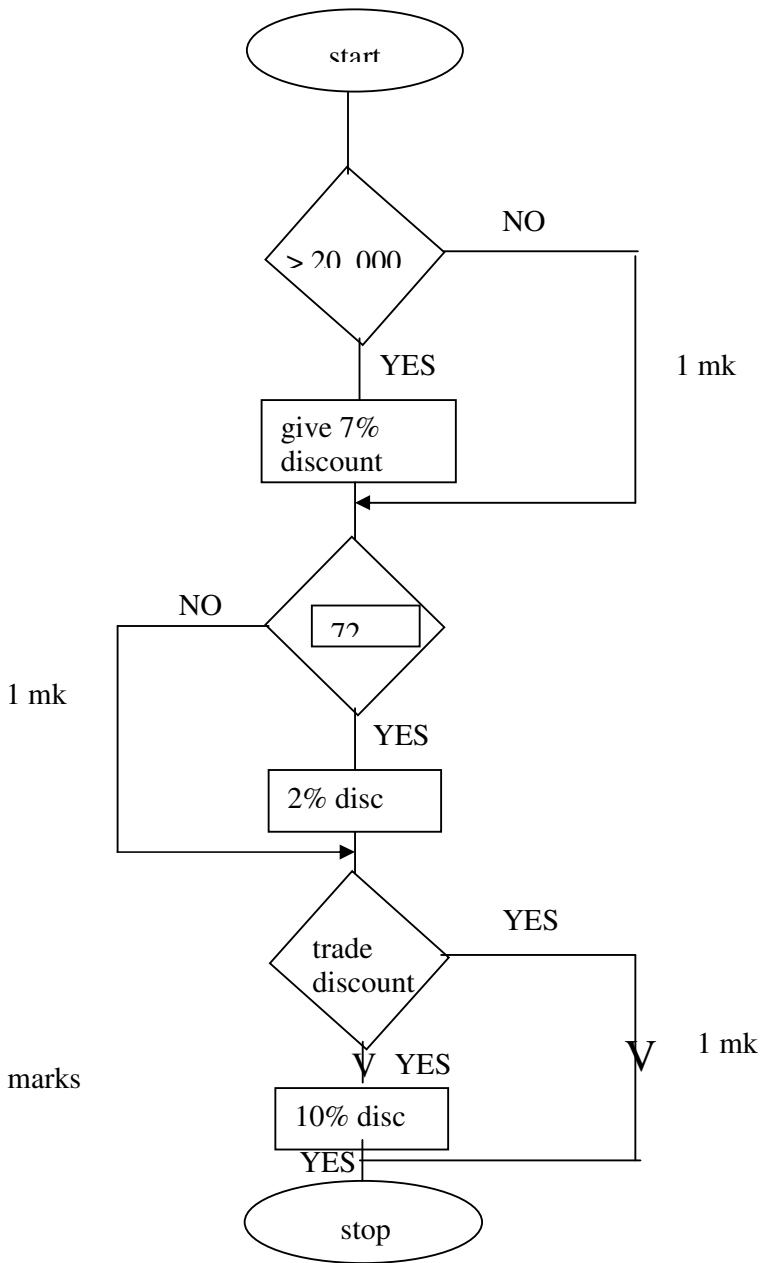


MARKING SCHEME

SECTION A 40 marks

1. –Computer room should be well lit to avoid eye strain
 - avoid over bright wall paints that reflect too much light causing eye strain
 - adjust brightness of the computer monitor until the eyes feel comfortable before using the computer
 - use/fit the monitor with radiation filter screens
 - avoid using flickering monitor
 - seat for the user must be comfortable and have a straight backrest that allows someone to sit upright
 - take frequent breaks while working with a computer
2. (a) insert
 - helps the user to insert or replace a character at the cursor position(b) delete
 - delete characters from the cursor position from left to right
3. – setup a computer network
 - maintain and enforce security measures on the network
 - monitor the use of network resources
 - maintain and trouble shoot network related problems
4. – be careful about body language, sitting arrangement, closeness etc
 - avoid personal biases in your questions and perceptions
 - interviewee must be informed in good time and topic communicated earlier
5. (a) portability refers to whether a program can be copied or installed in more than one computer
(b) – in-house developed programs
 - venue at the-shelf software purchase through a vendor
 - open source
6. (a) 10100_2 (b) 1100.001_2 (c) 326.448_8
7. –entertainment – e.g. music, movie
 - distribution of software
 - archival storage
8. (a) NIC – a device that creates a physical link to the computer and the transmission media
(b) – length
 - modem converts a signal from digital to analog form for the purpose of transmission over the analog media(c) – receives a signal from one section of a network, clean it to remove any distortion, boosts it and sends it to another section
9. – organize the main memory into blocks of sizes called partitions
 - assigns main memory storage partitions to data and instruction
 - access to data is given using addressing the partition
10. – hardware configuration

16. (a)



each symbol is 1/2 mark ≈ 7 marks

(b) – selection

- sequence

(c) error detection methods

-desk checking (dry-run) – going through the program while still on paper

- using debugging utilities – enter the program editor where syntax errors are detected during translation

- using test data – carries out trial runs

- various data variations and extreme including good and bad data are entered to see how the program

would handle them

17. (a) Advantages

- immune to electro magnetic interference and ear dropping

- fast and supports high band width

- large distance can be covered because it has low attenuation

- can be used in hazardous environment
- smaller and lighter than copper
- disadvantages
- connecting devices are expensive
- installation is difficult
- complex to configure
- expensive/ difficult to repair

(b) Analog

- made up of continuous varied wave form.
- it is transmitted over telephone line.
- a codec converts an analog signal to digital for transmission via a digital medium

Digital signal

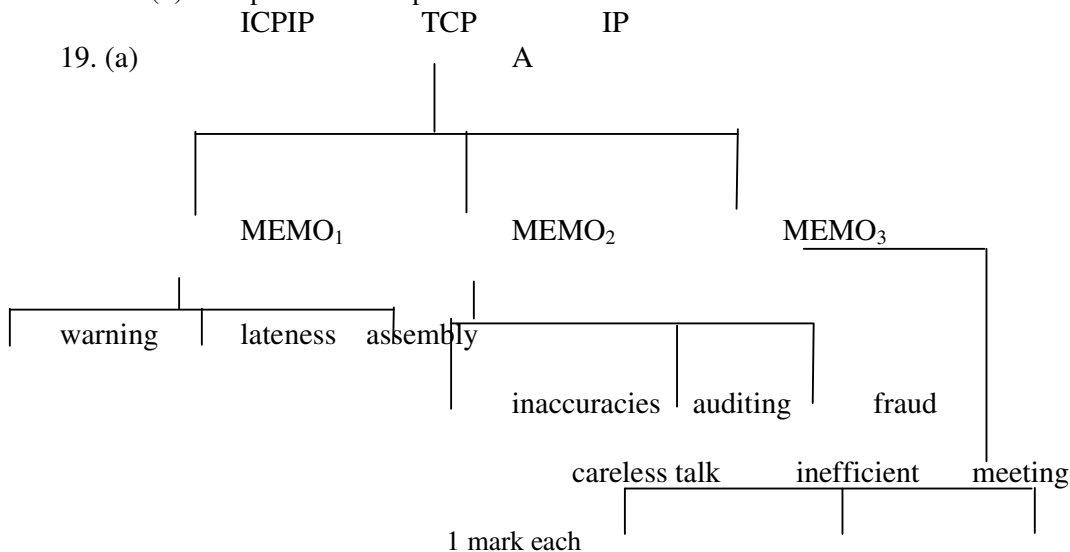
- made up of non continuous discrete wave form
- computers
- a modem converts a digital signal to analog for transmission over the analog media

(c) – thin net

- thick net

(d) microwave transmission consists of point to point transmissions meaning a signal is divided through a focused beam from transmitter to receiver while satellite is usually launched into space

(ii) example of internet protocol



(b) (i) A:/MEMO₂/Fraud

(ii) – do not drop the diskette down

- don't put heavy objects on top
- don't put near magnets
- don't remove from drive when still being read/written

(iii) use of password

(c) I/O c

- CPU
- memory
- secondary storage
- communication & ports

20. (a) Direct approach

- user simply stops using old system and starts using the new one

Parallel approach

- old and new system are operated side by side until the new system has shown it is reliable

Phased approach

- parts of a new system are phased in separately either at different times or all at one in groups

Pilot approach

- entire system is tried out but only by some users

(b) (i) Private data – belongs to an individual and must be accessed through direct permission from the owner
Confidential data – held by government or organization about people but can be seen by authorized people only.

(ii) fit strong metallic grills and locks to doors

- don't welcome strangers into the lab
- install alarms
- employ guards
- burglar proof

(c) (i) – output specification

- in put specification
- file /data/tables
- hard ware/soft ware

(ii) – lost benefit analyst

- schedule -Users
- environment -technology