

Previous Year KPIT Technologies Whole Test Question Paper

APTITUDE:

Q1. 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

The Proper sequence should be:

A. QRPS

B. SQPR

C. SQRP

D. QPSR

ANS: D

Q2. Choose the word which is the exact OPPOSITE of the given words

CROWDED

A. Busy

B. Congested

C. Quiet

D. Deserted

ANS: D

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Q3. 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

Q4. 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

Q5. 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

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Q6. 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

Q7. 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

Q8. 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

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ANS: D

Q9. 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

Q10. This looks too heavy, _____ pick it up?

- A. Can I
- B. may I
- C. need I
- D. would I

Q11. 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

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Q12. I wonder if _____ will show up at the meeting?

- A. someone
- B. anyone
- C. one
- D. everyone

Q13. Choose the word which best expresses the meaning of the given word.

MBEZZLE

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

ANS: A

Q14. 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.
- B. The offer cannot be accepted by me.
- C. Your offer cannot be accepted.

ANS: A

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Q15. 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

Q16. Find the correctly spelt words.

- A. Klaptomania
- B. Klepptomania
- C. Kleptomania
- D. Kleptomania**

ANS: D

Q17. Find the correctly spelt words.

- A. Judicious**
- B. Cancious
- C. Dilicous
- D. Gracous

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ANS: A

Q18. 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

Q19. Seats 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

Q20. 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

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- D. Data inadequate
- E. None of these

ANS: B

Q21. Which of the following is not a leap year?

- A. 700**
- B. 800
- C. 1200
- D. 2000

ANS: A

Q22. 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

Q23. An 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**

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ANS: D

Q24. How many days are there in x weeks x days?

- A. $7x^2$
- B. $8x$**
- C. $14x$
- D. 7

ANS: B

Q25. 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

TECHNICAL:

Q26. The 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

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ANS: B

Q27. 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

Q28. 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

Q29. In an improved shunt regulator, which of the following components sets the reference voltage?

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

ANS: B

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Q30. What is the ratio of the peak ripple voltage level to its rms voltage level?

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

ANS: A

Q31. As the forward current through a silicon diode increases, the internal resistance

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

ANS: C

Q32. What is the voltage measured from the negative terminal of C4 to the negative terminal of the transformer?

- A. 10 V
- B. 20 V
- C. 30 V
- D. 40 V

ANS: B

Q33. Which of the following FETs has the lowest input impedance?

- A. JFET
- B. MOSFET depletion-type

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- C. MOSFET enhancement-type
- D. None of the above

ANS: A

Q34. The gain of the multiple-feedback band-pass filter above is equal to which of the following? Assume $C = C_1 = C_2$.

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

ANS: C

Q35. How many unique symbols are used in the decimal number system?

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

ANS: C

Q36. Which filter has a maximally flat response?

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

ANS: B

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Q37. The 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. 444 ns
- B. 444 s
- C. 3.55 s
- D. 3.55 ms

ANS: A

Q38. The internal RAM memory of the 8051 is:

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

ANS: C

Q39. 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

Q40. Which of the following commands will move the number 27H into the accumulator?(8051)

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

ANS: B

Q41. 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

Q42. 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

Q43. In 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

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- C. a voltage determined by the binary weighted input
- D. none of the above

ANS: B

Q44. List 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

Q45. 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