

- 1) Which of the following BASIC statement is used to change from graphics mode to text mode?  
 (a) SCREEN 0      (b) SCREEN 2      (c) SCREEN 1      (d) None
- 2) How many types of graphics modes?  
 (a) 2      (b) 3      (c) 4      (d) 5
- 3) Graphics is an art to design and produce pictorial representation of  
 (a) Information      (b) Data      (c) Resolution      (d) Color
- 4) Screen graphics modes are  
 (a) 3      (b) 13      (c) 23      (d) 33
- 5) Graphics depends on the hardware such as  
 (a) Input devices      (b) Output devices      (c) Graphics card      (d) All
- 6) Monitor screen is made up of hundreds of  
 (a) Lines      (b) Asterisks      (c) Pixels      (d) Angles
- 7) The sharpness of an image is called  
 (a) Resolution      (b) Text Mode      (c) Pixel      (d) Graphics
- 8) Which of the following can be determined by counting the numbers of pixels down and the number of pixels to the right?  
 (a) Resolution      (b) Image      (c) Text      (d) Coordinates
- 9) Which colors are available in Palette 0?  
 (a) Red      (b) Brown      (c) Green      (d) All
- 10) Which colors are available in Palette 1?  
 (a) Cyan      (b) Magenta      (c) White      (d) All
- 11) Color 15, 0 means  
 (a) Background color no 15 and palette no 0      (b) Background color no 0 and palette no 15  
 (c) Background color no 15      (d) This is invalid command
- 12) Normally the computer monitor screen is in  
 (a) Graphic mode      (b) Text      (c) Both a & b      (d) None
- 13) How many rows a compute screen is divided in text mode?  
 (a) 40      (b) 80      (c) 25      (d) 24
- 14) The resolution of screen in medium resolution graphic mode is  
 (a) 25 X 80      (b) 640 X 200      (c) 320 X 200      (d) None
- 15) The screen modes are  
 (a) Text      (b) Medium      (c) High      (d) All
- 16) Screen 0 statement is used for  
 (a) Text mode      (b) Medium      (c) High      (d) All
- 17) How much colors are available in the text mode?  
 (a) 10      (b) 12      (c) 14      (d) 16
- 18) PSET ( 8,6 ) , 2 means  
 (a) Red dot drawn in the 8<sup>th</sup> column and 6<sup>th</sup> row  
 (b) Red dot drawn in the 6<sup>th</sup> column and 8<sup>th</sup> row  
 (c) Red dot drawn in the 8<sup>th</sup> column and 2<sup>nd</sup> row  
 (d) This is invalid command
- 19) The syntax for to draw a line is  
 (a) LINE ( Y1, X1 ) - ( Y2, X2 ), Color      (b) LINE ( X1, Y1 ) - ( X2, Y2 ), Color  
 (c) LINE ( X1, Y1 ) + ( X2, Y2 ), Color      (d) LINE

- 20) The syntax for circle is  
 (a) Circle ( X, Y), R, C (b) Circle (c) Circle ( X, Y) (d) Circle (X,Y), C, R
- 21) R in the circle command is for  
 (a) Red color (b) Radius (c) Row (d) Right column
- 22) Screen 1 statement is used for  
 (a) Text Mode (b) Medium Resolution (c) High Resolution (d) All
- 23) How much rows are available in the medium resolution graphic mode?  
 (a) 300 (b) 250 (c) 200 (d) 150
- 24) How much columns are available in the medium resolution graphic mode?  
 (a) 380 (b) 360 (c) 340 (d) 320
- 25) The X and Y in line statement are  
 (a) Keywords (b) Coordinates (c) Optional (d) Name of colors
- 26) Concentric circles are  
 (a) Colorful circles (b) Circles have different center  
 (c) Circle with different color (d) Circle in a circle
- 27) Can we use line and circle command in one program?  
 (a) YES (b) NO (c) Only in screen 0 (d) Only in screen 1
- 28) Screen 2 statement is used for  
 (a) Text (b) Medium (c) High (d) All
- 29) In high resolution graphic mode the screen is divided into  
 (a) 320 \* 200 (b) 640 \* 200 (c) 80 \* 25 (d) 640 \* 450
- 30) A line can be draw with the following statement  
 (a) LINE (b) DRAW (c) Both a & b (d) None
- 31) Which of the following is not a valid graphic mode command?  
 (a) LINE (b) PSET (c) COLOR (d) None
- 32) The number background colors available in BASIC is  
 (a) 4 (b) 8 (c) 12 (d) 16
- 33) How much columns are available in the high resolution graphic mode?  
 (a) 640 (b) 660 (c) 680 (d) 720
- 34) Which of the following BASIC statement is used to draw a point at specified location on the screen?  
 (a) POINT (b) LINE (c) PIXEL (d) PSET
- 35) Which of the following BASIC statement is used to draw a line between two points on the screen?  
 (a) SCREEN (b) LINE (c) CIRCLE (d) PSET
- 36) Which of the following statement is used to select from one of two colors sets that are already available?  
 (a) LINE (b) DRAW (c) COLOR (d) PALETE
- 37) The set of colors RED, GREEN and BROWN is given in  
 (a) Palette 0 (b) Palette 1 (c) Both a & b (d) None
- 38) The Circle statement can also be used to draw a  
 (a) LINE (b) BOX (c) ELLIPSE (d) PSET
- 39) Graphics depends on the  
 (a) Software (b) Hardware (c) Program (d) Information
- 40) In Text Mode screen has the capacity of displaying?  
 (a) 10 lines (b) 15 lines (c) 20 lines (d) 25 lines

- 41) In Medium-Resolution Graphic Mode the display screen is divided into rows  
 (a) 150 (b) 200 (c) 220 (d) 250
- 42) CGA stands for  
 (a) Central graphics adapter (b) Color graphics adapter  
 (c) Cool graphics adapter (d) Call graphics adapter
- 43) If the value for COLOR is greater than 3, an error is returned named  
 (a) Overflow error (b) Syntax error  
 (c) Illegal function call error (d) Program error
- 44) The purpose of LINE statement is to draw on the screen  
 (a) Lines (b) Boxes (c) Circles (d) Both a & b
- 45) Which function changes the way of displaying output in BASIC?  
 (a) SCREEN (b) PRINT (c) LEFTS (d) ABS
- 46) The prefix "B" in DRAW statement is used for:  
 (a) Draw a black (b) Move with blank mark  
 (c) Both a and b (d) Move with blue mark
- 47) In which mode we can not draw a picture.  
 (A) Text Mode (b) Normal Mode (c) High resolution (d) None
- 48) Which statement is used to specify the coordinates x, y of the point where it appears on the screen.  
 (a) Point (b) PSET (c) Color (d) None
- 49) Individual dots on the Monitor Screen are controlled to created graphics with desired detailed called.  
 (a) Dots (b) Pixels (c) Resolution (d) None
- 50) How many pixels are on medium resolution screen.  
 (a) 320 x 200 (b) 640 x 200 (c) 480 x 600 (d) 600 x 680

**ANSWER KEY**

|    |   |    |   |    |   |    |   |    |   |
|----|---|----|---|----|---|----|---|----|---|
| 1  | A | 11 | A | 21 | B | 31 | D | 41 | C |
| 2  | B | 12 | B | 22 | B | 32 | D | 42 | B |
| 3  | A | 13 | C | 23 | C | 33 | A | 43 | C |
| 4  | B | 14 | C | 24 | D | 34 | D | 44 | D |
| 5  | D | 15 | D | 25 | B | 35 | B | 45 | A |
| 6  | C | 16 | A | 26 | D | 36 | D | 46 | B |
| 7  | A | 17 | D | 27 | A | 37 | A | 47 | A |
| 8  | A | 18 | A | 28 | C | 38 | C | 48 | B |
| 9  | D | 19 | B | 29 | B | 39 | B | 49 | D |
| 10 | D | 20 | A | 30 | C | 40 | D | 50 | A |

**SHORT QUESTIONS**

**Q1: Define graphics.**

**GRAPHICS**

“Graphics is an art to present the pictorial form of information”

**Q2: Difference between Medium resolution graphics and high resolution graphics**

**DIFFERENCE BETWEEN MEDIUM & HIGH RESOLUTION GRAPHICS**

| Medium Resolution                                 | High Resolution                                   |
|---|---|
| 1. Screen mode statement is screen 1.             | 1. Screen mode statement is screen 2.             |
| 2. Pixels are 200 * 320                           | 2. Pixels are 200 * 640                           |
| 3. Assignment of 16 colors to any of 4 attributes | 3. Assignment of 16 colors to any of 2 attributes |

**Q3: What is resolution?**

**RESOLUTION**

The quality of a picture, movie or graphics on the monitor screen is depend upon the resolution. Monitor screen is made up of hundreds of pixels. The number of pixels horizontally and vertically determines the resolution.

**Q4: What is pixel?**

**PIXEL**

A small dot on a screen is called pixel.

**Q5: What is palette?**

**PALETTE**

PALETTE statement is used to select from one of two color sets. These color sets will be used by color parameters of a LINE, CIRCLE, PSET, DRAW or other graphics statement. The syntax of PALETTE statement is

PALETTE ( attributes, color )

**Q6: What is screen statement?**

**SCREEN STATEMENT**

Screen statement is used to change from one display mode to another. It is commonly used to select a screen mode.

The general syntax of SCREEN statement is

SCREEN ( mode )

**Q7: What is color statement?**

**COLOR STATEMENT**

The color statement is used to select display color. The general syntax of COLOR statement is

COLOR ( foreground ), ( background ), ( border )

**Q8: What is Line statement?**

**LINE STATEMENT**

The line statement is used to draw a line between two points on the screen. It can also be used to draw a box. The general syntax of LINE statement is

LINE ( X1, Y1 ) - ( X2 - Y2 ), [ [ attribute ] [ , B [ F ] ] [ , style ] ]

**Q9: What Pest statement?**

**PSET STATEMENT**

The PSET statement is used to make a point on the specified position on the screen. It is used in graphics mode. The general syntax of PSET statement is

PSET ( X, Y ) [ , Color ]

**Q10: What is Circle statement?**

#### CIRCLE STATEMENT

The CIRCLE statement is used to draw a circle or an ellipse on the screen. It is used in graphics mode. The syntax of CIRCLE statement is

```
CIRCLE ( X, Y ), radius [, ( color ) [, [ start ], [end ] [ , aspect ]]]
```

**Q11: What is DRAW statement?**

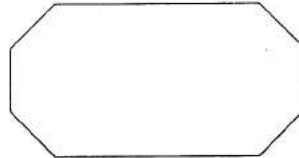
#### DRAW STATEMENT

DRAW statement is used in graphics mode to draw lines for drawing different shapes on the screen. These includes rectangles, triangles, boxes etc. but objects of circular shapes cannot be drawn such as circles, ellipse etc.

The general syntax of DRAW statement is

```
DRAW string
```

**Q12: Write a program to show the following output.**



```
10 CLS
20 SCREEN 2
30 DRAW "E30 R50 F30 G30 L50 H30"
40 End
```

**Q13: Write a program to show the triangle.**

#### TRIANGLE PROGRAM

```
10 Screen 1
20 Color 1,1
30 Line (100,40)-(150,90),1,B
40 Line (50,90)-(150,90),1,B
50 Line (100,40)-(50,90),1,B
60 End
```

**Q14: Write a program to show the star.**

#### STAR PROGRAM

```
10 CLS
20 SCREEN 2
30 DRAW "E60 F60 L120 BU40 R120 G60 H60"
40 End
```

**Q15: Write a program to produce the concentric circles.**

#### CONCENTRIC CIRCLES

```
10 Screen 1
20 Color 1,1
30 Circle(150,150),1,30
40 Circle(150,150),1,40
50 Circle(150,150),1,50
60 End
```

