

PPG INSTITUTE OF TECHNOLOGY

COIMBATORE

Dr. PALANISAMY ENDOWMENT FUND SCHOLARSHIP TEST

INSTRUCTIONS FOR CANDIDATES

- Duration of the Test is 90mins (Time: 10.00am to 11.30 am on 24th March 2010).
- Question Paper will have 90 objective type questions with 4 alternative answers.
10 questions from - Mathematics, Physics and Chemistry
Remaining 80 questions from - Branch Subjects.
- No Negative Marking for wrong answer.
- Cell Phone usage prohibited.
- Come with College ID cards.
- Decision of the committee is final.

Note: College Bus facility is available from Gandhipuram at 9.15 am.

PPG INSTITUTE OF TECHNOLOGY, SARAVANAMPATTY, COIMBATORE

SCHOLARSHIP TEST

DEPARTMENT OF CSE AND IT

1. The value of $[\vec{i} \times \vec{j}, \vec{j} \times \vec{k}, \vec{k} \times \vec{i}]$ is

- 1) 0 2) 1 3) $\sqrt{3}$ 4) 2

2. The argument of $\frac{1+i}{1-i}$ is

- 1) $-\frac{\pi}{2}$ 2) π 3) $\frac{3\pi}{2}$ 4) $\frac{\pi}{2}$

3. Hardness of water is due to the presence of

1. Ca & Mg salts 2. Ca & Mn salts 3. Ca & Na salts 4. Ca & K salts

4. One of the following is a solid lubricant

1. Graphite 2. Diamond 3. Sand 4. Calcium carbonate

5. Momentum is a Quantity.

- (a)vector (b)scalar (c)both a and b (d)none of the above.

6. Father of Computer is

- a) Dennis Ritchie b) Google c) Charles Babbage d) Gosling

7. C language also called as

- a) Medium Level Language b) Middle Level Language c) Middleware Language d) Procedural Language

8. Hiding the properties of one object by another object in C++ is called _____

- a) Independence b) Impedence c) Inheritance d) a & c

9. void main()

```
{  
char *s="\12345s\n";  
printf("%d",sizeof(s));  
}
```

What is the output for the above code?

- a) 6 b) 9 c) 5 d) 3

10. What is the output for the below code?

```
main()  
{  
printf("%p",main);  
}
```

- a)Some address will be printed. b) Nothing will be printed c) Error in the code d) 'main' will be printed

PPG INSTITUTE OF TECHNOLOGY, SARAVANAMPATTY, COIMBATORE
SCHOLARSHIP TEST
DEPARTMENT OF ECE

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6. What does AM mean?

- 1) Angelo marconi 2) Anno median 3) Amplitude modulation 4) Amperes

7. What frequency range is the High Frequency band?

- 1) 100 kHz 2) 1 GHz 3) 30 to 300 MHz 4) 3 to 30 MHz

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10. What does EPROM stand for?

- 1) Electric Programmable Read Only Memory 2) Erasable Programmable Read Only Memory
3) Evaluable Philotic Random Optic Memory 4) Every Person Requires One Mind

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SCHOLARSHIP TEST
DEPARTMENT OF EEE

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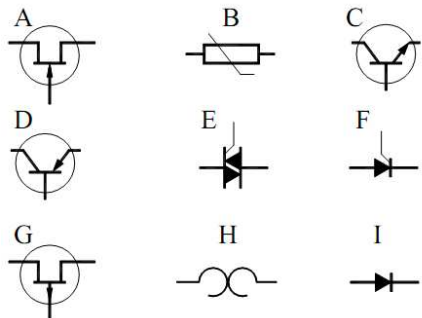
3. Which of the following is represented by the symbol XL?

a) impedance of a load b) reactance of a coil c) resonant frequency of a filter
d) output level of a source

4. One coulomb-per-second is equal to one:

a) watt b) joule c) volt d) ampere

5. Which of the components is the symbol for a PNP bipolar transistor?



a) A b) C c) D d) G

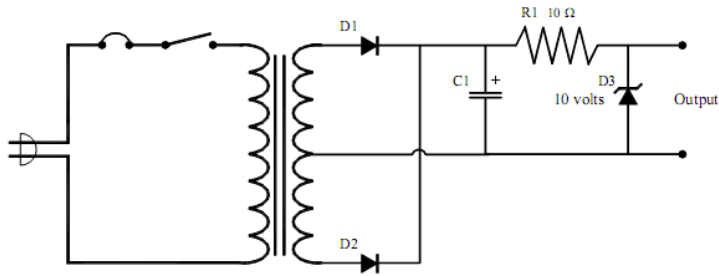
6. The frequency of a signal is INVERSELY proportional to which of the following:

a) period b) amplitude c) phase d) power

7. The amount of useful output power provided by a device is 1.5 W. It is powered by a 48-V supply with 100 mA of current. How much power is wasted in heat?

- a) 1.5 W b) 2.1 W c) 3.3 W d) 6.3 W

8. A voltage level of 20 V is measured at the output of the power supply with no load attached. Which of the following is the probable cause?



- a) R1 shorted b) C1 open c) D1 shorted d) D3 open

10. What is the peak voltage of a sine wave that measures 220 VAC rms?

- a) 155 V b) 169 V c) 311 V d) 440 V

PPG INSTITUTE OF TECHNOLOGY, SARAVANAMPATTY, COIMBATORE

SCHOLARSHIP TEST

DEPARTMENT OF MECHANICAL ENGINEERING

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6. A sheet of Al alloy having 2mm thickness is welded using which process
A) TIG B) MIG C) GAS D) NONE
7. In thick cylinders, which of the following is true [*S stands for sigma*]
(A) $S_t > S_r$ (B) $S_t = S_r$ (C) S_t D) NONE
8. Young's modulus value for steel?
A) 200Gpa B) 400Gpa C) 600Gpa D) 800Gpa
9. Thermal conductivity of silver
A) 200 w/m0K B) 400 w/m0K C) 600 w/m0K D) 800 w/m0K
10. Clinical thermometer is which order system
A) 0,1, 2, or 3 B) 1,2, 3 or 4 C) 3,2,1, or 0 D) None