CHOOSE THE CORRECT ANSWER

Q-1	What will affect on size of stack frame of a function ?
A	The number of times this function called in the program.
B	The code size inside this function.
C	The number of static local variables inside this function.
D	The number of function arguments.

CHOOSE THE CORRECT ANSWER

Q-2	The keyword static affects on variable ……
A	scope
B	life time
C	no effect
D	it depends

CHOOSE THE CORRECT ANSWER

Q-3	How to create a variable without allocate space in RAM
A	make it static global
B	make it constant local
C	make it constant global
D	B and C

CHOOSE THE CORRECT ANSWER

Q-4	Global variable and local variable with the same name
A	compiler error
B	linker error
C	no error
D	run time error

CHOOSE THE CORRECT ANSWER

Q-5	Which stage in tool chain generate warning
A	optimizer
B	linker
C	tokenization
D	symantic analysis

WHAT IS THE OUTPUT OF THE FOLLOWING CODE

Q-6

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
   char x = -128;
   x>>=1;
   Printf("%d",x);
   return 0;
}
```

A	-128
B	128
C	-64
D	64

WHERE THE VARIABLE ' x ' WILL BE ALLOCATED IN MEMORY

Q-7

```
#include <stdio.h>
#include <stdlib.h>
int x;
int main()
{
   printf("%d",x);
   return 0;
}
```

A	.data
B	.bss
C	stack
D	rom

DESCRIBE 'p'

Q-8

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
   int*(p)[2];
   return 0;
}
```

A	array of two integer elements
B	pointer to array of two integer elements
C	array of two pointers to integer
D	syntax error

ANSWER THE FOLLOWING

Q-9	To send character to 2*16 LCD
A	Make RS pin high
B	Make EN pin low for 1 milli second
C	Make EN pin high for 1 milli second
D	A and C

ANSWER THE FOLLOWING

Q-10	ADC resolution in Atmega32 is
A	8 bit
B	16 bit
C	10 bit
D	32 bit

ANSWER THE FOLLOWING

Q-11	ADC frequency range in Atmega32 is
A	0 – 200 khz
B	150 – 200 khz
C	50 – 200 khz
D	0 – 250 khz

ANSWER THE FOLLOWING

Q-12	Calculate over_flow_time of a 8 bit timer connected to 20 Mhz frequancy
A	50 nano second
B	12800 micro second
C	12800 nano second
D	50 micro second

ANSWER THE FOLLOWING

Q-13	Two interrupts at the same time in Atmega32
A	CPU serve the higher priority according to vector table
B	CPU serve the interrupt from hardware source
C	Run time error
D	CPU serve the interrupt from software source

ANSWER THE FOLLOWING

Q-14	All pins in Atmega32 by default
A	Output
B	Inputs
C	Internal Pull up resistors are activated
D	B and C

ANSWER THE FOLLOWING

Q-15	In ADC if your step size is 15 milli volt, what is the ADC reading if the analog input pin read 50 milli volt
A	3
B	4
C	15
D	50

ANSWER THE FOLLOWING

Q-16	In Atmega32
A	Timer0 over flow time is larger than timer1 over flow time
B	Timer1 over flow time is larger than timer0 over flow time
C	Timer0 over flow time is larger than timer2 over flow time
D	B and C

ANSWER THE FOLLOWING

Q-17	On of the following registers control UART perepheral
A	UBRRL
B	WDTCR
C	ADMUX
D	TWDR

ANSWER THE FOLLOWING

Q-18	Which from the following has the higher priority in vector table
A	TIMER2_COMP
B	ADC
C	TWI
D	TIMER0_OVF

ANSWER THE FOLLOWING

Q-19	The physical address of TWBR register
A	$20
B	$15
C	$00
D	$30

ANSWER THE FOLLOWING

Q-20	Two registers in Atmega32 sharing the same address
A	UBRRL and UCSRC
B	UBRRH and UCSRCA
C	UBRRL and UCSRA
D	UBRRH and UCSRC

ANSWER THE FOLLOWING

Q-21	Select the right formula to set bit (4) in a register called x
A	x = (x >> 4) | 1
B	x = (1 >> 4) | x
C	x = (x << 4) | 1
D	x = (1 << 4) | x

WHAT IS THE OUTPUT OF THE FOLLOWING CODE

Q-22

```
#include <stdio.h>
#include <stdlib.h>
const int x = 20;
int main()
{
   int*p = &x;
   *p = 50;
   printf("%d",x);
   return 0;
}
```

A	20
B	50
C	Run time error
D	Compiler error

ANSWER THE FOLLOWING

Q-23	The TWAR register control .....
A	UART
B	SPI
C	EEPROM
D	I2C

WHAT IS THE OUTPUT OF THE FOLLOWING CODE

Q-24

```
#include <stdio.h>
#include <stdlib.h>
struct a{
unsigned char x:3;
}b;
int main()
{
    b.x  = 255;
    b.x <<= 1;
    printf("%d",b.x);
    return 0;
}
```

A	255
B	254
C	6
D	Compiler error

WHAT IS THE OUTPUT OF THE FOLLOWING CODE

Q-25

```
//assuming int size -> 4 bytes
#include <stdio.h>
#include <stdlib.h>
struct a{
unsigned char x;
unsigned int  y;
unsigned char z;
}b;
int main()
{
    printf("%d",sizeof(b));
    return 0;
}
```

A	6
B	4
C	8
D	12

HOW MANY BADDING BYTES IN THIS CODE ?

Q-26

```
//assuming int size -> 4 bytes
#include <stdio.h>
#include <stdlib.h>
#pragma pack(2)
struct a{
unsigned char x;
unsigned int  y;
unsigned char z;
}b;
int main()
{
   return 0;
}
```

A	8
B	2
C	6
D	12

WHAT IS THE OUTPUT OF THE FOLLOWING CODE

Q-27

```
//assuming int size -> 4 bytes
#include <stdio.h>
#include <stdlib.h>
union a{
unsigned char x;
unsigned int  y;
unsigned char z;
}b;
int main()
{
   printf("%d",sizeof(b));
   return 0;
}
```

A	6
B	4
C	1
D	12

WHAT IS THE OUTPUT OF THE FOLLOWING CODE

Q-28

```
//assuming int size -> 4 bytes
#include <stdio.h>
#include <stdlib.h>
int main()
{
   int x = 10;
   (char)x = 20;
   printf("%d",sizeof(x));
   return 0;
}
```

A	1
B	2
C	4
D	error

WHAT IS THE OUTPUT OF THE FOLLOWING CODE

Q-29

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
   char x = 10;
   int*p = &x;
   printf("%d",sizeof(p));
   return 0;
}
```

A	1 byte
B	2 bytes
C	4 bytes
D	It depending on address bus

ANSWER THE FOLLOWING

Q-30	In 8-bit timer, to get a specific time we need 31,250 ticks, what is the remainder ticks we have to start counting from it to get the accurate time ?
A	9
B	122
C	18
D	256