

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



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



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



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. Confidencealoofness B. Definitenesscertainty C. Sincerityhope D. Eloquenceruthlessness



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.
MBE	ZZLE
	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



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. Kleptemania
- D. Kleptomania

ANS: D

Q17. Find the correctly spelt words.

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



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



D. Data	inadequate
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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 may 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
Q24. How many days are there in x weeks x days?
A. 7x2
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



A	N	S	÷	В
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Q27.	With	interrupt-driven	I/O, i	f 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



Q30. \	What is	the ra	atio d	of the	peak	ripple	voltage	level t	to its	rms	voltage	level	?
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- **A**. √3
- B. √2
- C. √3/2
- D. √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



- 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 = C1 = C2.

- A. A0 = R2 / R1
- B. A0 = R1 / R2
- C. A0 = R2 / 2 R1
- D. A0 = R1 / 2 R2

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



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)



Δ	M	O	V	Δ	P2	7

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



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