63. AC Voltage controller: → controls the rms value of an AC Voltage. Application:
- speed control of induction motors.
- varies the supply voltage.

64. GTO: (gate turn-off thyristor)
- special type of thyristor
- high power semi-conductor device
- fully controllable switches.

65. Voltage sensor: Voltage monitoring device

66. Corona - effect: the phenomenon of ionisation of air surrounding a conductor due to which luminous glow and hissing noise is rised is known as corona-effect.

69. Tariff: rate at which electrical energy is sold to a consumer.

70. Variable port addressing:
→ Allows data transfer between AL or AX and a 16 bit port address.

fixed-port addressing	Variable port addressing
→ 8-bit	→ 16-bit
→ only AL is used	→ AX is used

71. SPWM: (Advantages):
→ switching frequency constant
→ easy to calculate the losses of switching devices.
→ thermal design is easy.

72.

Fuse	Circuit Breaker
→ protects devices from overloading and ~~short circuit~~ only	→ protects device from short circuit and over-loading
→ can't be reused	→ can be reused.
→ fuse is a metal piece that melts when over-loading occurs.	→ circuit breaker is an intern switch that gets tripped when there is excess current

73. **Software:** set of computer programs and associated documentation and data.

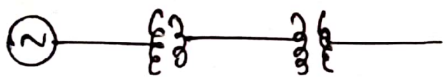
74. **Algorithm of maximum power point:**
max. power point → the point at which the product of the current and voltage equal the greatest value.
Algorithm → artificial

75. **program:** → set of instructions

76. **TDM:** (Time-division multiplexing)
→ Data, voice and video communication technique that interleaves several low speed signals into one high-speed transmission channel. ~~tone~~ ~~medium~~)

TDMA: (time division multiple access)
→ Channel access method for shared-medium networ
→ Allows several users to share the same frequenc channel.

77. **single-line diagram:** (simplified representation of an electrical system)



79. GP, Robi তোরা Modulation technique use করে?

80. PCM

81. SCR: Silicon controlled rectifier.

→ it is a three terminal thyristor that acts like a silicon rectifier diode whose conductor is controlled by an input current.

2. FDMA: Frequency Division Multiple Access.

3.

~~SSB~~ DSB	~~DSB~~ SSB
• removes the carriers but transmits both sidebands	→ removes the carriers and one of the sideba
• Double side-band modulation technique.	→ Single side-band modulat technique.
	→ utilizes half the bandwidth, the therm noise is reduced to half.

[SSB is better than DSB]

SSB → Single side-band
DSB → Double side-band.

84. Relative Addressing: JMP
JNZ
JE

85. → ?

86. Infinite Bus: An infinite bus is a power system so large that its voltage and frequency remain constant regardless of how much real or reactive power is drawn from or supplied to it.

→ Infinite bus - এর Voltage Angle constant.

87. What is fading a channel?

→ information এর ওপর নির্ভর করে capability.

88. Volatile memory : (RAM) যেখানে read + write করা যায় সেটাই।

89. Handshaking : inter connection between microprocessor and peripherals.

90. INT 21 H কোন type-এর interrupt?

→ software interrupt.

91. Fuse

Relay

→ switches that open / close an electrical circuit.

→ Allows small control signal to run heavier equipments.

92. Diversity Factor : (greater than 1)
(কোন ক্ষেত্রে ব্যবহার)

→ ratio of sum of the individual maximum demand of a system to the maximum demand of the whole system.

93. Total harmonics কোন কোথায়? → ?

94. Hardware

→ physical & visible components. CPU, keyboard, mouse.

Software

→ set of instructions

95. Maskable

→ this interrupt can be ignored / disabled by the CPU.

non-maskable

→ can't be ignored / disabled. The CPU must accept this interrupt.

96. Input নেয়ার code:

```
MOV AH, 1
INT 21H
```

output display- এর code:

```
MOV AH, 2
INT 21H
```

97. Form factor: $\frac{\text{RMS Value}}{\text{Average Value}}$

half-wave - এর form factor 1.57.

98. Ideal value of form factor: = 1

99. Transmission line-এ bounded wire কেন used হয়?

→ skin effect কমানো,

100. Difference between MATLAB and SIMULINK:

MATLAB → code.

SIMULINK → graphical user interface

1. THD:
2. Vector number:
3. VSB modulation: Vestigial-Sideband modulation.

→ the 'vestige' part of a signal is modulated alongside one sideband.

5. SSB, DSB কেন used হয়?

→ to extract the desired sideband.

7. Negative resistance কোথায় হয়?

→ oscillators, amplifiers.

9. Interrupt:

10. Segmentation কেন করি?

11. Slack Bus : → provides reference for the voltage & angle. (Also called reference bus)

16. Noise : → unwanted sound

17 → (2)

18.

8088	8086
8-bit mpu	16-bit mpu.

19.

PC Mode	Kit mode

20 → (2)

21. read mode- এর diagram- এ gap কেন দেয়া ?

→

22) NEAR:

the procedure is defined in the same segment as the code.

FAR:

the procedure is defined in some other segments.

23) Light of sight (LOS): A type of propagation that can transmit and receive data only where transmit and receive stations are in view of each other, without any obstacles.

24. Boost converter-এ capacitor-এর কাজ কি?

→ for filtering purpose.

25. Solar panel-এ কোন converter use করি?

→ Buck-boost converter.

26. Stack operation কোন কোন? (without PUSH & POP)

→