Sr No	Question	Option A	Option B	Option C	Option D	Answer
1	Main processor chip in computers is_____	ASIC	ASSP	CPU	CPLD	C
2	ARM stands for_____	Advanced Rate Machines	Advanced RISC Machines	Artificial Running Machines	Aviary Running Machines	B
3	The CISC stands for_____	Computer Instruction Set Compliment	Complete Instruction Set Compliment	Computer Indexed Set Components	Complex Instruction set computer	D
4	The GPIO stand for_____	General Purpose Inner Outer Propeller	General Purpose Input Output Pins	General Purpose Interested Old People	General Purpose Input Output Processor	B
5	The IDE stand for_____	In Deep Environment	Integrated Development Environment	Internal Deep Escape	IDE	B
6	A program written with the IDE for Arduino is called	IDE source	Sketch	Cryptography	Source code	B
7	Arduino IDE consists of 2 functions. What are they?	Build() and loop()	Setup() and build()	Setup() and loop()	Loop() and build and setup()	C
8	ALU of ARM7TDMI is_____bit.	8	32	64	10	B
9	How many digital pins are there on the UNO board?	10	12	16	20	A
10	Most of processors designed by ARM are_____	16bit	32bit	64bit	8bit	B
11	The function of link register in ARM7TDMI is_____	To store return address whenever subroutine is called	To store address of I/O device	Multiplex the address and data lines	Perform addition	A
12	The function of register r15 in ARM7TDMI is as_____	Program Counter	CPSR	SPSR	ALU	A
13	In the ARM Nomenclature ARMxTDMI, D and M stand for_____	Debug and Fast Multiplier units are present	Division and Multiplier units are present	Debugger and Multiplier units are not present	Division and Multiplier units are not present	A
14	The computer architecture aimed at reducing the time of execution of instructions is _____	CISC	RISC	ISA	ANNA	B
15	In CISC processor the nature of instruction size is_____	Fixed	variable	both a &b	none of the above	B
16	If the three stages of execution in pipelining are overlapped, how would be the speed of execution?	higher	moderate	lower	unpredictable	A
17	In RISC Processors configuration status of control unit is_____	Hard wired	Microprogrammed	both a &b	none of the above	A
18	A function is a series of programming statements that can be called by name. Which command is called once when the program starts_____	loop()	setup()	(output)	(input)	B
19	In ATmega328p ‘p’ refers to_____	Production	Pico-Power	Peripheral	Programmable on chip	B
20	The throughput of a super scalar processor is	less than 1	1	more than 1	not known	C
21	Each stage in pipelining should be completed within ____ cycle	1	2	3	4	A
22	The main importance of ARM micro-processors is providing operation with	Low cost and low power consumption	Higher degree of multi-tasking	Lower error or glitches	Efficient memory management	A
23	In ARM processor when Interrupt occurs ARM processor goes into following mode	FIQ mode	Abort mode	Supervisor mode	Undefined mode	A

24	The function of Barrel shifter is_____	Shift Operation in same instruction cycle	Shift operation in 2 instruction cycle	Shift operation in 4 instruction cycle	none of the above	**A**
25	Evaluate the following statements **I) R13 is traditionally used as the stack pointer and stores the head of the stack in the current processor mode** **II) R14 is the link register where the core puts the return address on executing a subroutine** **III) R15 is the program counter and contains the address of the next instruction to be fetched**	All the options are true	I and II are true	II and III are true	I and III are true	**A**
26	When the processor is executing simple data processing instructions, the pipeline enables one instruction to be completed every clock cycle, this is also called as	Throughput	Latency	Execution	None of the above	**A**
27	It starts with a /* and continues until a */ what does this do?	Loads a sketch	Makes comments	Compiles quicker	Makes stars appear	**B**
28	A function is a series of programming statements that can be called by name. Which command is called once when the program starts:	loop()	setup()	(input)	(output)	**B**
29	Default bootloader for the Arduino UNO is	Optibootloader	AIR-boot	Bare box	GAG	**A**
30	Select proper microcontroller used in Arduino UNO	ATmega328p	ATmega2560	ATmega32114	AT91SAM3x8E	**A**
31	The operation that does not involves clock cycles is ____	Execute	Installation of a device	Decode	Fetch	**B**
32	How many types of Arduino do we have?	5	6	8	4	**C**
33	When writing a sketch, how do you decide which features belong in the setup function and which belong in the loop function?	Features that need to be initialized go in setup & to run continuously go in loop	Features that need to be initialized go in loop	Features that need to run continuously go in setup	Features that need to run continuously go in loop	**A**
34	What is the standard length of MAC address:	16 bits	32 bits	64 bits	48 bits	**D**
35	An interface between the user or an application program and the system resources are.....	Microcontroller	Operating System	Microprocessors	Multi-microprocessors	**B**
36	This component will fetch, decode and execute data and instruction_____	Hard drive	ROM	CPU	RAM	**C**
37	Which Statement when executed,provides 5V @ pin 13 of Arduino UNO board in order to turn off the LED_____	DigitalWrite(13,LOW)	DigitalWrite(LED,LOW)	DigitalWrite(13,HIGH)	DigitalWrite(LED,HIGH)	**A**
38	Which one of the following is not the part of Arduino board_____	Power Jack	Reset button	USB jack	Keyboard	**D**
39	delay(5000); stands for_____	wait 50 seconds	wait 50 minutes	wait 5 seconds	wait 5 minutes	**C**
40	SDK stands for _____	Software Design Kit	Serial Development Kit	Software Development Kit	Serial Design Kit	**C**
41	If the three stages of execution in pipe lining are overlapped, how would be the speed of execution?	Moderate	Higher	Unpredictable	Lower	**B**
42	GPU stands for_____	Grouped Processing Unit	Graphics Processing Unit	Graphical Performance Utility	Graphical Portable Unit	**B**
43	A normal human eye can process around_____ frames per second	25	50	60	70	**A**

44	Fast action games must process at least _____ frames per for smooth game scroll and flow.	25	50	60	70	**C**
45	A process in which the video data is prepared and formatted prior to playback is known as___	3D graphics rendering	Video Editing	Graphics Processing.	Signal Processing.	**B**
46	The processor that can process large amount of data suited for Machine learning and Cryptocurrency mining is_____	IO processor	Digital Signal Processor	Graphics Processor	Coprocessor	**C**
47	_____not element an element of IoT	People.	Process.	Security.	Things.	**B**
48	Find the name of first recognized IoT Device.	Smart Watch	ATM	Radio	Video Game.	**B**
49	How many devices (in billion) approximately are estimated to be connected to IoT by 2020?	2	75	20	100	**C**
50	IoT Gateway must provide_____	Connection point between cloud and controllers.	Security with hardware.	Simple and fast installation.	Data storage.	**A**
51	_____ is the other way of refereeing to IoT devices	Smart	Connected.	Smart and Connected.	Access devices.	**C**
52	The role of IoT sensor is_____	Collect Data	Store Data	Manage Data	Security.	**A**
53	_____are smart devices that uses embedded processors, sensor and communication hardware to collect and send data which is acquired from environment	Computers	Network	Things	Protocols	**C**
54	_____ is the direct contact between two smart objects when they share information instantaneously without intermediaries	Device to device	Device to gateway	Gateway to data systems	Between data systems	**A**
55	Agriculture IoT stick is smart gadget work on principle of____	Plug and sense	Plug and play	Plug and work	Plug and socket	**A**
56	Vehicle communication, driverless car, connected cars are the example of IoT in_____	Agriculture	Electronics	Automotive	Discrete Manufacturing	**C**
57	Real time driver monitor system to detect monitor fatigue level of driver using IoT in automotive includes_____	Sensors to detect eye blinks, gas, impact sensors and alcohol detection	Sensors for GPS	Fluid level sensors	RFID tags	**A**
58	Nut and Bolt manufacturing is an example of discrete manufa	High complexity and low volume	Low complexity and high volu	Low complexity low volume	High complexity high volume	**B**
59	The industrial revolution is_____	significant change that affects a single industry only	new technologies and novel ways of perceiving the world that trigger a profound change in economic and social structures	an event that happened in a previous century and doesn't affect modern society	a series of technological advances that may or may not have a profound effect on societies	**B**
60	The series of events best describes the transformations of the first three industrial revolutions are_____	Mechanization of production; introduction of mass production	Mechanization of production; invention of steamships and railroad	Discovery of electricity; the growth of mass production	Mechanization of production; the agrarian revolution	**A**
61	Electrical power and locomotives are the inventions of_____	first revolution	second revolution	third revolution	fourth revolution	**B**
62	Artificial Intelligence is_____	a field that aims to make machines and humans more intelligent	a field that aims to improve the security	a field that aims to develop intelligent machines	a field that aims to mine the data.	**A**
63	For Pattern recognition _____ type of machine learning is req	supervised	unsupervised	reinforcement	semi supervised	**A**
64	The science of getting computers to learn and act like human	artificial Intelligence	machine Learning	deep Learning	supervised learning.	**B**
65	Clustering algorithm is used in_____	supervised	reinforcement	semi supervised	unsupervised	**B**
66	____uses Neural networks that allow machines to train in per	artificial Intelligence	machine Learning	deep Learning	supervised Learning.	**C**

67	A smart city is A	A city with all facilities.	A city run by accountants	Somewhere that makes smart use of new technology	There is no agreed definition for a smart city	**C**
68	The vital component is often considered in discourse around smart cities is	The role of the accountant	The role of central government	The role of local government	The role of technology	**D**
69	Smart metering causes	Increase in precision of billing	Decrease in precision of billing	Increase in approximation of billing	Increase in random estimation of billing	**A**
70	Ventilation is the process of	Cooling air in a space	Increase in humidity in a space	Exchanging /replacing air in a space	Purifying air in a space	**C**
71	HVAC provides	Air conditioning and purification	Light automation	Security system	Conical CCTV	**A**
72	One of the following is not a type of CCTV	Bullet CCTV	Dome CCTV	Wired CCTV	Dumping trash in landfills.	**D**
73	Smart waste deals with _	Garbage collection and disposal	Reusing and reducing garbage	Recycling waste	Dumping trash in landfills.	**A**
74	Smart bins indicate status of bin using	Pressure sensors	Temperature sensors	Garbage Sensors	Gas sensors	**A**
75	Smart bins can be monitored using	Its own private network implemented by municipality	Manual inspection by a person	Trained Dogs	All of the above	**A**
76	Trash trucks can be implemented smart waste technique by using	Navigation for reducing traffic congestion	Capacity detection at landfill sites	Garbage system monitoring	All above	**A**
77	M2M Communication is a communication between	Machine to Machine	Motor to Machine	machine to motor	motor to motor	**A**
78	Function of device domain in M2M network	Collection and transmission of sensor data.	Interpretation of sensor data	Processing of sensor data.	Analysis of sensor data	**A**
79	Subnet in M2M are used for generating the communication link between the M2M devices and the M2M	Gateways	Devices.	Server.	Router	**A**
80	All nodes communicate with each other using some intermediate gateways in a_____	Fully distributed networks	Client-server networks	Cooperative networks	Multi point network	**C**
81	Use of _____ differentiate IOT from M2M:	Senssor	Application server.	Internet	Processor.	**C**
82	The brain of IOT system is_____	Senssor	Processors	Gateways	Applications.	**B**
83	Major components of WSN	Sensors	RFID tag	Actuator.	All of the above	**D**
84	One of this is not a networking device:	Router	Switch	Bridge	Traffic Analyzer	**D**
85	Limitation of Wireless Sensor Network(WSN)	Restricted bandwidth	Infinite storage capacity	High processing speed	Large range	**C**
86	Requirement of Management service layer is	Large bandwidth	Large storage capacity	High frequency	None of the above	**B**
87	Management services in IOT architecture consists of_____	Operational Support services.	Billing Support services	Data and security Support services	all of above	**D**
88	One of this is not a sensor_____	Gyroscope	Camera	Oscillator	Barrometer	**C**
89	_____ helps in navigation systems	GPS	Light sensor	Barometer	Accelerometer	**A**
90	One out of these is not LPWAN technologies_____	SigFox	WiFi	NB-IoT	LoRa	**B**
91	Frequency band used by Z-WAVE IS _____	60 GHz	2.4 GHz	Sub 1 GHz	5 GHz	**C**
92	Transaction and data integration across multiple sources is_____	Orchestration	Data routing	Data mining	Data analyzing	**A**

93	A best known smart home automation system is_____	X-10	X-300	ALEXA	SIRI	**A**
94	NEST thermostat is a _____	Thermometer	Smart thermostat	Oven	None of the above	**B**
95	Smart dust doesnot include_____	Power supply	Sensors	wireless communicaton technology	Dust particles	**D**
96	M2M subnets include_____	SRD	PLC	ZigBee	All of the above	**D**
97	Which one of this is not a networking device_____	Router	Switch	Traffic Analyzer	Bridge	**C**
98	Machine learning is……	The selective acquisition of knowledge through the use of manual programs	The autonomous acquisition of knowledge through the use of manual programs	The selective acquisition of knowledge through the use of computer programs	The autonomous acquisition of knowledge through the use of computer programs	**D**
99	Frequency band used by Bluetooth is--------	2.4GHz	868 MHz	Sub 1GHz	2.4 MHz	**A**
100	The core element in architecture of smart city is.....	Mobile Unified Service	Integrated Information Provider	Management center	Urban Application Platform	**B**