

KPIT Cummins Info systems Ltd. Previously asked Questions-2**APTITUDE**

Choose the correct / most appropriate word/s to fill in the gap in the sentences given below.

1.This looks too heavy,_____ pick it up?

- a) Can I
- b) may I
- c) need I
- d) would I

2.I wonder if _____ will show up at the meeting?

- a) someone
- b) anyone
- c) one
- d) everyone

3.Each sentence below has 1 or 2 blanks – each blank indicating that something has been omitted. Beneath the sentence are some words. Choose the word for each blank that best fits the meaning of the sentence as a whole

The subtle shades of meaning, & still subtler echoes of association, make language an instrument which scarcely anything short of genius can wield with ----- &-----

- a) Confidence-----aloofness
- b) Definiteness-----certainty
- c) Sincerity-----hope
- d) Eloquence-----ruthlessness

4.In question below, there is a sentence of which some parts have been jumbled up. Rearrange these parts which are labelled P, Q, R and S to produce the correct sentence. Choose the proper sequence

Since the beginning of history

- P : have managed to catch
- Q : the Eskimos and Red Indians
- R : by a very difficulty method
- S : a few specimens of this aquatic animal

5.The Proper sequence should be:

- A. QRPS
- B. SQPR
- C. SQRP
- D. QPSR

Ans-D

6.In the question below the sentences are given in Active/Passive voice. From the given alternatives, choose the one which best expresses the given sentence in Passive/Active voice.

I cannot accept your offer.

- A. Your offer cannot be accepted by me.
- C. The offer cannot be accepted by me.
- D. Your offer cannot be accepted.

Ans-A

7.Choose the word which best expresses the meaning of the given word.

MBEZZLE

- A. Misappropriate
- B. Balance
- C. Remunerate
- D. Clear

Ans-A

8.Choose the word which is the exact OPPOSITE of the given words

CROWDED

- A. Busy
- B. Congested
- C. Quiet
- D. Deserted

Ans-D

9.Find the correctly spelt words.

- A. Klptomania

- B. Klepptomania
- C. Kleptemania
- D. Kleptomania

Ans-D

10. Find the correctly spelt words.

- A. Judicious
- B. Cancious
- C. Dilicious
- D. Gracous

Ans-A

11. In the question below a sentence broken into five or six parts. Join these parts to make a meaningful sentence. The correct order of parts is the answer.

1. of 2. we 3. heard 4. him 5. had

- A. 42351
- B. 52341
- C. 25341
- D. 25431
- E. 25314

Ans-E

12. Question consist of two words which have a certain relationship to each other followed by four pairs of related words, Select the pair which has the same relationship.

LIGHT:BLIND

- A. speech:dumb
- B. language:deaf
- C. tongue:sound
- D. voice:vibration

Ans-A

13. An incomplete statement (Stem) followed by fillers is given. Pick out the best one which can complete incomplete stem correctly and meaningfully.

I felt somewhat more relaxed

- A. but tense as compared to earlier
- B. and tense as compared to earlier
- C. as there was already no tension at all
- D. and tension-free as compared to earlier
- E. because the worry had already captured by mind

Ans-D

14.The ratio between the perimeter and the breadth of a rectangle is 5 : 1. If the area of the rectangle is 216 sq. cm, what is the length of the rectangle?

- A. 16 cm
- B. 18 cm
- C. 24 cm
- D. Data inadequate
- E. None of these

Ans-B

15.In a race of 200 m, A can beat B by 31 m and C by 18 m. In a race of 350 m, C will beat B by:

- A.22.75 m B.25 m C.19.5

Ans-B

16Seats for Mathematics, Physics and Biology in a school are in the ratio 5 : 7 : 8. There is a proposal to increase these seats by 40%, 50% and 75% respectively. What will be the ratio of increased seats?

- A. 2 : 3 : 4
- B. 6 : 7 : 8
- C. 6 : 8 : 9
- D. None of these

Ans-A

17An accurate clock shows 8 o'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 o'clock in the afternoon?

- A. 144°
- B. 150°

C. 168°

D. 180°

Ans-D

18 From a point P on a level ground, the angle of elevation of the top tower is 30° . If the tower is 100 m high, the distance of point P from the foot of the tower is:

A. 149 m

B. 156 m

C. 173 m

D. 200 m

Ans-C

19 The percentage increase in the area of a rectangle, if each of its sides is increased by 20% is:

A. 40%

B. 42%

C. 46%

D. 44%

Ans-D

20 How many days are there in x weeks x days?

A. $7x^2$

B. $8x$

C. $14x$

D. 7

Ans-B

21 Which of the following is not a leap year?

A. 700

B. 800

C. 1200

D. 2000

Ans-A

22 What is the speed of the train?

I. The train crosses a signal pole in 18 seconds.

II. The train crosses a platform of equal length in 36 seconds.

III. Length of the train is 330 metres.

A. I and II only

B. II and III only

C. I and III only

D. III and either I or II only

E. Any two of the three

Ans-D

23 The cost price of 20 articles is the same as the selling price of x articles. If the profit is 25%, then the value of x is:

- A. 15 B. 16
C. 18 D. 25

Ans-B

24 In how many different ways can the letters of the word 'CORPORATION' be arranged so that the vowels always come together?

- A. 810 B. 1440
C. 2880 D. 50400 E. 5760

Ans-D

25 In a group of 6 boys and 4 girls, four children are to be selected. In how many different ways can they be selected such that at least one boy should be there?

- A. 159 B. 194
C. 205 D. 209 E. None of these

Ans-D

26 In how many different ways can the letters of the word 'DETAIL' be arranged in such a way that the vowels occupy only the odd positions?

- A. 32 B. 48
C. 36 D. 60 E. 120

Ans-C

Technical

1 What is the ratio of the peak ripple voltage level to its rms voltage level?

- $\sqrt{3}$ C. $\sqrt{2}$
 $\sqrt{3}/2$ D. $\sqrt{2}/2$

Ans-A

2 In an improved shunt regulator, which of the following components sets the reference voltage?

- A. Transistor Q1 B. Zener diode
C. Transistor Q2 D. R_S

Ans-B

3 As the forward current through a silicon diode increases, the internal resistance

- A. increases.
B. decreases.
C. remains the same.

Ans-C

4 What occurs when a conduction-band electron loses energy and falls back into a hole in the valence band?

- A. doping
B. recombination
C. generation

Ans-B

5 What is the voltage measured from the negative terminal of C4 to the negative terminal of the transformer?

- A. -10 V C. 10 V
B. -20 V D. 20 V

Ans-B

6 Calculate the output of the second stage op-amp if $V_1 = 25$ mV.

- A. -0.075 V C. 0.06 V
B. 0.525 V D. 4.2 V

Ans-A

7 The gain of the multiple-feedback band-pass filter above is equal to which of the following? Assume $C = C_1 = C_2$.

- A. $A_0 = R_2 / R_1$ C. $A_0 = R_2 / 2 R_1$
B. $A_0 = R_1 / R_2$ D. $A_0 = R_1 / 2 R_2$

Ans-C

8 Identify the frequency response curve for a band-pass filter.

9 Which filter has a maximally flat response?

- A. Bessel
- B. Butterworth
- C. Chebyshev
- D. all of the above

Ans-B

10 Which of the following FETs has the lowest input impedance?

- A. JFET
- B. MOSFET depletion-type
- C. MOSFET enhancement-type
- D. None of the above

Ans-A

11 Referring to this transfer curve. Calculate (using Shockley's equation) V_{GS} at $I_D = 4\text{mA}$.

12 How many unique symbols are used in the decimal number system?

- A. One
- B. Nine
- C. Ten
- D. Unlimited

Ans_C

13 With interrupt-driven I/O, if two or more devices request service at the same time, _____.

- A. the device closest to the CPU gets priority
- B. the device that is fastest gets priority
- C. the device assigned the highest priority is serviced first
- D. the system is likely to crash

Ans-C

14 The logic gate that will have a LOW output when any one of its inputs is HIGH is the:

- A. NAND gate
- B. AND gate
- C. NOR gate
- D. OR gate

Ans-C

15The register in the 8085A that is used to keep track of the memory address of the next op-code to be run in the program is the:

- A. stack pointer
- B. program counter
- C. instruction pointer
- D. accumulator

Ans-B

16Derive the Boolean expression for the logic circuit shown below:

17In a 4-bit R/2R ladder digital-to-analog converter, because of negative feedback, the operational amplifier keeps the inverting (minus) input near _____.

- A. 5 volts
- B. zero volts
- C. a voltage determined by the binary weighted input
- D. none of the above

Ans-B

18Why is the given circuit called an inverter?

- A. The output is the opposite (inverse) of the input.
- B. The output is in phase with the input.
- C. The output is the same as the input.
- D. There is no output.

Ans-A

19The hexadecimal number 4B16 is transmitted as an 8-bit word in parallel. What is the time required for this transmission if the clock frequency is 2.25 MHz?

- A.444ns
- B.444s
- C.3,55s
- D.3.55ms

Ans A

20List which pins need to be connected together on a 7493 to make a MOD-12 counter.

- A. 12 to 1, 11 to 3, 9 to 2
- B. 12 to 1, 11 to 3, 12 to 2
- C. 12 to 1, 11 to 3, 8 to 2
- D. 12 to 1, 11 to 3, 1 to 2

Ans-C

21 In a TTL circuit, if an excessive number of load gate inputs are connected, _____.

- A. VOH(min) drops below VOH
- B. VOH drops below VOH(min)
- C. VOH exceeds VOH(min)
- D. VOH and VOH(min) are unaffected

Ans-B

22 The internal RAM memory of the 8051 is:

- A. 32 bytes
- B. 64 bytes
- C. 128 bytes
- D. 256 bytes

Ans_C

23 Which of the following commands will move the number 27H into the accumulator?(8051)

- A. MOV A, P27
- B. MOV A, #27H
- C. MOV A, 27H
- D. MOV A, @27

Ans-B

24 An alternate function of port pin P3.0 (RXD) in the 8051 is:

- A. serial port input
- B. serial port output
- C. memory write strobe
- D. memory read strobe

Ans-A

24 In an 8051 program DA A adjusts the value in the accumulator resulting from an addition into two BCDs.

A. True

B. False

Ans-A

CAMPUSPRO