Caterpillar Sample Placement Paper

CATERPILLER (MECH) VEBAL ABILITY

Each 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.(1-3)
1. slur : speech : : smudge :?
Ans. writing

2. epaulet : shoulder : : ring :?
Ans. finger

3. vernacular : place : : fingerprint : ?
Ans .identical

(4-8)find the next word in series
4. BC ,CE, EG ,GK ?
a)KN
b)KU
c)KM
d)None

5. AA, AB ,BC, CE?
a)EG
b)EH
c)EI
d)None

6. AB, EF, JK, QR ?
a)YZ
b)ZA
c)AB
d)None

7.ACD ,EGL, IKT, MOB?
a)QST
b)QSZ
c)QSY
d)None

8.AC, CG ,GO, OE?
a)EJ
b)EI
c)EL
d)None

In the following the questions choose the word which best expresses the meaning of the given word. (9-13)
9)TRACTABLE

(i) OBJECTIONABLE (ii) ENJOYABLE (iii) ADAPTABLE (iv) OBSTINATE

10) COVERT
(i) MANIFEST (ii) INVISIBLE (iii) SCARED (iv) ALTER

11) PENSIVE
(i) REPENTENT (ii) SAD (iii) THOUGHTLESS (iv) CARELESS

12) MITIGATE
(i) AGGRAVATE (ii) RELIEVE (iii) ELEMINATE (iv) EXHUMAN

13) DIVERGENT
(i) CONTRARY (ii) COMING TOGETHER
(iii) CONVERSANT (iv) CONTROVERSY

In each question, an incomplete statement (Stem) followed by fillers is given. Pick out the best one which can complete incomplete stem correctly and meaningfully.(14-15)

14)   His appearance is unsmiling but ......
A. his heart is full of compassion for others
B. he looks very serious on most occasions
C. people are afraid of him
D. he is uncompromising on matters of task performance
E. he is full of jealousy towards his colleagues

15)   He has no money now ......
A. although he was very poor once
B. as he has given up all his wealth
C. because he was very rich once
D. because he has received huge donation
E. because he was very greedy about wealth

General Awareness:

1. According to World Bank's latest report India is now the world's _____wealthiest nation?
(A) Fourth
(B) Eighth
(C) Twelfth
(D) Sixteenth

2. Isuzu Motors Ltd, Japan's largest maker of light trucks has decided to start making buses in India in2007 in association with:

(A) TELCO
(B) Ashok Leyland
(C) Swaraj Mazda
(D) Mahindra and Mahindra

3. In an attempt to enhance the quality of customer service and strengthen the grievance redressalmechanism, the Reserve Bank of India has constituted a new department Customer Service Department (CSD). Which of the following is not among the key responsibilities of the department?

(A) Dissemination of instructions or information relating to customer service.
(B) Grievance redressed by banks and the RBI.
(C) Administering the Banking Ombudsman (BO) scheme and act as a nodal department for the Banking codes and Standards Board of India (BCSBI).
(D) All of the above

4. The new ICC president David Morgan belongs to which among the following countries?

(A) England
(B) South Africa
(C) Australia
(D) New Zealand

5. Which among the following countries has the maximum amount of external debt?

(A) USA
(B) Mexico
(C) Brazil
(D) Japan

6. Tata Sky is a satellite television company in India, formed through a joint venture between the TataGroup and

(A) Star TV
(B) Eurospace
(C) Sky Italia
(D) ISRO

7. 'Eco Mark' is given to the Indian products that are:

(A) pure and unadulterated
(B) rich in protein
(C) economically viable
(D) environment-friendly

8. The indicator of economic prosperity is:

(A) increase in gross national product at current prices
(B) increase in net national product at current prices
(C) increase in gross national product at fixed prices
(D) increase in net national product at fixed prices

9. Cairn Energy, which is exploring oil in Rajasthan, belongs to

(A) Ireland
(B) Scotland

(C) Norway
(D) Sweden

10. The youngest ever Indian to achieve a Grandmaster norm in Chess is:

(A) Sahaj Grover
(B) Saina Nehwal
(C) Parimarjan Negi
(D) D Harika

11. Which among the following is not a wholly owned subsidiary of Reserve Bank of India?

(A) National Housing Bank
(B) National Bank of Agriculture and Rural Development
(C) Deposit Insurance and Credit Guarantee Corporation of India
(D) Exim Bank of India

12. The December 2006 Asian Games were held in

(A) Doha
(B) Abu Dhabi
(C) Riyadh
(D) Kyoto

13. The National Stock Exchange incorporated in 1992, in terms of transactions holds:

(A) fifth rank in the World.
(B) third rank in the World.
(C) seventh rank in the World.
(D) does not figure in the top 10.

14. Which country, of the following, is the biggest contributor for Foreign Direct Investment in India between1991 and 2004?

(A) Mauritius
(B) USA
(C) Japan
(D) United Kingdom

15. SAFTA stands for
(A) South Asia Free Trade Agreement
(B) South African Federation for Tribal Advancement
(C) South Asian Forum for Tourism Agreements
(D) None of the above

16. Which company, out of the following, does not figure in the â€œForbes Global 2000â€• year 2005 ranking?

(A) NTPC
(B) ONGC

(C) SBI
(D) EIL

17. Introduction of 3G services in telecommunication industry will NOT include which of the followingfeatures?

(A) Video Streaming
(B) Stock Transactions
(C) E-learning
(D) E-Governance

18. Which Finance Minister resigned after a report on Haridas Mundhra share imbroglio was published in1958?

(A) GK Iyengar
(B) Ramanand Shastri
(C) TT Krishnamachari
(D) V Padmanabhan

19. Which state tops the revenues collected under the implemented VAT tax regime?

(A) Maharashtra
(B) Andhra Pradesg
(C) Gujarat
(D) Karnataka

20. Which player won the country's highest ever professional Golf Prize held at China?

(A) Shiv Kapur
(B) Jeev Milkha Singh
(C) Gaurav Ghei
(D) Jyoti Randhawa

TECHNICAL QUESTIONS

1.   Work done in a free expansion process is

2.   A system absorbs 100 k J of heat and the increase in its internal energy is 100 kJ; the work done is

3.   The specific heats of the gas at constant pressure and constant volume are respectively 1.0 kJ/kg K and 0.72 kJ/kg K; the value of R for the gas is

4.   he compression ratio for a petrol engine generally lies between

5.   The SFC of an engine is 0.25 kg/kW hr. when the fuel used has a calorific value of 36000 kJ/kg. the thermal efficiency of the engine is

6.   When steam condenses and becomes water at the same temperature, the specific heat for the process in kJ/kg k is

7.   In vapour absorption refrigeration machine fluids used are

8.   In a carnot engine with an efficiency of 40%, the heat rejected to the sink at 27 C is 60 kJ, then the heat supplied in kJ to the engine by the sources is

9.   In a simple spur gear train, gears with 24, 48, 32, 72 and 96 teeth are in sequence. The gear with 24 teeth runs at 900 rpm. The speed in rpm of gear with 72 teeth is

10.   a governer in an Ic engine controls the

11.   For a spring controlled governer the relation F = ar+b (F is the controlling force, r is the radius of rotation a and b are constants), indicates that the governer is

12.   1.25 kg of hydrogen are burnt with stiochiometric air, the mass of air in kg required is

13.   A low wet bulb temperature indicates

14.   The moisture in air will condense at

15.   Air refrigeration cycle works on the

16.   A feather key is on one the following types

17.   The screw thread commonly used for transmission of motion is one of the following types of threads

18.   A cotter joint is generally used to transmit

19.   In a flange coupling, the flange bolts are designed for

20.   In power transmission using open belts or horizontal shafts it is preferable to have the slack side of the belt on the top because

Quantitative

1.Judy is now twice as old as Adam, but 6 years ago, she was 5 times as old as he was . How old is judy now?

A) 10   B) 16   C) 20   D) 24   E) 32

2. if 3x=2(5-2x), then x = ?

A) 10/7   B) 0   C) 3/7   D) 1   E) 10/7

3. If a is equal to the sum of b and c, which of the following is equal to the difference of b and c

A) a-b-c   B) a-b+c   C) a-c   D) a-2c   E) a-b-2c

4.if the sum of five consecutive even integers is t, then, in terms of t, what is the greatest of these integers?

A) (t-20)/5   B) (t-10)/5   C) t/5   D) (t+10)/5   E) (t+20)/5

5. If a school cafeteria needs c cans of soup each week for each student, and if there are s students in the school, for how many weeks will x cans of soup last?

A) csx   B) xs/c   C) s/cx   D) x/cs   E) cx/s

6. A vendor sell h hot dogs and s sodas. If a hot dog costs twice as much as a soda, and if the vendor takes in a total of d dollars, how many cents does a soda cost?

A)100d/(s+2h)   B) (s+2h)/100d   C)d(s+2h)/100
D) 100d(s+2h)   E) d/100(s+2h)

7.Yann will be x year old y years from now . How old was he z years ago?

A)x+y+z   B) x+y-z   C)x-y-z   D)y-x-z   E)z-y-x

8.At Medison High school each student studies exactly one foreign language. Three-fifth of the students take Spanish, and one-fourth of the remaining students take German. If all of the others take French, what per cent of the students take French?

A)10   B)15   C) 20   D) 25   E) 30

9.From 1994 to 1995 the sales of a book decreased by 80%. If the sales in 1996 were the same as in 1994, by what per cent did they increase from 1995 to 1996?

A)80%   B)100%   C) 120%   D) 400%   E) 500%

10. if 25% of 260 equals 6.5% of a, what is a?

A) 10   B) 65   C) 100   D) 130   E) 1000

11. in a certain club , the ratio of the number of boys to girls is 5:3. what percent of the members of club are girls?

A) 37.5%   B) 50%   C) 60%   D) 62.5%   E) 80%

12. From 1980 to 1990 , Lior's weight increased by 25% . if his weight was k kilograms in 1990, what was it in 1980?

A)1.75k   B) 1.25k   C) 1.20k   D) 0.80k   E) 0.75k

13. Evan has 4 times as many books as David and 5 times as many as Jason .If Jason has more than 40 books , what is the least number of books that Evan could have ?

A)200   B)205   C) 210   D) 220   E) 240

14. Alison is now three times as old as Jermy, but 5 years ago, she was 5 times as old as he was . How old is Alison now?

A) 10   B) 12   C) 24   D) 30   E) 36

15. What is the largest prime factor of 255?

A) 5   B) 15   C) 17   D) 51   E) 255

16. if w widgets cost c cents , how many widgets can you get for the dollars?

A) 100dw/c   B) dw/100c   C) 100cdw   D) dw/c   E) cdw

17. if 120% of a is equal to 80% of b, which of the following is equal to a+b?

A) 1.5a   B) 2a   C) 2.5a   D) 3a   E) 5a

18. if x and y are integers such that x3=y2 , which could not be the value of y?

A) -1   B) 1   C) 8   D) 16   E) 27

19. what is a divided by a% of a ?

A) a/100   B) 100/a   C) a2 /100   D) 100/a2   E) 100a

20. If an object is moving at a speed of 36 kilometres per hour , how many meters does it travel in one second ?

A) 10   B) 36   C) 100   D) 360   E) 1000