 - (b) balance owing
 - (c) name
 - (d) account no
 - (e) Duncan
- (27) In database management systems the structure is a _____ representation of the data.
- (a) physical
 - (b) logical
 - (c) relational
 - (d) tabular
 - (e) hierarchical

(28) The development of Computer Programming Languages aim to

1. move programming to the 'end user'
2. automate the process of programming as much as possible
3. be reliable
4. be easy maintained
5. be portable
6. be transferable with other computers

- (a) 1, 2, 3, 5, and 6
- (b) 2, 3, 4, 5, and 6
- (c) 1, 2, 4, 5, and 6
- (d) 3, 4, and 5
- (e) 1, 2, 3, 4, 5, and 6

(29) Computers use the binary system to represent data. Which of the following statements is true?

- (a) Binary codes cannot be used by computers to represent text
- (b) Numbers must be processed into ASCII code in order to be processed by a computer
- (c) Binary code is used because computers recognise only two states
- (d) The English alphabet is the only thing a computer understands
- (e) Arithmetical operations are the only things that computers understand

(30) Read the following statements, and select the most appropriate outcome.

A. Value-added networks provide additional value by offering services other than the simple transmission of a communication.

B. Local Area Networks and Wide Area Networks are usually connected by gateways.

- (a) Only A is true
- (b) Only B is true
- (c) Both A and B are true
- (d) Both A and B are false
- (e) Don't Know

(31) In computing terms what is 'Half-Duplex' transmitting?

- (a) The sending and receiving of messages in both directions
- (b) The sending and receiving of messages in one direction
- (c) The sending of a message which never gets to its destination
- (d) The receiving of a message which is distorted
- (e) The receiving of a message which is not appropriate to the user

(32) A Trojan Horse in computing terms can be defined as:

- (a) Badware which when run will perform some malicious function when some pre-defined set of conditions arise, i.e., date, time, the millionth action, etc.
- (b) A program inside which a virus and or logic bomb can hide during either its transmission phase between machines or its running phase on a host computer
- (c) Don't Know

(33) Information can be classified under the following risk categories. Which one is the ODD one out?

- (a) Intentional caused by insiders usually in the course of business
- (b) Unintentional caused by insiders
- (c) Intentional, caused by outsiders usually external to the normal routine of business operations (e.g.: industrial espionage)
- (d) Unintentional, caused by natural disasters (fire, flood etc.)
- (e) Nothing to worry about and it is all hyped up by the press

(34) A database is an organised collection of data

Is this statement True or False

- (a) True
- (b) False

(35) A Database Management System has the following characteristics?

- (a) Aids the user to create, store, change, sort and retrieve data
- (b) Aids the user to protect data only
- (c) Aids the user when trying to determine what databases to buy
- (d) Aids the user to store, change and retrieve data only
- (e) Aids the user to retrieve and manipulate data only

(36) The link between the logical view and the physical view of data is the:

- (a) application program
- (b) DBMS
- (c) database
- (d) programming
- (e) Data Flow Diagrams

(37) Which database structure arranges data in some natural hierarchy?

- (a) tree
- (b) tabular
- (c) relational
- (d) network
- (e) sorted

(38) A spreadsheet is particularly suitable for accounting use because it automatically provides an audit trail

Is this statement?

- (a) True
- (b) False
- (c) Don't Know

(38) Listed below are methods which can be used to secure information systems. Which one of the following is the odd one out?

- (a) Procedural controls
- (b) Technical controls
- (c) Management controls
- (d) Legal enforcement
- (e) Allowing professional hackers to enter your computing systems without any resistance

(39) The standardisation of computer programming languages contributes greatly to

- (a) compilation
- (b) portability
- (c) modularity
- (d) simplicity
- (e) none of the above

(40) Which is the only international accepted network standard that is designed to allow devices from different manufactures to communicate with one another?

- (a) System Application Architecture (SAA)
- (b) Open System Interconnection (OSI)
- (c) Electronic Data Interchange (EDI)
- (d) System Network Architecture (SNA)
- (e) Accessible Communication Coded Enforced Set of Standards (ACCESS)

(41) A file created for the process of updating records in a computerised system is know as:

- (a) a master file
- (b) a reference file
- (c) a transaction file
- (d) a static file
- (e) a normal file

(42) Due to its conceptual simplicity and powerful data manipulation capabilities, the use of this type of database is increasing in popularity.

- (a) network structure
- (b) tree structure
- (c) graphical structure
- (d) relational structure
- (e) a big one

- (43) A record in a file will be uniquely identified by ? (chosed from the list below) in relational databases**
- (a) a protected field
 - (b) a check digit
 - (c) a key field
 - (d) the field length
 - (e) the file structure
- (44) What provides the capability of writing, assembling, designing, and printing high quality documents?**
- (a) word processing
 - (b) desktop publishing
 - (c) data processing
 - (d) office automation
 - (e) databases
- (45) Conversion from analogue signals to digital is called?**
- (a) modulation
 - (b) electronic data interchange
 - (c) communication protocol
 - (d) ISO
 - (e) demodulation