

## IOCL Placement Paper Questions

1)  $1256 \times 3892 = ?$

(a) 4883582

(b) 4888352

(c) 4888532

(d) 4883852

(e) None of these

Answer : b

2)  $6 \times 66 \times 6666 = ?$

(a) 263736

(b) 267336

(c) 263763

(d) 263376

(e) None of these

Answer : a

3)  $(7)3 \div ?? + 7 = 14$

(a) 49

(b) 1764

(c) 441

(d) 3136

(e) None of these

Answer : e

4)  $12167 \times ? = 1035$

(a) 35

(b) 25

(c) 55

(d) 15

(e) None of these

Answer : e

5)  $5 \times 8 \div 7 = ?$

(a) 1

(b) 1

(c) 5

(d) 5

(e) None of these

Answer : c

## 2. Computer Knowledge Questions

1) The term .. designates equipment that might be added to a computer system to enhance its functionality.

(a) digital device

(b) system add-on

(c) disk pack

(d) peripheral device

(e) None of these

Answer : b

2) A device, which is not connected to the CPU, is called as

- (a) Land-line
- (b) On-Line device
- (c) Off-line device
- (d) Device
- (e) None of the above

Answer : c

3) A . Is a microprocessor-based computing device.

- (a) personal computer
- (b) mainframe
- (c) workstation

(d) server

(e) None of these

Answer : a

4) The. Is the amount of data that a storage device can move from the storage medium to the computer per second.

(a) data migration rate

(b) data digitizing

(c) data transfer rate

(d) data access rate

(e) None of these

Answer : c

5) RAM can be thought of as the \_\_\_\_\_ for the computers processor

(a) factory

(b) operating room

(c) waiting room

(d) planning room

(e) None of these

Answer : c

6 An area of a computer that temporarily holds data waiting to be processed is ..

(a) CPU

(b) Memory

(c) Storage

(d) File

(e) None of these

Answer : b

7) Data becomes . When it is presented in a format that people can understand and use.

(a) processed

(b) graphs

(c) information

(d) presentation

(e) None of these

Answer : c

8) To move a copy of a file from one computer to another over a communication channel is called?

(a) File transfer

(b) File encryption

(c) Waiting room

(d) File copying

(e) None of these

Answer : a

9) The instructions that tell a computer how to carry out processing tasks are referred to as computer .

(a) programs

(b) Processors

(c) input devices

(d) memory modules

(e) None of these

Answer : a

10) What kind of memory is both static and non-volatile?

(a) RAM

(b) ROM

(c) BIOS

(d) CACHE

(e) None of these

Answer : b

### 3. Technical Questions

1) The relative speed between the magnetic fields of stator and rotor under steady state operation is zero for a

(a) dc machine.

(b) 3 phase induction machine.

(c) synchronous machine.

(d) single phase induction machine.

e) All of the above

Answer : e

2) What are two purposes for segmentation with a bridge?

1) To add more broadcast domains.

2) To create more collision domains.

3) To add more bandwidth for users.

4) To allow more broadcasts for users.

(a).1 only

(b).2 and 3

(c).2 and 4

(d).4 only

Answer: c

3) A salient pole synchronous motor is running at no load. Its field current is switched off. The motor will

(a) come to stop.

(b) Continue to run at synchronous speed.

(c) Continue to run at a speed slightly more than the synchronous speed.

(d) Continue to run at a speed slightly less than the synchronous speed.

Answer : b

4) In a stepper motor the angular displacement

(a) can be precisely controlled.

(b) It cannot be readily interfaced with micro computer based controller.

(c) The angular displacement cannot be precisely controlled.

(d) It cannot be used for positioning of work tables and tools in NC machines.

Answer : a

5) In a D.C. machine, the armature MMF is

(a) stationary w.r.t. armature.

(b) Rotating w.r.t. field.

(c) Stationary w.r.t. field.

(d) Rotating w.r.t. brushes.

Answer : c

6) Out of the following methods of heating the one which is independent of supply frequency is

- (a) electric arc heating
- (b) induction heating
- (c) electric resistance heating
- (d) dielectric heating

Answer : c

7) When a synchronous motor is running at synchronous speed, the damper winding produces

- (a) damping torque.
- (b) eddy current torque.
- (c) torque aiding the developed torque.
- (d) no torque.

Answer : d

8) The two windings of a transformer is

(a) conductively linked.

(b) Inductively linked.

(c) Not linked at all.

(d) Electrically linked.

Answer : b

9) The d.c. series motor should always be started with load because

(a) at no load, it will rotate at dangerously high speed.

(b) it will fail to start.

(c) it will not develop high starting torque.

(d) all are true.

Answer : a

10) In a 3 phase induction motor running at slip  $s$  the mechanical power developed in terms of air gap power  $P_g$  is

(a)  $(s-1)P_g$

(b)  $P_g/1-S$

(c)  $1-SP_g$

(d) S.Pg.

Answer : c

11) The power factor of a squirrel cage induction motor is

- (a) low at light load only.
- (b) low at heavy load only.
- (c) low at light and heavy load both.
- (d) low at rated load only.

Answer : a

12) A motor which can conveniently be operated at lagging as well as leading power factors is the

(a) squirrel cage induction motor.

(b) wound rotor induction motor.

(c) synchronous motor.

(d) DC shunt motor.

Answer : c

13) The generation voltage is usually

(a) between 11 KV and 33 KV.

(b) between 132 KV and 400 KV.

(c) between 400 KV and 700 KV.

(d) None of the above.

Answer : a

14) If a transformer primary is energised from a square wave voltage source, its output voltage will be

(a) A square wave.

(b) A sine wave.

(c) A triangular wave.

(d) A pulse wave.

Answer : a

15) In a d.c. series motor the electromagnetic torque developed is proportional to

(a)  $I_a$

(b)  $I_a^2$  - Answer

(c)  $I_a / I_a$

(d)  $I_a / I_a^2$

Answer : b

16) A hysteresis motor

(a) is not a self-starting motor.

(b) is a constant speed motor.

(c) needs dc excitation.

(d) can not be run in reverse speed.

Answer: b

17) In a transformer the voltage regulation will be zero when it operates at

(a) unity p.f.

(b) leading p.f.

(c) lagging p.f.

(d) zero p.f. leading.

Answer : b

18) A two-winding single phase transformer has a voltage regulation of 4.5% at full-load and unity power-factor. At full-load and 0.80 power-factor lagging load the voltage regulation will be

(a) 4.5%.

(b) less than 4.5%.

(c) more than 4.5%.

(d) 4.5% or more than 4.5%.

Answer : c

19) The primary winding of a 220/6 V, 50 Hz transformer is energised from 110 V, 60 Hz supply. The secondary output voltage will be

(a) 3.6 V.

(b) 2.5 V.

(c) 3.0 V.

(d) 6.0 V.

Answer : c

20) The size of a conductor used in power cables depends on the

(a) operating voltage.

(b) power factor.

(c) current to be carried.

(d) type of insulation used.

Answer : c

21) The emf induced in the primary of a transformer

(a) is in phase with the flux.

(b) lags behind the flux by 90 degree.

(c) leads the flux by 90 degree.

(d) is in phase opposition to that of flux.

Answer : c

22) The current from the stator of an alternator is taken out to the external load circuit through

(a) slip rings.

(b) commutator segments.

(c) solid connections.

(d) carbon brushes.

Answer : c

23) The frequency of the rotor current in a 3 phase 50 Hz, 4 pole induction motor at full load speed is about

(a) 50 Hz.

(b) 20 Hz.

(c) 2 Hz.

(d) Zero.

Answer : c

24) The most suitable servomotor for low power applications is

(a) a dc series motor.

(b) a dc shunt motor.

(c) an ac two-phase induction motor.

(d) an ac series motor.

Ans: b

25) Out of the following methods of heating the one which is independent of supply frequency is

(a) electric arc heating

(b) induction heating

(c) electric resistance heating

(d) dielectric heating

Answer : c