RECRUITMENT EXAMINATION

Advertisement No. HVSU/18/ENT /007 dt. 07/11/2018

SKILL INSTRUCTOR (ELECTRONICS)

A

Max. Marks : **90 Marks**
Time : **90 Minutes**

1. Electron in the outermost shell of an atom is called as:
   (a) Filed electron   (b) Free electron   (c) Valence electron   (d) Conduction electron

2. The number of protons or electrons in an atom is called as:
   (a) Mass Number   (b) Atomic Number   (c) Valence electron   (d) None of these

3. The materials whose electrical property lies between those of conductors and insulators are known as:
   (a) Extrinsic Semi-conductor   (b) Intrinsic Semi-conductor   (c) Super-Conductor   (d) Semi-conductor

4. The current due to the minority carriers in reverse bias is said to be:
   (a) Drift current   (b) Reverse Saturation current   (c) Diffusion current   (d) None of these

5. The charge of an electron is:
   (a) 1.6×10^{-19} coloumbs   (b) 1.6×10^{19} coloumbs   (c) 1.9×10^{-16} coloumbs   (d) 1.9×10^{16} coloumbs

6. The mass of an electron is:
   (a) 9.11×10^{31} Kgs   (b) 9.11×10^{-31} Kgs   (c) 9.31×10^{-11} Kgs   (d) 9.31×10^{11} Kgs

7. The value of 1 eV is:
   (a) 1.6×10^{19} joules   (b) 1.9×10^{-16} joules   (c) 1.6×10^{-19} joules   (d) 1.9×10^{16} joules

8. The dynamic resistance of a diode is:
   (a) $r = V/I$ (b) $r = \Delta V/\Delta I$ (c) $r = \Delta V.\Delta I$ (d) $r = V.I$

9. The current conduction in a Shottky Diode is due to:
   (a) Majority & minority carriers   (b) Majority or minority carriers   (c) Minority carriers   (d) Majority carriers

10. The current gain in highest in which transistor configuration:
    (a) Common base   (b) Common collector   (c) Common emitter   (d) None of these

11. The reverse saturation current is .... of bias voltage.
    (a) Dependent   (b) Independent   (c) Semi-dependent   (d) None of these

12. UJT stands for:
    (a) Universal Junction Transistor   (b) Uni- Junction Transistor   (c) Unit Junction Transistor   (d) Uni- Junction Transformer

13. BJT is basically a .... device.
    (a) Switching   (b) Oscillating   (c) Amplifying   (d) None of these

14. UJT is basically .... device.
    (a) Switching   (b) Oscillating   (c) Amplifying   (d) None of these

15. The basic gates are:
    (a) NAND, NOR   (b) AND, OR   (c) AND, OR, NOT   (d) NAND, NOR, NOT

16. The Universal gates are:
    (a) NAND, NOR   (b) AND, OR   (c) AND, OR, NOT   (d) NAND, NOR, NOT

17. CMOS belongs to which logic family:
    (a) Unipolar   (b) Saturated   (c) Non-saturated   (d) None of these

18. Schottky TTL belongs to which logic family:
    (a) Unipolar   (b) Saturated   (c) Non-saturated   (d) None of these

19. TTL belongs to which logic family:
    (a) Unipolar   (b) Saturated   (c) Non-saturated   (d) None of these

20. What are the types of TTL logic:
    (a) Open collector output   (b) Totem-Pole Output   (c) Tri-state output   (d) All of these

21. The time delay between the two clock pulses is called:
    (a) Phase skew   (b) Signal skew   (c) Clock skew   (d) None of these

22. The process by which the amplitude of the carrier wave is changed in accordance with the instantaneous value of the message signal:
    (a) Frequency modulation   (b) Phase modulation   (c) Amplitude modulation   (d) Angle modulation

23. The process by which the frequency or phase of the carrier wave is changed in accordance with the instantaneous value of the message signal:
    (a) Frequency modulation   (b) Phase modulation   (c) Amplitude modulation   (d) Angle modulation

24. What is the bandwidth of AM:
    (a) $2.f_m$ (b) f_m^2 (c) f_m (d) None of these

25. VSB stands for:
    (a) Vertical Side Band   (b) Vestigial Suppressed Band   (c) Vestigial Side Band   (d) None of these

26. The process of conversion of analog signal in to discrete signal is called as:
    (a) Quantization   (b) Sampling   (c) Encoding   (d) None of these

27. The process of conversion of discrete signal in to discrete valued signal is called as:
    (a) Quantization   (b) Sampling   (c) Encoding   (d) None of these

28. PCM is a:
    (a) Analog modulation Technique   (b) Digital modulation Technique   (c) Combination of both   (d) None of these

29. PWM is a:
    (a) Analog modulation Technique   (b) Digital modulation Technique   (c) Combination of both   (d) None of these

30. The gain of an ideal OPAMP is:
    (a) Infinity   (b) Zero   (c) Moderate   (d) None of these

31. The bandwidth of an ideal OPAMP is:
    (a) Infinity   (b) Zero   (c) Moderate   (d) None of these

32. The output impedance of an ideal OPAMP is:
    (a) Infinity   (b) Zero   (c) Moderate   (d) None of these

33. The input impedance of an ideal OPAMP is:
    (a) Infinity   (b) Zero   (c) Moderate   (d) None of these

34. The micro word in microprocessor refers to:
    (a) size   (b) speed   (c) frequency   (d) None of these

35. The 8085 microprocessor is .... bit processor:
    (a) 16   (b) 8   (c) 20   (d) None of these

36. The number of flags in 8085 microprocessor are:
    (a) 16   (b) 8   (c) 20   (d) 5

37. The number bits in address & data bus of 8086 microprocessor are:
    (a) 16, 16   (b) 20, 16   (c) 16, 20   (d) 20, 20

38. The system generates the output depending upon present & past inputs only:
    (a) Causal system   (b) Anti-Causal system   (c) Non-Causal system   (d) None of these

39. A signal with finite energy and zero power will be called as:
    (a) Power Signal   (b) Energy Signal   (c) both of these   (d) None of these

40. A band limited signal of finite energy, which has no frequency components higher than the W hertz, is completely described by specifying the values of the signal at the instant of time separated by .... seconds:

(a) W (b) 2W (c) 1/W (d) 1/2W

41. DTFT output is .... in time :

(a) Discrete (b) Continuous (c) Both of these (d) None of these

42. DFT output is ....in time:

(a) Discrete (b) Continuous (c) Both of these (d) None of these

43. The magnetic field strength is in the direction of propagation and no component of electric field is in this direction. This mode is called as:

(a) TEM (b) TE (c) TM (d) None of these

44. Isolator is a .... port device:

(a) One (b) Two (c) Three (d) None of these

45. Negative resistance region is there in .... diode.

(a) Schottky (b) Gun (c) Tunnel (d) None of these

46. Klystron is a.............

(a) Generator (b) Detector (c) circulator (d) Isolator

47. The example of a Simplex system is............

(a) Mobile phone (b) Telephone (c) Pager (d) None of these

48. GPS stands for:

(a) Global Positioning System (b) Global Pointing System (c) Grand Positioning System (d) None of these

49. SIM stands for:

(a) Subscriber Identity Mobile (b) Subscriber Identity Module (c) Subscriber Identification Module (d) None of these

50. .... theorem states that the summation of all the product of branch voltage and its current of a circuit is zero:

(a) Thevenin's (b) Norton's (c) Millman's (d) Tellegen's

Q51. Choose the one which best expresses the meaning of the given word:

VINDICTIVE

(A) Imaginative   (B) Accusative

(C) Spiteful   (D) Aggressive

Q52. Find out which part of the sentence has an error:

He reassured to his boss (a) / that he had no plans (b) / to leave the company.
(c) / No error (d)

(A) (a)   (B) (b)

(C) (c)   (D) (d)

Q53. Pick the right meanings of the following idiom and phrase:

By dint of

(A) By force of
(B) By permission of
(C) By fear of
(D) By blessing of

Q54. Choose the one which is most opposite in meaning to the given word:

Boisterous

(A) Rowdy
(B) Tumultuous
(C) Violent
(D) Serene

Q55. Fill in the blank with suitable article:

The king prayed for ____ heir.

(A) an   (B) a   (C) the   (D) no article

Q56. Fill in the blank:

The willingness of John to take up any responsibility is a sign of _____.

(A) status
(B) greed
(C) maturity
(D) strength

Q57. **Directions:** In question given below, the first and the last sentences are numbered 1 and 6. Remaining sentences are named P,Q, R and S. These four sentences are not given in their proper order. Read the sentences and find out which of the four combinations is correct:

1 :   Time is our tyrant.

P : We are chronically aware of the moving minute hand, even of the moving second hand.

Q : There are trains to be caught, cards to be punched, tasks to be done in specified periods, records to be broken by fraction of a second.

R : Our consciousness of the smallest unit of time is now acute.

S : We have to be.

6 : To us, for example, the moment 8.17 a.m. means something-something very important, if it happens to be the starting time of our daily train.

(A) SPRQ   (B) PSRQ   (C) SPQR   (D) PSQR

Q58. Choose the correct option to complete the sentence given below:
Neither of the workers was happy with the new legislation _____ ?

(A) weren't they
(B) did they
(C) didn't they
(D) were they

Q59. Pick out the most effective word from the given options to fill in the blank to make the sentence meaningfully complete:
He became enamored _____ her grace when he first saw her dance.

(A) with
(B) of
(C) by
(D) In

Q60. **Directions: Read the following passage to answer the given question based on it-**

There was a marked difference of quality between the personages who haunted near bridge of brick and the personages who haunted the far one of stone. Those of lowest character preferred the former, adjoining the town; they did not mind the glare of the public eye. they had been of no account during their successes; and though they might feel dispirited, they had no sense of shame in their ruin. Instead of sighing at their adversaries they spat, and instead of saying the iron had entered into their souls they said they were down in their luck. The miserable's who would pause on the remoter bridge of a politer stamp persons who did not know how to get rid of the weary time. The eyes of his species were mostly directed over the parapet upon the running water below. While one on the town ward bridge did not mind who saw him so, and kept his back to parapet to survey the passer-by, one on this never faced the road, never turned his head at coming foot-steps, but, sensitive on his own condition, watched the current whenever a stranger

approached, as if some strange fish interested him, though every finned thing had been poached out of the rivers years before.
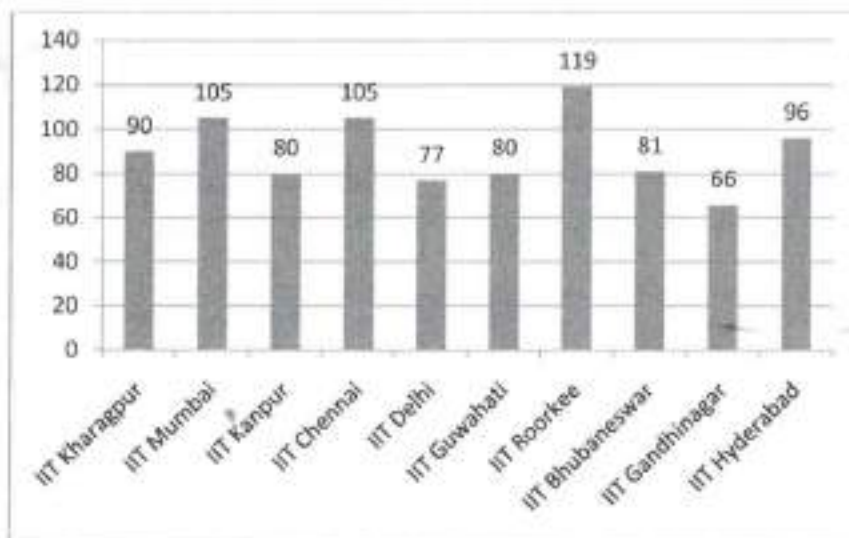
In this passage the author is trying to
(A) explain the difference between the construction of the two bridges
(B) describe the way different sections of people like to dress
(C) explain the variety of ways in which strangers can be treated
(D) describe how people of different classes behaved when unhappy

General Aptitude

Q61. Richa started from her home to office. She started in east direction. After walking for 4 m she turned to her left and walked 8 m, now she turned left and walked 2 m. After this she turned to right walked 4 m. Now after turning to her right she walked 13 m and reached office. Find the shortest distance between her office and home.

(A) 87 m
(B) 9√41 m
(C) 26 m
(D) 3√41 m

Q62. **Knoll : Hill :: Eclogue : ?**

(A) Poem
(B) Music
(C) Drama
(D) Ballad

Q63. Pointing to a lady Pankaj Said, Her mother's only grandson is my son, "How is that Lady related to pankaj"?

(A) Aunt
(B) Sister
(C) Mother
(D) Wife

Direction: Read the information carefully and answer the questions given below.

Number of students selected through campus placements from ten IIT colleges

Percentage of student who did not get campus placements

College	Percentage
IIT Kharagpur	75
IIT Mumbai	65
IIT Kanpur	68
IIT Chennai	62.5
IIT Delhi	65
IIT Guwahati	66.7
IIT Roorkee	66
IIT Bhubaneswar	55
IIT Gandhinagar	56
IIT Hyderabad	68

Stream wise classification of student in each college (percentage)

College	Civil engg.	Mechanical engg.	Chemical engg.	Computer engg.
IIT Kharagpur	30	20	35	15
IIT Mumbai	20	24	27	29
IIT Kanpur	22	26	32	20
IIT Chennai	34	26	22	18
IIT Delhi	18	24	27	31
IIT Guwahati	25	22	27	26
IIT Roorkee	26	28	20	26
IIT Bhubaneswar	16	34	32	18
IIT Gandhinagar	22	26	20	32
IIT Hyderabad	28	16	22	34

Q64. If 65% of the total-number of students selected from college IIT Guwahati are boys and they form 40% of the total number of boys in the college, then what percentage of the girls in the college got selected through campus placements?

(A) 25 %　　　　　　　　　　(B) 28 %

(C) 31 %　　　　　　　　　　(D) 35%

Q65. Complete the series:　　0.5, 12, 52, 106, 107, ?

(A) 40　　　　　　　　　　(B) 45

(C) 50　　　　　　　　　　(D) 54

Q66. If 'dog' is called 'lion', 'lion' is called 'bison', 'bison' is called 'snake', 'snake' is called 'mongoose', 'mongoose' is called 'crocodile', then which one is reared as pet?

(A) Lion   (B) Bison   (C) Snake   (D) Mongoose

Q67. In a north facing row of NCC Cadets, Trisha is 9th from the left end and Tina is 12th from the right end. There are 5 cadets between Trisha and Tanya who is equidistant to Tina. Find how many cadets are there in the row?
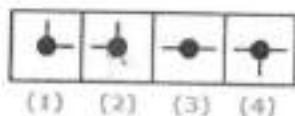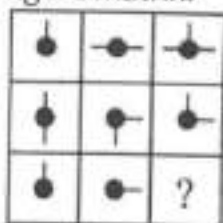
(A) 34   (B) 32   (C) 31   (D) 33

Q68. In the following question, a statement/group of statements is given followed by some conclusions. Without resolving anything yourself, choose the conclusion which logically follows from the statement(s).

Statement - Many offices are located in buildings with multiple floors. If a building has more than three floors, it has a lift.
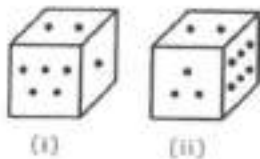
(A) All floors of buildings with multiple floors may be reached in lifts.
(B) Only floors above the third floor have lifts.
(C) Seventh floor does not have lifts.
(D) All buildings have lifts.

Q69. Select a suitable figure from the four alternatives that would complete the figure matrix.

(A) 1   (B) 2   (C) 3   (D) 4

Q70. Two positions of a block are given below. When 1 is at the top, which number will be at the bottom?

(A) 2   (B) 3   (c) 4   (D) 6

71. The name of 1ˢᵗ President of India is ....:
    (a) Rajender Parshad   (b) A. P. J. Abdul Kalam   (c) Ramnath Kovind   (d) S. Radhakrishnan

72 The name of the President of America is .... :
    (a) John F. Kennedy   (b) Bill Clinton   (c) J. W. Bush   (d) Donald Trumph

73. Who built Taj-mahal?
    (a) Akbar   (b) Babbar   (c) Shahjahan   (d) Shershah Suri

74. The Quit India Movement started in ....:
    (a) 1931   (b) 1942   (c) 1947   (d) 1905

75. The name of the Finance Minister of India is ....:
    (a) Nitin Gadkari   (b) Arun Jaitley   (c) Piyush Goyal   (d) P. Chitambaram

76. The of the Speaker of the Lok-sabha is ....:
    (a) Nazma Heptulla   (b) Auscar Fernandej   (c) Sumitra Mahajan   (d) Smiriti Irani

77. Thomas Cup is associated with which game?
    (a) Tennis   (b) Badminton   (c) Table-tennis   (d) None of these

78. The name of the Captain of the Cricket Team of India which won the World Cup for the 1ˢᵗ time is ....:
    (a) M. S. Dhoni   (b) Virat Kohli   (c) Sunil Gavaskar   (d) Kapil Dev

79. The name of the 1ˢᵗ Indian wrestler who won the silver medal in Olympics is ....:
    (a) Sushil Kumar   (b) Bajrang Punia   (c) Yogeshwar Dutt   (d) None of these

80. The International Yoga Day is celebrated on ....:
    (a) 21ˢᵗ May   (b) 21ˢᵗ June   (c) 21ˢᵗ July   (d) 21ˢᵗ August

Q81. What is the name of the display feature that highlights areas of the screen which requires operator attention?

  A) Pixel

  B) Reverse video

  C) Touch screen

  D) Cursor

Q82. The terminal device that functions as a cash register, computer terminal, and OCR reader is the:

  A) Data collection terminal

  B) OCR register terminal

  C) Video Display terminal

  D) POS terminal

Q83. Microprocessors as switching devices are for which generation computers

  A) First Generation

  B) Second Generation

  C) Third Generation

  D) Fourth Generation

Q84. If in a computer, 16 bits are used to specify address in a RAM, the number of addresses will be

  A) 216

  B) 65,536

  C) 64K

  D) Any of the above

Q85. List of documents waiting to be printed on printer is called

  A) print list

  B) print stack

  C) print queue

  D) print line

Q86. Which of following is not element of computer desktop?

  A) icons

  B) task bar

  C) START button

  D) title bar

Q87. IPv6 addressed have a size of

    A) 32 bits
    B) 64 bits
    C) 128 bits
    D) 265 bits

Q88. Internet works on

    A) packet switching
    B) circuit switching
    C) both packet switching and circuit switching
    D) none of the mentioned

Q89. A simple protocol used for fetching e-mail from a mailbox is

    A) POP2
    B) POP3
    C) IMAP
    D) None of the above

Q90. What is gutter margin?

    A) Margin added to the left margin when printing
    B) Margin added to right margin when printing
    C) Margin added to the binding side of page when printing
    D) Margin added to the outside of the page when printing

SVSU Recrutment Examination 2019
Loaded Key Sheet for : 22 - Skill Instructor (Electronics) , Set Code : A

Q.No.	Key	Q.No.	Key	Q.No.	Key	Q.No.	Key	Q.No.	Key
1	C	21	C	41	B	61	D	81	B
2	B	22	C	42	A	62	A	82	D
3	D	23	D	43	B	63	B	83	D
4	B	24	A	44	B	64	A	84	B
5	A	25	C	45	B	65	D	85	C
6	B	26	B	46	A	66	A	86	D
7	C	27	A	47	C	67	B	87	C
8	B	28	B	48	A	68	A	88	A
9	D	29	A	49	B	69	A	89	B
10	B	30	A	50	D	70	D	90	C
11	B	31	A	51	C	71	A	91	X
12	B	32	B	52	A	72	D	92	X
13	C	33	A	53	A	73	C	93	X
14	A	34	C	54	D	74	B	94	X
15	C	35	B	55	A	75	B	95	X
16	A	36	D	56	C	76	C	96	X
17	A	37	B	57	D	77	B	97	X
18	C	38	A	58	D	78	D	98	X
19	B	39	B	59	B	79	A	99	X
20	D	40	D	60	D	80	B	100	X