

Sample KPIT Technologies Aptitude, Technical Test Questions & Answers Paper

APTITUDE:

Q1. What sum of money is to be divided among 3 men in the ratio 3: 4: 5 so that the third man receives Rs 10 only.

- A. Rs 56
- B. Rs 84
- C. Rs 120
- D. Rs 24

ANS: D

Q2. A hawker purchased oranges at the rate of 4 oranges in a rupee, but he sells at the rate of 5 oranges in a rupee. His loss is:

- A. 20%
- B. 25%
- C. 50%
- D. 100%

ANS: A

Q3. Choose the word which is the exact OPPOSITE of the given words.

EXPAND

- A. Convert
- B. Condense
- C. Congest
- D. Conclude

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ANS: B

Q4. 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.

I read an advertisement that said

P : posh, air-conditioned

Q : gentleman of taste

R : are available for

S : fully furnished rooms

The Proper sequence should be:

- A. PQRS
- B. PSRQ
- C. PSQR
- D. SRPQ

ANS: B

Q5. In question given below out of four alternatives, choose the one which can be substituted for the given word/sentence.

State in which the few govern the many

- A. Monarchy
- B. Oligarchy
- C. Plutocracy
- D. Autocracy

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ANS: B

Q6. The questions below the sentences have been given in Active/Passive voice. From the given alternatives, choose the one which best expresses the given sentence in Passive/Active voice

They greet me cheerfully every morning.

- A. Every morning I was greeted cheerfully.
- B. I am greeted cheerfully by them every morning.
- C. I am being greeted cheerfully by them every morning.
- D. Cheerful greeting is done by them every morning to me.

ANS: B

Q7. Which of phrases given below the sentence should replace the phrase printed in bold type to make the grammatically correct?

I need not offer any explanation regarding this incident - my behaviour is speaking itself.

- A. will speak to itself
- B. speaks for itself
- C. has been speaking
- D. speaks about itself
- E. No correction required

ANS: B

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Q8. Pick out the most effective word(s) from the given words to fill in the blank to make the sentence meaningfully complete.

If you smuggle goods into the country, they may be by the customs authority.

- A. possessed
- B. punished
- C. confiscated
- D. fined

ANS: C

Q9. The number of times a bucket of capacity 4 litres to be used to fill up a tank is less than the number of times another bucket of capacity 3 litres used for the same purpose by 4. What is the capacity of the tank?

- A. 360 litres
- B. 256 litres
- C. 48 litres
- D. 525 litres

ANS: C

Q10. A square garden has fourteen posts along each side at equal interval. Find how many posts are there in all four sides:

- A. 56
- B. 52
- C. 44
- D. 60

ANS: B

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Q11. A certain quantity of rice is spent daily for 30 students in a hostel. One day some students were absent as a result, the quantity of rice has been spent in the ratio of 6: 5. How many students were present on that day?

- A. 24
- B. 20
- C. 15
- D. 25

ANS: D

Q12. When Rs 250 added to $\frac{1}{4}$ th of a given amount of money makes it smaller than $\frac{1}{3}$ rd of the given amount of money by Rs 100. What is the given amount of money?

- A. Rs 350
- B. Rs 600
- C. Rs 4200
- D. Rs 3600

ANS: C

Q13. The rate of failure in an examination is 39.25%. Find the least number of total candidates appeared in the examination.

- A. 500
- B. 400
- C. 125
- D. 260

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ANS: B

Q14. Find the greatest number which on dividing 107 and 120 leaves remainders 5 and 1 respectively.

- A. 25
- B. 6
- C. 9
- D. 17

ANS: D

Q15. Read the each sentence to find out whether there is any grammatical error in it

- A. The institute
- B. imparts training
- C. in
- D. the French
- E. No error.

ANS: D

Q16. Find the correctly spelt word

- A. Ommineous
- B. Omineous
- C. Ominous
- D. Omenous

ANS: C

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Q17. In question given below out of four alternatives, choose the one which can be substituted for the given word/sentence.

The study of ancient societies

- A. Anthropology
- B. Archaeology
- C. History
- D. Ethnology

ANS: B

Q18. 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.

THRUST: SPEAR

- A. mangle: iron
- B. scabbard: sword
- C. bow: arrow
- D. fence: epee

ANS: D

Q19. In 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. medicine
2. a

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- 3. Neeta
- 4. given
- 5. was

- A. 51423
- B. 25431
- C. 15423
- D. 42531
- E. 35421

ANS: E

Q20. Choose the word which best expresses the meaning of the given word.

ALERT

- A. Energetic
- B. Observant
- C. Intelligent
- D. Watchful

ANS: D

Q21. A train 125 m long passes a man, running at 5 km/hr in the same direction in which the train is going, in 10 seconds. The speed of the train is:

- A. 45 km/hr
- B. 50 km/hr
- C. 54 km/hr
- D. 55 km/hr

ANS: B

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Q22. If n is any positive odd integer greater than 1, the $n(n^2 - 1)$ is always divisible by:

- A. 7
- B. 5
- C. 24
- D. 15

ANS: C

Q23. Find square root of 2.7

- A. 0.5
- B. 5
- C. $1\frac{2}{3}$
- D. 0.3

ANS: C

Q24. 0.8 portion of a tank is filled with water. If 25 litres of water is taken out from the tank, 14 litres of excess water over the half filled up tank remains in it. Find the capacity of the tank.

- A. 100 litres
- B. 130 litres
- C. 200 litres
- D. 150 litres

ANS: B

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Q25. Find the ratio of purchase price and sell price if there is loss of 12

- A. 7 : 8
- B. 8 : 7
- C. 2 : 25
- D. 25 : 2

ANS: B.

TECHNICAL:

Q26. Bit-addressable memory locations are:

- A. 10H through 1FH
- B. 20H through 2FH
- C. 30H through 3FH
- D. 40H through 4FH

ANS: B

Q27. The _____ ensures that only one IC is active at a time to avoid a bus conflict caused by two ICs writing different data to the same bus.

- A. control bus
- B. control instructions
- C. address decoder
- D. CPU

ANS: C

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Q28. Which of the following is not an enhancement to the Pentium that was unavailable in the 8086/8088?

- A. Pipelined architecture
- B. Expansion of cache memory
- C. Inclusion of an internal math coprocessor
- D. Data/address line multiplexing

ANS: D

Q29. A _____ filter significantly attenuates all frequencies below f_c and passes all frequencies above f_c .

- A. low-pass
- B. high-pass
- C. band-pass
- D. band-stop

ANS: B

Q30. A third-order filter will have a roll-off rate of

- A. 20 dB/decade.
- B. 40 dB/decade.
- C. 60 dB/decade.
- D. 30 dB/decade.

ANS: C

Q31. What is the difference between a 7400 and a 7411 IC?

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- A. 7400 has two four-input NAND gates; 7411 has three three-input AND gates
- B. 7400 has four two-input NAND gates; 7411 has three three-input AND gates
- C. 7400 has two four-input AND gates; 7411 has three three-input NAND gates
- D. 7400 has four two-input AND gates; 7411 has three three-input NAND gates

ANS: B

Q32. Which of the following is not a basic Boolean operation?

- A. OR
- B. NOT
- C. AND
- D. FOR

ANS: D

Q33. The term hex inverter refers to:

- A. an inverter that has six inputs
- B. six inverters in a single package
- C. a six-input symbolic logic device
- D. an inverter that has a history of failure

ANS: B

Q34. When reading a Boolean expression, what does the word NOT indicate?

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- A. the same as
- B. inversion
- C. high
- D. low

ANS: B

Q35. The format used to present the logic output for the various combinations of logic inputs to a gate is called a(n):

- A. Boolean constant
- B. Boolean variable
- C. truth table
- D. input logic function

ANS: C

Q36. If a 3-input NOR gate has eight input possibilities, how many of those possibilities will result in a HIGH output?

- A. 1
- B. 2
- C. 7
- D. 8

ANS: A

Q37. When used with an IC, what does the term QUAD indicate?

- A. 2 circuits
- B. 4 circuits

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- C. 6 circuits
- D. 8 circuits

ANS: B

Q38. Filters with Bessel characteristics are used for filtering pulse waveforms.

- A. True
- B. False

ANS: A

Q39. A low-pass filter has a cutoff frequency of 1.23 kHz. Determine the bandwidth of the filter.

- A. 2.46 kHz
- B. 1.23 kHz
- C. 644 Hz
- D. not enough information given

ANS: B

Q40. Which filter exhibits a linear phase characteristic?

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

ANS: A

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Q41. This program code will be executed continuously:

```
STAT: MOV A, #01H  
JNZ STAT
```

- A. True
- B. False

ANS: A

Q42. An alternate function of port pin P3.4 in the 8051 is:

- A. Timer 0
- B. Timer 1
- C. interrupt 0
- D. interrupt 1

ANS: A

Q43. When the 8051 is reset and the (EA)⁻ line is HIGH, the program counter points to the first program instruction in the:

- A. internal code memory
- B. external code memory
- C. internal data memory
- D. external data memory

ANS: A

Q44. The software used to drive microprocessor-based systems is called:

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- A. assembly language
- B. firmware
- C. machine language code
- D. BASIC interpreter instructions

ANS: A

Q45. The contents of the accumulator after this operation

```
MOV A,#0BH  
ANL A,#2CH
```

will be

- A. 11010111
- B. 11011010
- C. 00001000
- D. 00101000

ANS: C

Q46. The register in the 8085 A 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

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Q47. What type of circuit is used at the interface point of an output port?

- A. decoder
- B. latch
- C. tristate buffer
- D. none of the above

ANS: B

Q48. The Pentium microprocessor has a data bus of _____.

- A. 16 bits
- B. 32 bits
- C. 64 bits
- D. 128 bits

ANS: C

Q49. Which of the following is not a jump instruction?

- A. JB (jump back)
- B. JA (jump above)
- C. JO (jump if overflow)
- D. JMP (unconditional jump)

ANS: A

Q50. Which of the following buses is primarily used to carry signals that direct other ICs to find out what type of operation is being performed?

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- A. data bus
- B. control bus
- C. address bus
- D. address decoder bus

ANS: B