

UNIVERSITY OF MUMBAI'S  
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT  
P.G. DIPLOMA IN INFORMATION TECHNOLOGY (PGDIT)  
ENTRANCE EXAMINATION  
2022-23

DATE : 07-Jul-22      TIME : 11.00 AM TO 12.00 NOON      MARKS : 50

**NOTE:** ➤ 2 MARKS EACH QUESTION

1. Arrange the words given below in a meaningful sequence.

1. Key   2. Door   3. Lock   4. Room   5. Switch on

A.    5, 1, 2, 4, 3

B.    4, 2, 1, 5, 3

C.    1, 3, 2, 4, 5

D.    1, 2, 3, 5, 4

2. A is sister of B. F is daughter of G. C is mother of B. D is father of C. E is mother of D. A is related to D as -

1) Granddaughter

2) Daughter

3) Daughter-in-law

4) Sister

3. 'Dandia' is a popular dance of

A. Punjab

B. Gujarat

C. Tamil Nadu

D. Maharashtra

4. In which of the following festivals are boat races a special feature?

A. Onam

B. Rongali Bihu

C. Navratri

D. Pongal

5. Samba dance is famous in -

- 1) Brazil
- 2) Peru
- 3) Argentina
- 4) Mexico

6. Which of the following company buy eBay's Indian operations -

- 1. Amazon
- 2. Flipkart
- 3. Snapdeal
- 4. PayTM

7. Look at this series: 36, 34, 30, 28, 24, ... What number should come next?

- A. 20
- B. 22
- C. 23
- D. 26

8. A byte is comprised of:

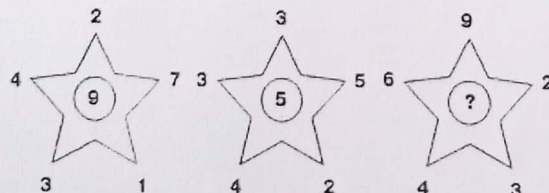
- A. One bit
- B. Four bits
- C. Eight bits
- D. Sixteen bits
- E. None of the above

9. Which of the following terms could be used to describe the concurrent processing of computer programs via CRTs, on one computer system?

- 1) Time sharing
- 2) On-line processing
- 3) Interactive processing
- 4) All of these

10. Which number replace the question mark?

Which number replaces the question mark?



11. If DELHI is coded as 73541 and CALCUTTA as 82589662, how can CALICUT be coded?

a. 5279431

b. 5978213

c. 8251896

d. 8543691

12. COLOUR is coded as OCOLUR then SPECTRUM is coded as " \_\_\_\_\_"?

13. The first page of a website is called the \_\_\_\_\_

14. In a column of girls Kamal is 11th from the front, Neela is 3 places ahead of Sunita who is 22nd from the front. How many girls are there between Kamal and Neela in the column?

1) Six

2) Eight

3) Seven

4) Nine

15. What does SSL stand for?

A. Secure Socket Layer

B. System Socket Layer

C. Super user System Login

D. Secure System Login

16. Which of the following problem causes an exception?

A. Missing semicolon in statement in *main()*.

B. A problem in calling function.

C. A syntax error.

D. A run-time error.

17. ARTIFICIAL

A. Red

B. Natural

C. Truthful

D. Solid

18. Success in this examination depends ..... hard work alone.

- A. at
- B. over
- C. for
- D. on

19. Data has to be \_\_\_\_\_ before it can be converted into information.

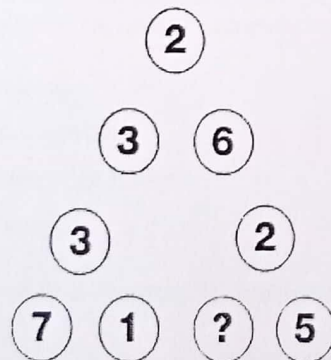
- A. transformed
- B. processed
- C. changed
- D. engineered
- E. None of the above

20. Look at this series: 70, 71, 76, \_\_, 81, 86, 70, 91, ... What number should fill the blank?

- A. 70
- B. 71
- C. 80
- D. 96

21. Which number replaces the question mark?

Which number replaces the question mark?



22. 2017 FIFA Confederations Cup title is won by \_\_\_\_\_

- A. Barcelona
- B. England
- C. Chile
- D. Germany

23. Which of the following do you need to consider when you make a table in SQL?

- A. Data types
- B. Primary keys
- C. Default values
- D. All of the above.

24. The most commonly used standard data code to represent alphabetical, numerical and punctuation characters used in Electronic Data Processing system is called

- A. ASCII
- B. EBCDIC
- C. BCD
- D. All of the above
- E. None of the above

25. If you use either Telnet or FTP, which is the highest layer you are using to transmit data?

- A. Application
  - B. Presentation
  - C. Session
  - D. Transport
-



SEAT NO. : \_\_\_\_\_

SUPERVISOR'S SIGN.: \_\_\_\_\_

**UNIVERSITY OF MUMBAI'S  
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT  
POST GRADUATE DIPLOMA IN INFORMATION TECHNOLOGY (PGDIT)  
ENTRANCE EXAM  
2<sup>ND</sup> ROUND**

**DATE: 9<sup>TH</sup> -AUG-17**

**TIME : 11.00AM TO 12.00 NOON**

**MARKS : 50**

- NOTE:** 1) DO NOT CARRY YOUR MOBILE IN THE EXAMINATION HALL  
2) ALL QUESTIONS ARE COMPULSORY  
3) READ INSTRUCTION CAREFULLY

1) Data has to be \_\_\_\_\_ before it can be converted into information.

- A. transformed
- B. processed
- C. changed
- D. engineered
- E. None of the above

2) A is sister of B. F is daughter of G. C is mother of B. D is father of C. E is mother of D. A is related to D as -

- 1) Granddaughter
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6) Which of the following company buy eBay's Indian operations -

- 1. Amazon
- 2. Flipkart
- 3. Snapdeal
- 4. PayTM



7) Dipa Karmakar a medal winner in Commonwealth Games 2014 is associated with?

- 1) Squash
- 2) Shooting
- 3) Gymnastic
- 4) Badminton

8) The first Indian satellite was launched into space in 1975. What was it called?

- 1) Aryabhata
- 2) Rohini
- 3) Insat-1A
- 4) IRS-1A

9) Which of the following terms could be used to describe the concurrent processing of computer programs via CRTs, on one computer system?

- 1) Timesharing
- 2) On-line processing
- 3) Interactive processing
- 4) All of these

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14) In a column of girls Kamal is 11th from the front, Neela is 3 places ahead of Sunita who is 22nd from the front. How many girls are there between Kamal and Neela in the column?

- 1) Six
- 2) Eight
- 3) Seven
- 4) Nine

15) What does SSL stand for?

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- B. System Socket Layer
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16) Which of the following problem causes an exception?

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17) ARTIFICIAL

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- C. Truthful
- D. Solid

18) Success in this examination depends ..... hard work alone.

- A. at
- B. over
- C. for



D. on

19) Arrange the words given below in a meaningful sequence.

1. Key 2. Door 3. Lock 4. Room 5. Switch on

A. 5, 1, 2, 4, 3

B. 4, 2, 1, 5, 3

C. 1, 3, 2, 4, 5

D. 1, 2, 3, 5, 4

20) 2, 5, 9, ?, 20, 27

A. 14

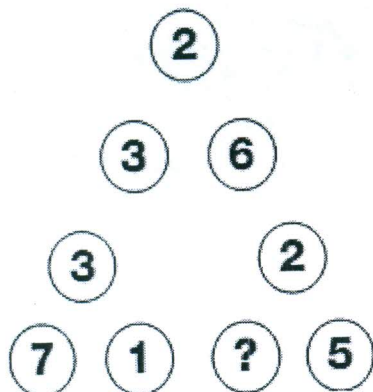
B. 16

C. 18

D. 24

21) Which number replaces the question mark?

Which number replaces the question mark?



22) 2017 FIFA Confederations Cup title is won by \_\_\_\_\_

A. Barcelona

B. England

C. Chile

D. Germany

23) Which of the following do you need to consider when you make a table in SQL?

A. Data types

B. Primary keys

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D. All of the above.

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A. ASCII

B. EBCDIC

C. BCD

D. All of the above

E. None of the above

25) If you use either Telnet or FTP, which is the highest layer you are using to transmit data?

A. Application

B. Presentation

C. Session

D. Transport

—————X—————X—————



SEAT NO. \_\_\_\_\_

SUPERVISOR'S SIGN : \_\_\_\_\_

**UNIVERSITY OF MUMBAI'S  
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT  
P.G.DIPLOMA IN INFORMATION TECHNOLOGY  
(PGDIT)  
ENTRANCE EXAMINATION**

**DATE : 29-JUL-17**

**TIME : 11.00 AM TO 12.00 NOON**

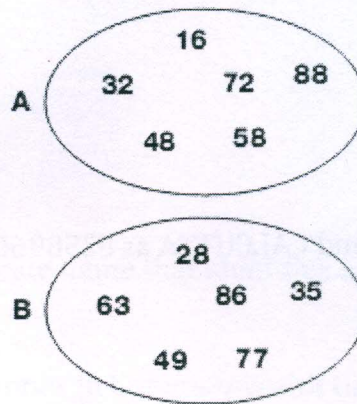
**MARKS : 50**

**NOTE:**

- DO NOT CARRY MOBILE IN THE EXAMINATION HALL.
- FOLLOW THE INSTRUCTION GIVE IN THE QUESTION
- NO OVERWRITING IS ALLOWED
- EACH QUESTION CARRIES **TWO** MARKS

1.

Which number is the odd one out in each oval?



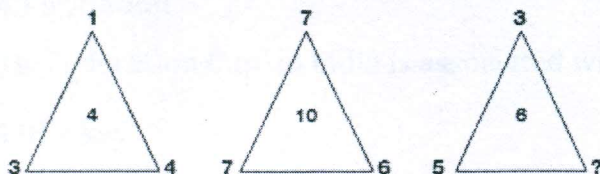
2.

Which number replaces the question mark?



3. Which number replaces the question mark?

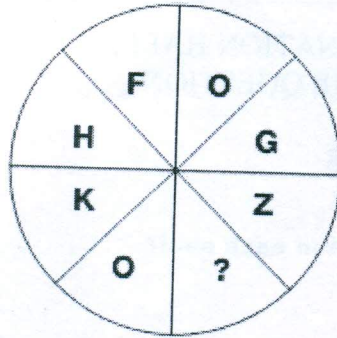
Which number replaces the question mark?





4. Which letter replaces the question mark?

Which letter replaces the question mark?



5. If DELHI is coded as 73541 and CALCUTTA as 82589662, how can CALICUT be coded?

a. 5279431

b. 5978213

c. 8251896

d. 8543691

6. COLOUR is coded as OCOLURL, then SPECTRUM is coded as "\_\_\_\_"?

7.  $10\ 25639 - 5252 - 3232 = ?$

(1) 17255

(2) 17551

(3) 17515

(4) 17155

(5) None of these

8. Milk : Emulsion :: Butter : ?

(1) Aerosol

(2) Suspension

(3) Sol

(4) Gel

9. Haemoglobin : Iron :: Chlorophyll : ?

(1) Copper

(2) Magnesium

(3) Cobalt

(4) Calcium



10. The first page of a website is called the \_\_\_\_\_

11. In a column of girls Kamal is 11th from the front. Neela is 3 places ahead of Sunita who is 22nd from the front. How many girls are there between Kamal and Neela in the column?

- 1) Six
- 2) Eight
- 3) Seven
- 4) Nine

12.  $34658 - 21541 - 2054 = ?$

- 1) 11063
- 2) 13063
- 3) 10136
- 4) 13106

13. A website address is a unique name that identifies a specific \_\_\_\_\_ on the web.

14. Dipa Karmakar a medal winner in Commonwealth Games 2014 is associated with?

- 1) Squash
- 2) Shooting
- 3) Gymnastic
- 4) Badminton

15. Name the player of the Indian Cricket team who on January 4th, 2013 was honoured with the 'CEAT International Cricketer' of the year 2012 Award -

- 1. Yuvraj Singh
- 2. Gautam Gambhir
- 3. M.S. Dhoni
- 4. Virat Kohli

16. 'Federation Cup' in India is associated with which sport?

- 1) Hockey
- 2) Football
- 3) Basketball
- 4) Badminton

17. A \_\_\_\_\_ is a computer attached to the internet that runs a special web server software and can send web pages out to the other computer over the internet.

18. If the speed of a man is 45 km per hour, then what is the distance traveled by him in 30 seconds ?

- a) 275m      b) 360m      c) 375 m      d) 420 m

19. What does SSL stand for?

- A. Secure Socket Layer
- B. System Socket Layer
- C. Superuser System Login
- D. Secure System Login

20. Look at this series: 36, 34, 30, 28, 24, ... What number should come next?

- A. 20
- B. 22
- C. 23
- D. 26

21. Look at this series: 70, 71, 76, \_\_, 81, 86, 70, 91, ... What number should fill the blank?

- A. 70
- B. 71
- C. 80
- D. 96

22. Who was known as Iron man of India?

- A. GovindBallabh Pant
- B. Jawaharlal Nehru
- C. Subhash Chandra Bose
- D. SardarVallabhbhai Patel



23. Michael Jackson is a distinguished person in the field of?

- A. Pop Music
- B. Journalism
- C. Sports
- D. Acting

24. A byte is comprised of:

- A. One bit
- B. Four bits
- C. Eight bits
- D. Sixteen bits
- E. None of the above

25. In SQL, which command is used to add new rows to a table?

- A. ALTER TABLE
- B. ADD ROW
- C. INSERT
- D. APPEND
- E. None of the above

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SEAT NO. : \_\_\_\_\_

**UNIVERSITY OF MUMBAI**  
**GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT**  
**P.G. DIPLOMA IN INFORMATION TECHNOLOGY**  
**(PGDIT)**  
**ENTRANCE EXAM**  
*SECOND ROUND*

**DATE:** 24-AUG-15

**TIME :** 11.00AM TO 12.00 NOON

**MARKS : 50**

**NOTE:**        ➤ DO NOT CARRY YOUR MOBILE IN THE EXAMINATION HALL  
                 ➤ ALL QUESTIONS CARRY EQUAL MARKS

1 Look at this series: 36, 34, 30, 28, 24, ... What number should come next?

- |         |         |
|---------|---------|
| A    20 | B    22 |
| C    23 | D    26 |

2 Look at this series: F2, \_\_, D8, C16, B32, ... What number should fill the blank?

- |          |         |
|----------|---------|
| A    A16 | C    G4 |
| B    E4  | D    E3 |

3 desert

- |             |           |
|-------------|-----------|
| A    Cactus | B    arid |
| C    Oasis  | D    flat |

4 Antique

- |             |                  |
|-------------|------------------|
| A    Rarity | B    Artifact    |
| C    Aged   | D    Prehistoric |

5 ELFA, GLHA, ILJA, \_\_\_\_\_, MLNA

- |           |           |
|-----------|-----------|
| A    OLPA | B    KLMA |
| B    LLMA | D    KLLA |

6 Yard is to inch as quart is to

- |              |              |
|--------------|--------------|
| A.    gallon | B.    Ounce  |
| C.    milk   | D.    Liquid |

7 Which word does NOT belong with the others?

- |             |             |
|-------------|-------------|
| A.    tulip | B.    Rose  |
| C.    bud   | D.    Daisy |

8 Which word does NOT belong with the others?

- |                   |                   |
|-------------------|-------------------|
| A.    noun        | B.    Preposition |
| C.    punctuation | D.    Adverb      |

9 Here are some words translated from an artificial language.

*moolokarn* means blue sky

*wilkospadi* means bicycle race

*moolowilko* means blue bicycle

Which word could mean "racecar"?

- |               |               |
|---------------|---------------|
| A. wilkozwet  | B. Spadiwilko |
| C. moolobreil | D. Spadivolo  |

10 What Galileo invented?

- A. Barometer
- B. Pendulum clock
- C. Microscope
- D. Thermometer

11 What is the name of the person that controls a football match?

- A. A referee
- B. An umpire
- C. A spectator
- D. A goalkeeper

12 India First won the Olympic Hockey Gold at

- |           |              |
|-----------|--------------|
| A. London | B. Amsterdam |
| C. Berlin | D. Rome      |

13 LIGHT:BLIND

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

14 The lead character in the film 'The Bandit Queen' has been played by

- A. Rupa Ganguly
- B. Seema Biswas



C. Pratiba Sinha

D. Shabana Azmi

15 The first Indian to receive Noble Prize in Literature was

A. Mother Teresa

B. C. V. Raman

C. Rabindranath Tagore

D. Sarojini Naidu

16 When is the World's Diabetes Day?

A. 14th November

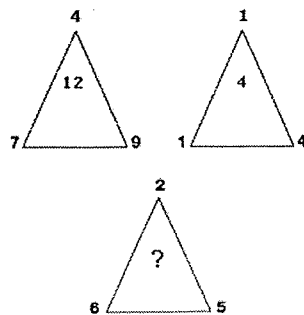
B. 11th December

C. 15th October

D. 1st July

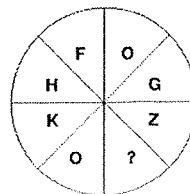
17 Which number replaces the question mark? =

Which number replaces the question mark?



18 Which letter replaces the question mark? =

Which letter replaces the question mark?



19 A computer program that converts assembly language to machine language is

- A. Compiler
- B. Interpreter
- C. Assembler
- D. Comparator
- E. None of the above

20 Which of the following is not an output device of a computer?

- A. Printer
- B. Keyboard
- C. VDU
- D. CRT screen
- E. All of the above

21 Which of the following operating systems is produced by IBM?

- |         |            |
|---------|------------|
| A. OS-2 | B. Windows |
| C. DOS  | D. UNIX    |

22 What is a URL?

- A. A computer software program
- B. A type of UFO
- C. The address of a document or "page" on the World Wide Web
- D. An acronym for Uniform Resources Learning

23 On which of the following sites can you set up your email account:

- |   |   |
|---|---|
| A. <a href="http://www.linux.org">www.linux.org</a> | B. <a href="http://www.gre.org">www.gre.org</a>         |
| C. <a href="http://www.syvum.com">www.syvum.com</a> | D. <a href="http://www.hotmail.com">www.hotmail.com</a> |

24 Which of the following is not a valid domain name?

- A.    Www.yahoo.com
- B.    Www.yahoo.co.uk
- C.    Www.fr.yahoo
- D.    Www.yahoo.fr

25 What kind of data can you send by e-mail?

- A.    Audio
- B.    Pictures
- C.    Video
- D.    All of the above

\* \* \* \*



SEAT NO. : \_\_\_\_\_

**UNIVERSITY OF MUMBAI**  
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**P.G. DIPLOMA IN INFORMATION TECHNOLOGY**  
**(PGDIT)**  
**ENTRANCE EXAM**

DATE: 03-AUG-15

TIME : 11.00AM TO 12.00 NOON

MARKS : 50

**NOTE:** ➤ ALL QUESTIONS CARRY EQUAL MARKS (2 marks each)

1. A person crosses a 600 m long street in 5 minutes. What is his speed in km per hour?

- |        |        |
|--------|--------|
| A. 3.6 | B. 7.2 |
| C. 8.4 | D. 10  |

2. The present ages of three persons in proportions 4 : 7 : 9. Eight years ago, the sum of their ages was 56. Find their present ages (in years).

- |               |                  |
|---------------|------------------|
| A. 8, 20, 28  | B. 16, 28, 36    |
| C. 20, 35, 45 | D. None of these |

3. Hockey was introduced in the Asian Games in

- A. 1958 in Tokyo
- B. 1962 in Jakarta
- C. 1966 in Bangkok
- D. 1970 in Bangkok

4. Joe is younger than Kathy.

Mark was born after Joe.

Kathy is older than Mark.

If the first two statements are true, the third statement is

True

False

Uncertain

5. Production of chlorofluorocarbons (CFC) gas which is proposed to be banned in India, is used in which of the following domestic products?

- A. Television
- B. Refrigerator
- C. Tube light
- D. Cooking gas

6. What is the unit for measuring the amplitude of a sound?

- A. Decibel  
B. Coulomb  
C. Hum  
D. Cycles

7. Look at this series: 7, 10, 8, 11, 9, 12, ... What number should come next?

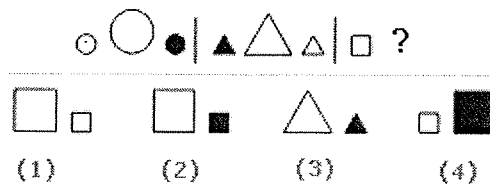
- A. 7  
B. 10  
C. 12  
D. 13

8. In these series, you will be looking at both the letter pattern and the number pattern. Fill the blank in the middle of the series or end of the series.

QAR, RAS, SAT, TAU, \_\_\_\_\_

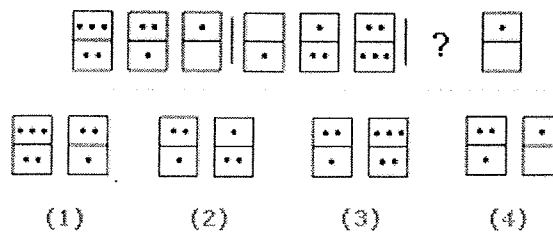
- A. UAV  
B. UAT  
C. TAS  
D. TAT

9. Look carefully at the sequence of symbols to find the pattern. Select correct pattern.



- A. 1  
B. 2  
C. 3  
D. 4

10. Look carefully at the sequence of symbols to find the pattern. Select correct pattern.



- A. 1  
B. 2  
C. 3  
D. 4

11. In which of the following form, data is stored in computer ?

- A. Decimal  
B. Binary  
C. HexaDecimal  
D. Octal

12. Which among following is an image name extension ?

A. gif

B. docx

C. ppt

D. lib

13. Who invented Java ?

A. Deniss Ritche

B. James Gosling

C. Bajarnae

D. Linus Torvalds

14. Where is RAM located ?

A.Expansion Board B.External Drive C.Mother Board D.All of above

15. If a computer provides database services to other, then it will be known as ?

A.Web server B.Application server C.Database server D.FTP server

16. Recently, which of the following auto makers launched its first compact SUV named Creta in India?

A.Toyota B.Maruti Suzuki C.Tata Motors D.Hyundai

17. Who was the father of Internet ?

A.Chares Babbage B.Vint Cerf C.Denis Riche D.Martin Cooper

18.What is LINUX ?

A.Malware B.Operating System C.Application Program D.Firmware

19. What is the name of first super computer of India ?

A.Saga 220 B.PARAM 8000 C.ENIAC D.PARAM 6000

20. USB is which type of storage device ?

A.Primay B.Secondary C.Tertiary D.None of above

21. If a computer provides database services to other, then it will be known as ?

A.Web server B.Application server C.Database server D.FTP server

22. Arun went for a movie nine days ago. He goes to watch movies only on Thursdays. What day of the week is today?

A.WEDNESDAY B.SATURDAY C.FRIDAY D.MONDAY



23. Who is the author of the book "Kashmir: The Vajpayee Years"?

A. A K Sinha B. Shyam Mukherji C. A S Dulat D. P J Nayak

24 Who won the Commonwealth Chess Championship title-2015?

A .Arghyadip Das B. Abhijeet Gupta C. Lalith Babu D. Mukund Pal

25. The Average age of a class of 22 students is 21 years. The average increased by 1 when the teacher's age also included. What is the age of the teacher?

A.48 B.45 C.43 D.44

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ENTRANCE EXAMINATION  
P.G. DIPLOMA IN INFORMATION TECHNOLOGY (PGDIT)

DATE : 17/07/2014

TIME : 11.00 AM TO 12.00 NOON

MARKS : 50

NOTE:-

- All 50 questions are compulsory. Each question carries 1 mark.
- Tick the correct option for the answer.

1. Find the odd man out:

10, 25, 45, 54, 60, 75, 80

- A. 10
- B. 60
- C. 54
- D. 80

2. Find the odd man out:

22, 33, 66, 99, 121, 279, 594

- A. 33
- B. 121
- C. 279
- D. 594

3. What number should come next in the following series?

2, 1, (1/2), (1/4), ( )

- A. (1/3)
- B. (1/8)
- C. (2/8)
- D. (1/16)

4. What number should come next in the following series?

7, 10, 8, 11, 9, 12, \_\_,

- A. 7
- B. 10
- C. 12
- D. 13

5. Choose the word that is a necessary part of the word **bird**.

- A. sky
- B. fly
- C. feather
- D. wing

6. The equation  $y^2 = 4ax$  is necessarily the equation of

- A. Parabola
- B. Hyperbola
- C. Helix
- D. Ellipse

7.

$$\begin{vmatrix} 2 & 5 \\ X & 5 \end{vmatrix}$$

If the above matrix is singular then

- A.  $X=5$
- B.  $X=2$
- C.  $X=0$
- D. None of the above

8.  $y=3x+7$  ----- (a)

$y=5x+7$  ----- (b)

$y=3x+10$  ----- (c)

The above equations

- A. (a) and (b) present parallel lines
- B. ((b) and (c) present parallel lines
- C. (a) and (c) present parallel lines
- D. None of the above

9. The distance between two points  $P(x_1, y_1)$  and  $Q(x_2, y_2)$  is given by

A.  $\sqrt{(x_1-x_2)^2 - (y_1-y_2)^2}$

B.  $\sqrt{(x_1-y_1)^2 - (x_2-y_2)^2}$

C.  $\sqrt{(x_1-x_2)^2 + (y_1-y_2)^2}$

D. None of the above

10. The discount on a packet of sweets costing Rs. 75 marked down to Rs. 69 is

- A. 10%
- B. 7%
- C. 8%
- D. 12%

11. The co-ordinates of the centre of the circle  $(x-1)^2 + (y-4)^2 = 9$  are

- A. (4,1)
- B. (1,4)
- C. (3,0)
- D. (1,2)

12. A bird approaching the top of the tower 300 meters high makes an angle of depression of  $45^\circ$  at a certain instant. The distance it needs to make to reach the tower is



- A. 300 meters
- B. 150 meters
- C. 600 meters
- D. 100 meters

13. Present ages of Sashank and Anand are in the ratio of 5 : 4 respectively. Three years hence, the ratio of their ages will become 11 : 9 respectively. What is Anand's present age in years?

- A. 44
- B. 36
- C. 30
- D. 24

14. The sum of ages of 3 children born at the intervals of 2 years each is 21 years. What is the age of the youngest child?

- A. 5
- B. 8
- C. 10
- D. 6

15. A man is 30 years older than his son. In three years, his age will be twice the age of his son. The present age of his son is:

- A. 21 years
- B. 27 years
- C. 20 years
- D. 22 years

16. Ram and Shyam earn an average monthly income of Rs. 5000. The average monthly income of Shyam and Prem is Rs. 6000 and the average monthly income of Ram and Prem is Rs. 5500. The monthly income of Prem is:

- A. 6500
- B. 6000
- C. 5500
- D. 5000

17. Below are given two statements I and II. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements

- I. Importance of Yoga and exercise is being realized by all sections of the society.
- II. There is an increasing awareness about health in the society particularly among middle age group of people.

- A. Statement I is the cause and statement II is its effect.
- B. Statement II is the cause and statement I is its effect.
- C. Both the statements I and II are independent causes.
- D. Both the statements I and II are effects of independent causes.
- E. Both the statements I and II are effects of some common cause.

18. Arrange the words given below in a meaningful sequence.

1. Door 2. Key 3. Lock 4. Room 5. Enter

- A. 5, 1, 2, 4, 3
- B. 2, 3, 1, 5, 4
- C. 1, 3, 2, 4, 5
- D. 1, 2, 3, 5, 4

19. Sita is older than Geeta.

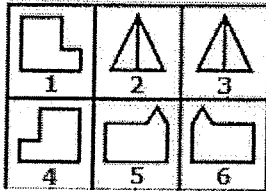
Cynthia is older than Sita.

Cynthia is older than Geeta.

If the first two statements are true, the third statement is

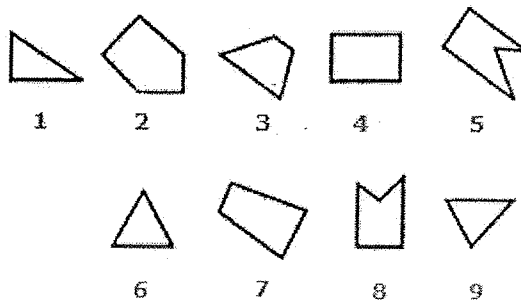
- A. true
- B. false
- C. uncertain

20. Group the given figures into three classes using each figure only once



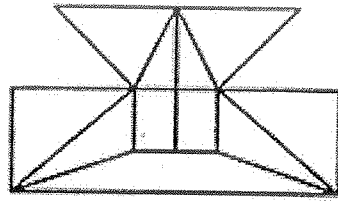
- A. 1,4 ; 2,3 ; 5,6
- B. 1,5 ; 2,6 ; 4,3
- C. 1,6 ; 2,3 ; 4,5
- D. 1,2 ; 3,6 ; 4,5

21. Group the given figures into three classes using each figure only once.



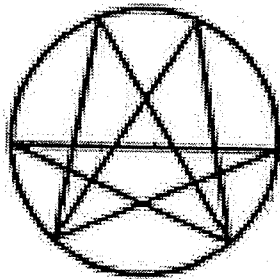
- A. 7,8,9 ; 2,4,3 ; 1,5,6
- B. 1,3,2 ; 4,5,7 ; 6,8,9
- C. 1,6,8 ; 3,4,7 ; 2,5,9
- D. 1,6,9 ; 3,4,7 ; 2,5,8

22. Find the minimum number of straight lines required to make the given figure.



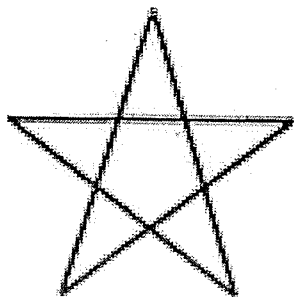
- A. 16
- B. 17
- C. 18
- D. 19

23. Find the number of triangles in the given circle below:



- A. 22
- B. 24
- C. 26
- D. 28

24. Find the number of triangles in the given figure.



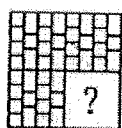
- A. 5
- B. 6
- C. 8
- D. 10



25. If 10 people can do a piece of work in 5 days, working 2 hours a day, how long will 2 people take to do the same work, working 5 hours a day?

- A. 8
- B. 5
- C. 10
- D. 12

26. Identify the figure that completes the following pattern.



(X)



(1)



(2)



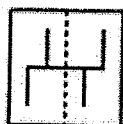
(3)



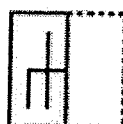
(4)

- A. 1
- B. 2
- C. 3
- D. 4

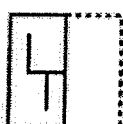
27. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



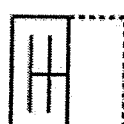
(X)



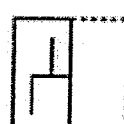
(1)



(2)



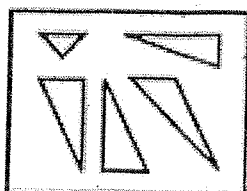
(3)



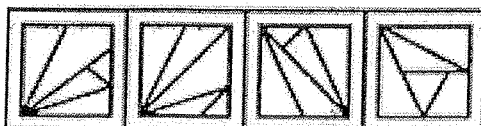
(4)

- A. 1
- B. 2
- C. 3
- D. 4

28. Find out which of the figures (1), (2), (3) and (4) can be formed from the pieces given in figure (X).



(X)



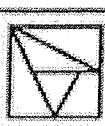
(1)



(2)



(3)



(4)

- A. 1
- B. 2
- C. 3
- D. 4

29. Pick out the best one which can compete meaningfully.  
 "Even if it rains I shall come" means:-

- A. if I come it will not rain
- B. if it rains I shall not come
- C. I will certainly come whether it rains or not
- D. whenever there is rain I shall come

30. Arrange the following in a meaningful sequence :

1. Consultation 2. Illness 3. Doctor 4. Treatment 5. Recovery

- A. 2,3,1,4,5
- B. 2,3,4,1,5
- C. 4,3,1,2,5
- D. 5,1,4,3,2

31. Rearrange these parts, which are labeled P, Q, R and S to produce the correct sentence. Choose the proper sequence:

When

P : he did not know

Q : he was nervous and

R : he heard the hue and cry at midnight

S : what to do

The Proper sequence should be:

- A. RQPS
- B. QSPR
- C. SQPR
- D. PQRS

32. A motorcycle traveled 60 Km in 30 minutes. How many Km per hour was its speed in Km/h?

- A. 150
- B. 80
- C. 120
- D. 60

33. Which word does NOT belong with the others?

- A. rudder
- B. deck
- C. sail
- D. ship

34. Which word does NOT belong with the others?

- A. trumpet
- B. whistle
- C. guitar
- D. flute

35. The school principal has received complaints from parents about bullying in the school yard during recess. He wants to investigate and end this situation as soon as possible, so he has asked the recess aides to watch closely. Which situation should the recess aides report to the principal?

- A. A girl is sitting glumly on a bench reading a book and not interacting with her peers.
- B. Four girls are surrounding another girl and seem to have possession of her backpack.
- C. Two boys are playing a one-on-one game of basketball and are arguing over the last basket scored.
- D. Three boys are huddled over a handheld video game, which isn't supposed to be on school grounds.

36. All the tulips in Rajesh's garden are white.

All the roses in Rajesh's garden are pink.

All the flowers in Rajesh's garden are either white or pink.

If the first two statements are true, the third statement is

- A. true
- B. false
- C. uncertain

37. Ink is to pen as Diesel is to

- A. Can
- B. Fuel tank
- C. Pump
- D. Car

38. Entomology is the science that studies

- A. Behavior of human beings
- B. Insects
- C. The origin and history of technical and scientific terms
- D. The formation of rocks

39. Tags such as <Head></Head> are used while scripting

- A. HTML
- B. C program
- C. Java code
- D. None of the above

40. LINUX is :

- A. Proprietary Software
- B. Free and Open Source Software
- C. Mac O.S. clone
- D. None of the above

41. Which of the following three main search expressions, or operators, recognized by Boolean logic?

- A. FROM, TO, WHOM
- B. AND, OR, NOT
- C. SEARCH, KEYWORD, TEXT
- D. AND, OR, BUT

42. <Student123@giced.mu.ac.in> is an example of

- A. A URL
- B. An access code
- C. A directory
- D. Email address

43. Which one of the following is not an operating system?

- A. Microsoft Windows
- B. Android
- C. Oracle
- D. Linux

44. Calculations in the computer are done by the

- A. ALU
- B. Hard disk
- C. RAM

45. The digits 68232578, and 87523286 are the same \_\_\_\_\_.

- A Amount
- B Backwards
- C Number
- D None Of The Above

46. Data Networking is associated with

- A. Social media
- B. Computers
- C. Video conferencing
- D. All of the above

47. #include <iostream> belongs to the following programming language:

- A. C++
- B. Fortran
- C. Cobol
- D. Basic



48. If ABC is a right angle triangle then the sides AB, BC and CA are given by the following units:
- A. 4,5,25
  - B. 8,15,17
  - C. 8,9,16
  - D. 7,8,12
  - E. None of the above
49. Binary number is expressed by the following numeral system
- A. base-2
  - B. base-10
  - C. base-8
  - D. none of the above
50. Which of the following is not a peripheral device of the PC. ?
- A. Key board
  - B. Mouse
  - C. Microprocessor
  - D. Printer

— X —

**GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT**  
**ENTRANCE EXAMINATION**  
**P.G. DIPLOMA IN INFORMATION TECHNOLOGY (PGDIT)**  
**THIRD ROUND**

DATE : 14-Aug-14

TIME : 11.00 AM TO 12.00 NOON

MARKS : 50

NOTE:- All 50 questions are compulsory. Each question carries 1 mark.  
Tick the correct option for the answer.

1. Which one of the following is not a prime number?  
A. 31  
B. 71  
C. 61  
D. 91
2. What should come in place of both x in the equation  
 $x/(\sqrt{128}) = (\sqrt{162})/x$   
A. 12  
B. 144  
C. 14  
D. 196
3. If  $\sqrt{5} = 2.236$ , then what will be the value of  $\sqrt{80} + 6\sqrt{5}$   
A. 13.41  
B. 20.46  
C. 21.66  
D. 22.36
4. What number should come next?  
58, 52, 46, 40, 34, \_\_\_\_  
A. 26  
B. 28  
C. 30  
D. 32
5. Choose the word that is a necessary part of the word **Book**  
A. fiction  
B. pages  
C. pictures  
D. learning
6. Choose the word that is a necessary part of the word **Guitar**  
A. band  
B. teacher  
C. songs  
D. strings
7. Choose the word that is a necessary part of the word **bird**.  
A. sky  
B. fly  
C. feather  
D. wing

8. 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. 12 cm

9. The diagonal of a rectangular field is 7.5 m. The shorter side of the field is 4.5 m. The area of the field in sq.m. is:

- A. 25 sq. m
- B. 27 sq. m
- C. 37.5 sq. m
- D. 28.25 sq. m

10. The equation  $(y^2/a^2) - (x^2/b^2) = 1$ , is the equation of

- A. Parabola
- B. Helix
- C. Hyperbola
- D. Ellipse

11.

$$\begin{vmatrix} 4 & 5 \\ X & 5 \end{vmatrix}$$

If the above matrix is singular then

- A.  $X=5$
- B.  $X=2$
- C.  $X=4$
- D. None of the above

12.  $y = -2x + 1$  ----- (a)  
 $y = (1/2)x + 4$  ----- (b)

In the above equations:

- A. (a) and (b) are parallel lines
- B. (a) and (b) are perpendicular lines
- C. None of the above

13. The digits 96232578, and 87523269 are the same \_\_\_\_\_.

- A. Amount
- B. Backwards
- C. Number
- D. None of the above

14.  $[(\text{Log } \sqrt{8})/\text{Log } 8] =$

- A.  $1/\sqrt{8}$
- B.  $1/8$
- C.  $1/2$
- D.  $1/4$

15. The discount on a packet of sweets costing Rs. 75 marked down to Rs. 69 is

- A. 10%
- B. 7%
- C. 8%
- D. 12%

16.  $x^2 + y^2 + 2(2x - y) = 11$  is an equation of

- A. Circle center(2,-1) radius=4
- B. Circle center(-2,1) radius=4
- C. Circle center(2,-1) radius=11
- D. Circle center(-2,-1) radius=2

17. A bird approaching the top of the tower 330 meters high makes an angle of depression of  $45^\circ$  at a certain instant. The distance it needs to make to reach the tower is

- A. 300 meters
- B. 150 meters
- C. 330 meters
- D. 100 meters

18. Anita's father was 38 years of age when she was born while her mother was 36 years old when her brother four years younger to her was born. What is the difference between the ages of her parents?

- A. 2
- B. 4
- C. 6
- D. 8

19. A is two years older than B who is twice as old as C. If the total of the ages of A, B and C be 27, then how old is B?

- A. 7
- B. 8
- C. 9
- D. 10



20. Below are given two statements I and II. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements.

I. The meteorological Department has issued a statement mentioning deficient rainfall during monsoon in many parts of the country.

II. The Government has lowered the revised estimated GDP growth from the level of earlier estimates.

- A. Statement I is the cause and statement II is its effect.
- B. Statement II is the cause and statement I is its effect.
- C. Both the statements I and II are independent causes.
- D. Both the statements I and II are effects of independent causes.
- A. Both the statements I and II are effects of some common cause

21. Success in this examination depends \_\_\_\_\_ hard work alone.

- A. at
- B. over
- C. for
- D. on

22. In the first 10 overs of a cricket game, the run rate was only 3.2. What should be the run rate in the remaining 40 overs to reach the target of 282 runs?

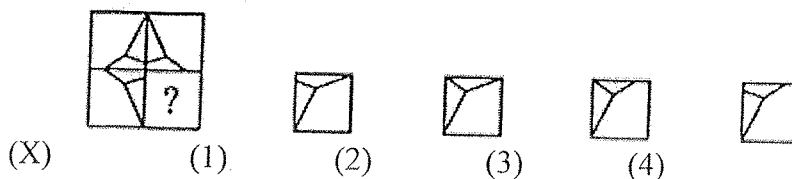
- A. 6.25
- B. 6.5
- C. 6.75
- D. 7

23. Arrange the words given below in a meaningful sequence.

1. Key    2. Door    3. Lock    4. Room    5. Switch on

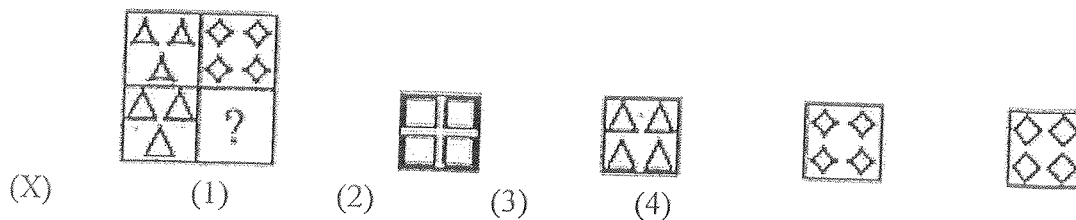
- A. 5, 1, 2, 4, 3
- B. 4, 2, 1, 5, 3
- C. 1, 3, 2, 4, 5
- D. 1, 2, 3, 5, 4

24. Identify the figure that completes the pattern.



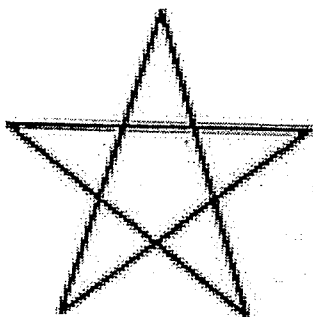
- A. 1
- B. 2
- C. 3
- D. 4

25. Identify the figure that completes the pattern.



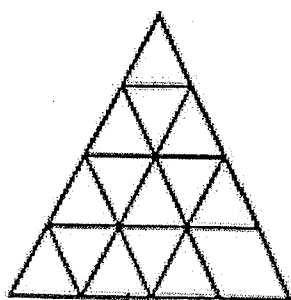
- A. 1
- B. 2
- C. 3
- D. 4

26. Find the number of triangles in the given figure.



- A. 5
- B. 6
- C. 10
- D. 8

27. Find the minimum number of straight lines required to make the given figure.



- A. 9
- B. 15
- C. 11
- D. 16

28. If 12 people can do a piece of work in 5 days, working 2 hours a day, how long will 2 people take to do the same work, working 5 hours a day?

- A. 8
- B. 5
- C. 10
- D. 12

29. Arrange the following in a meaningful sequence :

1. Consultation 2. Illness 3. Doctor 4. Treatment 5. Recovery

- A. 2,3,1,4,5
- B. 2,3,4,1,5
- C. 4,3,1,2,5
- D. 5,1,4,3,2

30. A car traveled 60 Km in 20 minutes. How many Km per hour was its speed?

- A. 180
- B. 80
- C. 120
- D. 60

31. All trees in the park are fruit trees.

The mango trees are alphonso type

All fruit trees in the park are Alphonso type.

If the first two statements are true, the third statement is

- A. True
- B. False
- C. Uncertain

32. During a function, Nayan ate more sweets than Mayank. ☐

Sachin ate fewer sweets than Ramesh. ☐

Ramesh ate more sweets than Nayan.

☐

If the first two statements are true, the third statement is

- A. True
- B. False
- C. Uncertain

33. Oranges cost more than lemons.

Oranges cost less than mangoes.

Mangoes cost more than both lemons and Oranges.

If the first two statements are true, the third statement is

- A. true
- B. false
- C. uncertain

34. Odometer is to mileage as compass is to

- A. speed
- B. hiking
- C. needle
- D. direction

35. The three main search expressions, or operators, recognized by Boolean logic are:
- A. FROM, TO, WHOM
  - B. AND, OR, NOT
  - C. SEARCH, KEYWORD, TEXT
  - D. AND, OR, BUT
36. The Internet is formed by
- A. Link of many Nations
  - B. Link of Computers
  - C. Link of International clubs
  - D. Link of fishing boats
37. <http://www.mu.ac.in> - is an example of :
- A. A URL
  - B. An access code
  - C. A directory
  - D. A server
38. The computer necessarily consists of
- A. Hard disk printer and monitor
  - B. Hard disk, cpu and mother board
  - C. CPU, dongle and USB
  - D. CPU, motherboard and Printer
39. C/C++, Fortran, Pascal are
- A. Operating systems
  - B. Proprietary Software
  - C. Programming languages
  - D. None of the above
40. Which one of the following is a search engine?
- A. Macromedia Flash
  - B. Google
  - C. Netscape
  - D. Oracle
41. 'Algorithm' is associated with
- A. Logarithm
  - B. Algae
  - C. Calculator
  - D. Computer programming
42. Calculations in the computer are done by the
- A. ALU
  - B. Hard disk
  - C. RAM



43. Which of the following are object oriented languages
- A. C++
  - B. Java
  - C. None of the above
  - D. Both C++ and Java
44. 'Mbps' is used to measure
- A. Bandwidth
  - B. Memory usage
  - C. Disk space usage
45. Which of the following is Free and Open Source Software?
- A. Windows Vista
  - B. Mac o.s. Snow Leopard
  - C. Windows XP
  - D. Linux
46. URL stands for
- A. Universal Research Locator
  - B. Uniform Resource Locator
  - C. Unlimited Resource Locator
  - D. United Resources limited
47. RDBMS is related to
- A. Hardware
  - B. Programming
  - C. Data bases
  - D. Website
48. Tags such as <Head></Head> are used while scripting
- A. HTML
  - B. C program
  - C. Java code
  - D. None of the above
49. The binary system uses powers of
- A. 2
  - B. 10
  - C. 8
  - D. 16
50. An Operating System used in Mobile phones:
- A. Windows XP
  - B. Red Hat Linux
  - C. Android
  - D. All of the above

————— X —————

UNIVERSITY OF MUMBAI  
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT  
P.G.DIPLOMA IN INFORMATION TECHNOLOGY  
ENTRANCE EXAM

DATE : 17/07/13

TIME : 11.00AM TO 12.00 NOON

MARKS : 50

**NOTE :-**

❖ All 50 questions are compulsory. Each question carries 1 mark.

1. Which word from below is a necessary part of the word "computer"

- A. Disk
- B. Storage
- C. Electronic
- D. Digital

2. Fill in the blank the missing number of the series?

5, 10, 17, \_\_, 37,

- A. 30
- B. 21
- C. 26
- D. 34

3. A bird approaching the top of the tower 200 meters high makes an angle of depression of  $45^\circ$  at a certain instant. The distance it needs to make to reach the tower is

- A. 200 meters
- B. 100 meters
- C. 220 meters
- D. 110 meters

4. Two lines are given as  $3x+2y=11$  and  $6x+4y=15$  then

- A The lines are parallel
- B The lines intersect
- C The lines are skew

5. Observing the rows, which number should replace the question mark "?"

16	9	5	5
12	8	5	4
9	9	6	3
12	4	4	?

- A. 7  
B. 4  
C. 3  
D. 5

6. The average weight of 8 person's increases by 2 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person?

- A. 67 Kg  
B. 63 Kg  
C. 81 Kg  
D. None of the above

7. The cost price of 25 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. 20  
C. 18  
D. 25

8. A can do a work in 15 days and B in 20 days. If they work on it together for 4 days, then the fraction of the work that is left is :

- A.  $\frac{1}{4}$   
B.  $\frac{1}{10}$   
C.  $\frac{7}{15}$   
D.  $\frac{8}{15}$

9. The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?

- A. 8 years  
B. 9 years  
C. 4 years  
D. 7 years

10. Mara runs faster than Gail. □  
Lily runs faster than Mara. □  
Gail runs faster than Lily.

If the first two statements are true, the third statement is

- A. True
- B. False
- C. Uncertain

11. **Statements:** Some doctors are fools. Some fools are rich.  
**Conclusions:**

- I. Some doctors are rich
- II. Some rich are doctors.

- A. Only conclusion I follows
- B. Only conclusion II follows
- C. Either I or II follows
- D. Neither I nor II follows
- E. Both I and II follow

12. Arrange the words given below in a meaningful sequence.

1. Correction   2. Write   3. Paper  
4. Study   5. Result

- A. 4, 2, 3, 1, 5
- B. 1, 2, 4, 3, 5
- C. 5, 4, 3, 2, 1
- D. 3, 1, 4, 5, 2

13. Rearrange these parts, which are labeled P, Q, R and S to produce the correct sentence. Choose the proper sequence:

When

P : he did not know

Q : he was nervous and

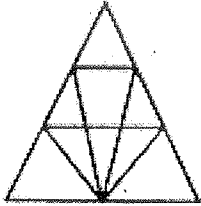
R : he heard the hue and cry at midnight

S : what to do

The Proper sequence should be:

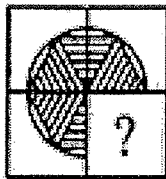
- A. RQPS
- B. QSPR
- C. SQPR
- D. PQRS

14. Find the number of triangles in the given figure



- A. 12
- B. 18
- C. 22
- D. 26

15. Identify the figure that completes the following pattern



(1)



(2)



(3)



(4)

- A. 1
- B. 2
- C. 3
- D. 4

16. Below are given two statements I and II. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements.

I. The meteorological Department has issued a statement mentioning deficient rainfall during monsoon in many parts of the country.

II. The Government has lowered the revised estimated GDP growth from the level of earlier estimates.

- A Statement I is the cause and statement II is its effect.
- B Statement II is the cause and statement I is its effect.
- C Both the statements I and II are independent causes.
- D Both the statements I and II are effects of independent causes.

17. Below are given two statements I and II. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements
- I. Importance of Yoga and exercise is being realized by all sections of the society.
  - II. There is an increasing awareness about health in the society particularly among middle age group of people.
- A Statement I is the cause and statement II is its effect.
  - B Statement II is the cause and statement I is its effect.
  - C Both the statements I and II are independent causes.
  - D Both the statements I and II are effects of independent causes.
  - E Both the statements I and II are effects of some common cause.
18. A loosely hanging thread is attached to distantly spaced two nails on a board. If a pencil with its point stretches the thread tightly, which of the following figures will describe the path it moves along the board?
- A. Circle
  - B. Oval
  - C. Ellipse
19. A motorcar traveled 60 Km in 30 minutes. How many Km per hour was its speed?
- A 150
  - B 80
  - C 120
  - D 60
20. Pineapples cost more than lemons.  
Pineapples cost less than mangoes.  
Mangoes cost more than both lemons and Pineapples.
- If the first two statements are true, the third statement is
- A. True
  - B. False
  - C. Uncertain
21. For a parabola  $y^2 = 4ax$ , the equation of the tangent at  $(x_1, y_1)$  is
- A.  $yy_1 = 2a(x+x_1)$
  - B.  $yy_1 = 2a(x-x_1)$
  - C.  $yy_1 = 4a(x+x_1)$



22. Mayur and Dinesh are working on an assignment. Mayur takes 6 hours to type 30 pages on a computer, while Dinesh takes 8 hours to type 40 pages. How much time will they take, working together on two different computers to type an assignment of 110 pages?

- A 6
- B 8
- C 12
- D 10

23. The line  $y = m_1x + 1$  and  $y = m_2x + 3$  are two straight lines. If the slopes  $m_1$  and  $m_2$  are equal the lines are

- A Intersecting
- B Parallel
- C Perpendicular
- D None of the above

24. If you rearrange the letters "ANLDEGN" you would have the name of

- A Baseball Player
- B Country
- C State
- D Actor

25. The northern hemisphere and the southern hemisphere are separated by

- A The International Date line
- B The plane of the equator
- C The plane of Tropic of Cancer
- D The plane of Tropic of Capricorn

26. A cynic is one who knows the \_\_\_\_\_ of everything and the value of nothing.

- A. Meaning
- B. Emotion
- C. Price
- D. Quality

27. Ink is to pen as Petrol is to

- A Can
- B Fuel tank
- C Pump
- D Motor

28. Doctor' is related to 'Stethoscope' in the same way as 'Carpenter' is related to

- A. Polish
- B. Wood
- C. Furniture
- D. Saw

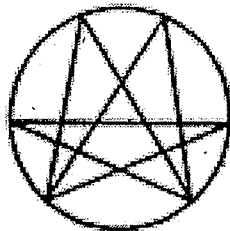
29. Even the most \_\_\_\_\_ rose has thorns.

- A. Ugly
- B. Beautiful
- C. Tempting
- D. Weathered

30. If you rearrange the letters "GROANE" you would have the name of

- A Baseball Player
- B Fruit
- C State
- D Actor

31. Find the number of triangles in the given figure.



- A. 24
- B. 26
- C. 28
- D. 22

32. Which choice makes the best comparison? READ is to DEAR as 6323 is to \_\_\_\_\_.

- A 3326
- B 3623
- C 6232
- D 3236

33. Which of the following is least like the others?

- A. Parrot
- B. Pigeon
- C. Duck
- D. Eagle

48. 'Query' are used in

- A Programs
- B Data base
- C Internet connectivity
- D Portal

49. Which of the following statements should be used to obtain a remainder after dividing 3.14 by 2.1 while programming in C ?

- A. `rem = 3.14 % 2.1`
- B. `rem = modf(3.14, 2.1)`
- C. `rem = fmod(3.14, 2.1)`

50. `#include <iostream>` is used in the following programming language:

- A. C++
- B. Fortran
- C. Cobol
- D. Basic

————— X —————

UNIVERSITY OF MUMBAI  
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT  
P.G.DIPLOMA IN INFORMATION TECHNOLOGY  
SECOND ROUND  
ENTRANCE EXAM

DATE : 05/08/2013      TIME : 11.00 AM TO 12.00 Noon      MARKS : 50

NOTE :-

- ❖ All questions are compulsory. Each questions carries 1 mark.
- ❖ Tick the correct option for the answer.

1. What number should come next in the following series?  
1, 8, 27, 64, \_\_\_\_  
  
A. 121  
B. 128  
C. 125  
D. 112
  
2. Which two numbers should come next in the series below?  
61, 61, 50, 50, 39, 39, \_\_ , \_\_  
  
A. 25, 25  
B. 30, 30  
C. 21, 21  
D. 28, 28
  
3. Choose the word that is a necessary part of the word **drum**.  
A. Band  
B. Music  
C. Songs  
D. Percussion
  
4. If length of the sides AB, BC and CA of a triangle are 8cm, 15 cm and 17 cm respectively, then the triangle ABC is  
  
A. Isosceles  
B. Right angled  
C. None of the above
  
5. A can do a work in 15 days and B in 20 days. If they work on it together for 4 days, then the fraction of the work that is left is :  
  
A.  $\frac{1}{4}$   
B.  $\frac{1}{10}$   
C.  $\frac{7}{15}$   
D.  $\frac{8}{15}$

6. A man's speed with the current is 15 km/hr and the speed of the current is 2.5 km/hr. The man's speed *against* the current is:
- 8.5 km/hr
  - 9 km/hr
  - 10 km/hr
  - 12.5 km/hr
7. A fruit seller had some apples. He sells 40% apples and still has 420 apples. Originally, he had:
- 588 apples
  - 600 apples
  - 672 apples
  - 700 apples
8. The distance between two lines  $3y - 4x + 21 = 0$  and  $3y - 4x + 1 = 0$  is
- $\frac{23}{3}\sqrt{5}$
  - $\frac{3}{20}$
  - $\frac{20}{25}$
  - $\frac{22}{25}$
9. The co-ordinates of the centre of the circle  $x^2 - 2x + y^2 - 10y + 1 = 0$  are
- (5,1)
  - (1,5)
  - (2,1)
  - (1,2)
10. A man from the top of a 100 metre high tower sees a car moving towards the tower at an angle of depression of 30 Degrees. After sometimes, the angle of depression becomes 60 Degrees. The distance (in metres) traveled by the car during this time is
- $100\sqrt{3}$
  - $200/\sqrt{3}$
  - $100/\sqrt{3}$
  - $200\sqrt{3}$
11. A is two years older than B who is twice as old as C. If the total of the ages of A, B and C be 27, the how old is B?
- 7
  - 8
  - 9
  - 10

12. A father said to his son, "I was as old as you are at the present at the time of your birth". If the father's age is 38 years now, the son's age five years back was:

- A. 14 years
- B. 19 years
- C. 33 years
- D. 38 years

13. The average weight of A, B and C is 45 kg. If the average weight of A and B be 40 kg and that of B and C be 43 kg, then the weight of B is:

- A. 17 kg
- B. 31 kg
- C. 26 kg
- D. 20 kg

14. Arrange the words given below in a meaningful sequence.

1. Bell 2. Door 3. Room 4. Enter 5. Sit

- A. 5, 1, 2, 4, 3
- B. 4, 2, 1, 5, 3
- C. 1, 3, 2, 4, 5
- D. 1, 2, 4, 3, 5

15. Mohan runs faster than Ram.  
Shyam runs faster than Mohan.  
Ram runs faster than Shyam.

If the first two statements are true, the third statement is

- A. true
- B. false
- C. uncertain

16. All the daisies in Suresh's garden are white.

All the roses in Suresh's garden are yellow.

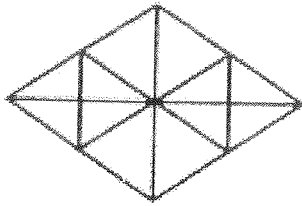
All the flowers in Suresh's garden are either white or yellow

If the first two statements are true, the third statement is

- A. true
- B. false
- C. uncertain

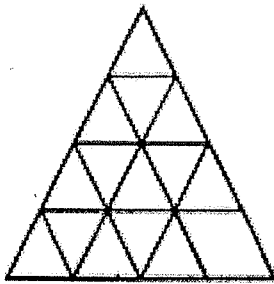


17. Find the number of triangles in the given figure.



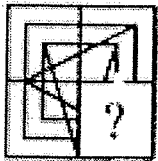
- A. 18
- B. 28
- C. 22
- D. 26

18. Find the minimum number of straight lines required to make the given figure.



- A. 13
- B. 15
- C. 11
- D. 19

19. Identify the figure that completes the following pattern (?).



(1)



(2)



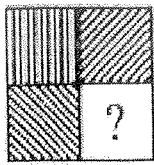
(3)



(4)

- A. 1
- B. 2
- C. 3
- D. 4

20. Identify the figure that completes the following pattern (?).



(1)



(2)



(3)



(4)

- A. 1
- B. 2
- C. 3
- D. 4

21. A motorcar traveled 50 Km in 30 minutes. How many Km per hour was its speed?

- A. 150
- B. 80
- C. 100
- D. 60

22. When they heard news of the hurricane, Maya and Suraj decided to change their vacation plans. Instead of traveling to the island beach resort, they booked a room at a fancy new spa in the mountains. Their plans were a bit more expensive, but they'd heard wonderful things about the spa and they were relieved to find availability on such short notice.

Find the statement that must be true according to the above information.

- A. Maya and Suraj take beach vacations every year.
- B. The spa is overpriced.
- C. It is usually necessary to book at least six months in advance at the spa.
- D. Maya and Suraj decided to change their vacation plans because of the hurricane.

23. Below are given two statements I and II. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements

- I. The staff of Airport Authorities called off the strike they were observing in protest against privatization.
- II. The staff of Airport Authorities went on strike anticipating a threat to their jobs..

- A. Statement I is the cause and statement II is its effect.
- B. Statement II is the cause and statement I is its effect.
- C. Both the statements I and II are independent causes.
- D. Both the statements I and II are effects of independent causes.
- E. Both the statements I and II are effects of some common cause.

24. It has been established that  
P : Einstein was  
Q : although a great scientist  
R : weak in arithmetic  
S : right from his school days

The Proper sequence should be:

- A. SRPQ
- B. QPRS
- C. QPSR
- D. RQPS

25. Ink is to pen as bat is to

- A. Cricket
- B. Tennis
- C. Ball
- D. Pitch

26. Entomology is the science that studies

- A. Behavior of human beings
- B. Insects
- C. The origin and history of technical and scientific terms
- D. The formation of rocks

27. For which of the following disciplines is Nobel Prize awarded?

- A. Physics and Chemistry
- B. Physiology or Medicine
- C. Literature, Peace and Economics
- D. All of the above

28. Which of the following expressions is in the sum-of-products (SOP) form?

- A.  $(A + B)(C + D)$
- B.  $(A)B(CD)$
- C.  $AB + CD$
- D.  $AB(CD)$

29. yogesh@mu.ac.in - is an example of :

- A. A URL
- B. An access code
- C. Email address
- D. A server

30. FORTRAN is name of:
- A. Computer system
  - B. Programming language
  - C. Software code
  - D. Database
31. If the second day of the month is Sunday then the ninth day will be
- A. Sunday
  - B. Wednesday
  - C. Thursday
  - D. None of the above
32. The digits 11232578, and 87523211 are the same \_\_\_\_\_.
- A Amount
  - B Backwards
  - C Number
  - D None Of The Above
33. 'Binary' is associated with
- A. Logarithm
  - B. Digit
  - C. Calculator
  - D. Computer programming
34. If the sides AB, BC and CA of triangle ABC are all unequal , then the triangle is
- A. Scalene triangle
  - B. Isosceles triangle
  - C. Equilateral triangle
  - D. Right angle triangle
35. I saw a \_\_\_\_\_ of cows in the field.
- A. group
  - B. herd
  - C. swarm
  - D. flock
36. My uncle decided to take ..... and my sister to the market.
- A. I
  - B. mine
  - C. me
  - D. myself

37. Microprocessor in the computer
- A. stores the data
  - B. displays graphics
  - C. does data processing and calculation
  - D. none of the above
38. Which of the following is not an object oriented languages
- A. C++
  - B. Java
  - C. C#
  - D. Fortran IV
39. Frequency is measured in
- A. Mbps
  - B. Km/s
  - C. Hertz
40. LINUX is a :
- A. Microsoft product
  - B. Programming language
  - C. Free and open source Operating system
  - D. Database
41. URL stands for
- A. Universal Research Locator
  - B. Uniform Resource Locator
  - C. Unlimited Resource Locator
  - D. United Resources limited
42. RDBMS is related to
- A. Hardware
  - B. Programming
  - C. Data bases
  - D. Website
43. Tags such as <? and ?> are used while scripting
- A. HTML
  - B. PHP scripting
  - C. Java code
  - D. None of the above
44. CDMA and GSM refer to:
- A. Programming language
  - B. Free and open source software
  - C. Operating system
  - D. Mobile communications

45. `#include <iostream>` belongs to the following programming language:

- A. C++
- B. Fortran
- C. Cobol
- D. Basic

46. Blue tooth is used for connecting

- A. far-off devices
- B. nearby devices
- C. none of the above

47. Key board of the PC is :

- A. An accessory
- B. Portable device
- C. Peripheral device

48. Routers are used for

- A. Wireless telephony
- B. Mobile technology
- C. Connecting different data networks

49. Data in the computer is stored and retrieved from the

- A. Microprocessor
- B. ROM
- C. RAM
- D. Hard disk

50. An integer 'n' can be declared in C/C++ as

- A. integer n;
- B. int n;
- C. n;
- D. All of the above

✕



UNIVERSITY OF MUMBAI  
GARWARE INSTITUTE OF CAREER EDUCATION & DEVELOPMENT  
P.G. DIPLOMA IN INFORMATION TECHNOLOGY  
ENTRANCE EXAM

DATE : 11/7/2012

TIME : 11.00AM TO 12.00 NOON

MARKS : 50

All 50 questions are compulsory. Each question carries 1 mark (ONE MARK EACH)

Enter only the choice alphabet for the answer or fill in the blanks.

1. Which word from below is a necessary part of the word "harvest"  
A. Autumn  
B. Storage  
C. Tractor  
D. Crop
2. In the first 10 overs of a cricket game, the run rate was only 3.2. What should be the run rate in the remaining 40 overs to reach the target of 282 runs?  
A. 6.25  
B. 6.5  
C. 6.75  
D. 7
3. The average of 20 numbers is zero. Of them, at the most, how many may be greater than zero?  
A. 0  
B. 1  
C. 10  
D. 19
4. Which number should come next in this series?  
10, 17, 26, 37, \_  
A. 46  
B. 52  
C. 50  
D. 56
5. Which number should replace the question mark "?"

17	8	5	5
13	7	5	4
6	12	6	3
10	6	4	?

- A. 4
- B. 5
- C. 6
- D. 7

6. If 10 people can do a piece of work in 5 days, working 2 hours a day, how long will 2 people take to do the same work, working 5 hours a day?

- A. 8
- B. 5
- C. 10
- D. 12

7. 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. 6
- C. 18
- D. 25

8. A can do a work in 15 days and B in 20 days. If they work on it together for 4 days, then the fraction of the work that is left is :

- A.  $\frac{1}{4}$
- B.  $\frac{1}{10}$
- C.  $\frac{7}{15}$
- D.  $\frac{8}{15}$

9. A father said to his son, "I was as old as you are at the present at the time of your birth". If the father's age is 40 years now, the son's age five years back was:

- A. 15 years
- B. 19 years
- C. 34 years
- D. 38 years

10. All the trees in the park are flowering trees.  
Some of the trees in the park are rosewoods.  
All rosewoods in the park are flowering trees.

If the first two statements are true, the third statement is

- A. True
- B. False
- C. Uncertain

11. No women teacher can play. Some women teachers are athletes.

If conclusions from the above statements shows I and II

- I. Male athletes can play.
- II. Some athletes can play.

Then which of the following is true.

- A. Only conclusion I follows
- B. Only conclusion II follows
- C. Either I or II follows
- D. Neither I nor II follows
- E. Both I and II follow

12. Arrange the words given below in a meaningful sequence.

- 1. Police                      2. Punishment    3. Crime
- 4. Judge                     5. Judgement

- A. 3, 1, 2, 4, 5
- B. 1, 2, 4, 3, 5
- C. 5, 4, 3, 2, 1
- D. 3, 1, 4, 5, 2

13. Arrange the following in a logical order:  
1.Euphoria 2.Happiness 3.Ambivalence 4.Ecstasy 5.Pleasure

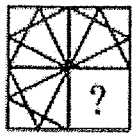
A. 4,1,3,2,5  
B. 3,2,5,1,4  
C. 2,1,3,4,5  
D. 1,4,2,5,3

14. Arrange the words given below in a meaningful sequence.

1. Family 2. Community 3. Member  
4. Locality 5. Country

A. 3, 1, 2, 4, 5  
B. 3, 1, 2, 5, 4  
C. 3, 1, 4, 2, 5  
D. 3, 1, 4, 5, 2

15. Identify the figure that completes the pattern.



(X)



(1)



(2)



(3)



(4)

A. 1  
B. 2  
C. 3  
D. 4

16. Below are given two statements I and II. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements.

I. Standard of living among the middle class society is constantly going up since part of few years.  
II. Indian Economy is observing remarkable growth.

A. Statement I is the cause and statement II is its effect.  
B. Statement II is the cause and statement I is its effect.  
C. Both the statements I and II are independent causes.  
D. Both the statements I and II are effects of independent causes.  
E. Both the statements I and II are effects of some common cause.

17. Below are given two statements I and II. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements.

I. A huge truck overturned on the middle of the road last night.  
II. The police had cordoned of entire area in the locality this morning for half of the day.

A. Statement I is the cause and statement II is its effect.  
B. Statement II is the cause and statement I is its effect.  
C. Both the statements I and II are independent causes.  
D. Both the statements I and II are effects of independent causes.  
E. Both the statements I and II are effects of some common cause.

18. A loosely hanging thread is attached to distantly spaced two nails on a board. If a pencil with its point stretches the thread tightly and moves along the x x board all about the nails. The figure drawn on the board will be described by which of the following choices.

A. Circle  
B. Oval  
C. Ellipse

19. The straight line  $y=mx+1$  is a tangent to the parabola  $y^2=4x$ , if
- $m=1$
  - $m=2$
  - $m=3$
  - $m=4$
20. A man from the top of a 100 metre high tower sees a car moving towards the tower at an angle of depression of  $30^\circ$ . After sometimes, the angle of depression becomes  $60^\circ$ . The distance (in metres) traveled by the car during this time is
- $100\sqrt{3}$
  - $200/\sqrt{3}$
  - $100/\sqrt{3}$
  - $200\sqrt{3}$
21. If the equations of the lines are
- $$\begin{aligned} x + by &= 1 & (1) \\ x + y &= b & (2) \\ x + by &= 1 & (3) \end{aligned}$$
- then
- Lines (1) and (3) intersect each other
  - Lines (2) and (3) are parallel
  - Line (2) intersects lines (1) and (3)
22. Three lines are given by the following equations
- $$\begin{aligned} ax + by + c &= 0 \\ a'x + b'y + c' &= 0 \\ a''x + b''y + c'' &= 0 \end{aligned}$$
- the value of the determinant is as follows
- $$\begin{vmatrix} a & b & c \\ a' & b' & c' \\ a'' & b'' & c'' \end{vmatrix} = 0$$
- Then the lines are
- Parallel
  - Concurrent
  - Skew
23. The line  $y=mx+1$  is a tangent to the parabola  $y^2=4x$  if
- $m=1$
  - $m=2$
  - $m=3$
  - $m=4$
24. The distance between the lines  $4x+3y=11$  and  $8x+6y=15$  is
- $7/2$
  - $7/3$
  - $7/5$
  - $7/10$
25. A car traveled 28 miles in 30 minutes. How many miles per hour was it traveling?
- 55
  - 56
  - 60
  - 54

26. A cynic is one who knows the price of everything and the \_\_\_\_\_ of nothing.
- A. Meaning
  - B. Emotion
  - C. Value
  - D. Quality

27. Water is to glass as letter is to...

- A. Pen
- B. Stamp
- C. Envelope
- D. Mail

28. 'Doctor' is related to 'Stethoscope' in the same way as 'Painter' is related to

- A. ~~D.~~ Painting
- B. ~~E.~~ Brush
- C. ~~F.~~ Exhibition
- D. ~~G.~~ Art

29. Even the most \_\_\_\_\_ rose has thorns.

- A. Ugly
- B. Beautiful
- C. Tempting
- D. Weathered

30. If you rearrange the letters "ANLDEGN" you would have the name of

- A. Baseball Player
- B. Country
- C. State
- D. Actor

31. Find the number of triangles in the given figure.



- A. 8
- B. 10
- C. 12
- D. 14

32. Which choice makes the best comparison? LIVED is to DEVIL as 6323 is to \_\_\_\_\_.

- A. 2636
- B. 3623
- C. 6232
- D. 3236

33. Which of the following is least like the others?

- A. Kangaroo
- B. Cow
- C. Horse
- D. Deer

34. The digits 08232569, and 96523280 are the same \_\_\_\_\_.

- A. Amount
- B. None Of The Above
- C. Backwards
- D. Number

35. Fate smiles \_\_\_\_\_ those who untiringly grapple with stark realities of life.

- A. with
- B. over
- C. on
- D. around

36. If the second day of the month is a Friday, then the 12th day of the month is a \_\_\_\_\_.
- A Tuesday
  - B Saturday
  - C Monday
  - D Thursday
37. If Joe looks in the mirror and touches his left ear with his right hand, the reflection seems to touch it's \_\_\_\_\_ ear with it's \_\_\_\_\_ hand.
- A. Right ; Left
  - B. Right ; Right
  - C. Left ; Left
  - D. Left ; Right
38. Marathon is to race as hibernation is to \_\_\_\_\_
- A. winter
  - B. bear
  - C. dream
  - D. sleep
39. You interact with the Computer by using \_\_\_\_\_
- A Key board and mouse
  - B Monitor
  - C Scanner
  - D Printer
40. The Arithmetic Logical Unit (ALU) is contained in the following parts of the Computer:
- A Hard disk
  - B Ram
  - C Microprocessor
41. The programming language used by scientist since a long time to deal with formulae and equations is:
- A BASIC
  - B C++
  - C COBOL
  - D FORTRAN
42. Data is stored in the following component of the Computer
- A Hard disk
  - B RAM
  - C Processor
  - D Power supply
43. Internet connection to the Computer is obtained by using \_\_\_\_\_
- A Modem
  - B Telephone machine
  - C FAX machine
  - D Data switch
44. Bandwidth is measured in \_\_\_\_\_
- A Km/s
  - B M/s
  - C Mbps
45. Android is an operating system that runs on \_\_\_\_\_
- A Apple computers
  - B Supercomputers
  - C Mobile phones
  - D Answering machines
46. The letters RDBMS refers to \_\_\_\_\_
- A Relative Data Business Management System
  - B Redundant Data Base Management Services
  - C Relational Data Base Management System
  - D Redundant Data Base Migration System



47. HTML script is used for the following;

- A Operating system
- B Programming language
- C Web pages
- D Object oriented Programming

48. 'Query' are used in

- A Programs
- B Data base
- C Internet connectivity
- D Portal

49. Which of the following statements should be used to obtain a remainder after dividing 3.14 by 2.1 while programming in C ?

- A. `rem = 3.14 % 2.1`
- B. `rem = modf(3.14, 2.1)`
- C. `rem = fmod(3.14, 2.1)`

50. Which of the following function prototype is perfectly acceptable in C++?

- A `int Function (int Tmp = Show());`
  - B `float Function (int Tmp = Show(int, float));`
  - C `float = Show (int, float) Function(Tmp);`
-