**Sections 9.2-9.4**

9.1 How do you create a window?

A. window = newWindow()

B. window = Window()

C. window = Frame()

D. window = Tk()

D

Answer analysis:D

9.2 How do you create a frame?

A. frame = newWindow()

B. frame = Window()

C. frame = Frame()

D. frame = Tk()

C

Answer analysis:C

9.3 How do you create an event loop?

A. window.loop()

B. window.main()

C. window.mainloop()

D. window.eventloop()

C

Answer analysis:C

9.4 To create a label under parent window, use \_\_\_\_\_\_\_.

A. label = Label(text = "Welcome to Python")

B. label = Label(window, text = "Welcome to Python")

C. label = Label(text = "Welcome to Python", fg = " red")

D. label = Label(text = "Welcome to Python", fg = " red", bg = "white")

B

Answer analysis:B

9.5 To create a button under parent window with command processButton, use \_\_\_\_\_\_\_.

A. Button(text = "OK", fg = "red", command = processButton)

B. Button(window, text = "OK", fg = "red")

C. Button(window, text = "OK", fg = "red")

D. Button(window, text = "OK", command = processButton)

D

Answer analysis:D

9.6 Assume v1 = IntVar(), how do you set a new value 5 to v1.

A. v1 = 5

B. v1.setValue(5)

C. v1.set(5)

D. v1.get(5)

C

Answer analysis:C

9.7 Assume v1 = IntVar(), how do you create a check button under parent frame1 with variable bound to v1?

A. Checkbutton(frame1, text = "Bold", command = processCheckbutton)

B. Checkbutton(frame1, text = "Bold", variable = v1.get())

C. Checkbutton(frame1, text = "Bold", variable = v1, command = processCheckbutton)

D. Checkbutton(frame1, text = "Bold", variable = v1.set(), command = processCheckbutton)

C

Answer analysis:C

9.8 Assume v1 = IntVar(), how do you create a radio button under parent frame1 with variable bound to v1 and value 1?

A. Checkbutton(frame1, text = "Bold", command = processCheckbutton)

B. Checkbutton(frame1, text = "Bold", variable = v1.get())

C. Checkbutton(frame1, text = "Bold", variable = v1, command = processCheckbutton)

D. Radiobutton(frame1, text = "Yellow", bg = "yellow", variable = v1, value = 1, command = processRadiobutton)

D

Answer analysis:D

9.9 Assume name = StringVar(), how do you create a text field (entry) under parent frame2 with variable bound to name?

A. entryName = Entry(frame2, textvariable = name)

B. entryName = Entry(frame2, variable = name, value = "")

C. entryName = Entry(frame2, textvariable = name, command = processEntry)

D. entryName = Entry(frame2, text = name, command = processEntry)

A

Answer analysis:A

9.10 How do you create a GUI component for displaying multiple-lines of text?

A. use Label

B. Use Button

C. Use Text

D. Use Message

D

Answer analysis:D

9.11 How do you create a text area?

A. use Label

B. Use Button

C. Use Text

D. Use Message

C

Answer analysis:C

**Section 9.5**

9.12 How do you create a canvas under parent frame1 with background color white and foregroung color green?

A. Canvas(frame1, bg = "white", fg = "green")

B. Canvas(frame1, bg = "white", fg = "green", command = processEvent)

C. Canvas(frame1, bg = "white", command = processEvent)

D. Canvas(frame1, fg = "green", command = processEvent)

A

Answer analysis:A

**Section 9.5**

9.13 How do you draw a rectangle centered at 100, 100 with width 100 and height 100 on canvas?

A. canvas.create\_rect(100, 100, 100, 100)

B. canvas.create\_rectangle(100, 100, 100, 100)

C. canvas.create\_rect(100 - 50, 100 - 50, 100 + 50, 100 + 50)

D. canvas.create\_rectangle(100 - 50, 100 - 50, 100 + 50, 100 + 50)

D

Answer analysis:D

9.14 How do you draw a circle rectangle centered at 100, 100 with radius 100 on canvas?

A. canvas.create\_oval(100, 100, 100, 100)

B. canvas.create\_oval(100 - 100, 100 - 100, 100 + 100, 100 + 100)

C. canvas.create\_oval(100 - 50, 100 - 50, 100 + 50, 100 + 50)

D. canvas.create\_circle(100 - 100, 100 - 100, 100 + 100, 100 + 100)

B

Answer analysis:B

9.15 How do you draw an arc centered at 100, 100 with radius 20, starting angle 15, ending angle 50, filled with red color on canvas?

A. canvas.create\_arc(100 - 20, 100 - 20, 100 + 20, 100 + 20, fill = "red", start = 15, extent = 50)

B. canvas.create\_arc(100 - 20, 100 - 20, 100 + 20, 100 + 20, fill = "red", start = 15, extent = 35)

C. canvas.create\_arc(100 - 20, 100 - 20, 100 + 20, 100 + 20, filled = "red", start = 15, extent = 50)

D. canvas.create\_arc(100 - 20, 100 - 20, 100 + 20, 100 + 20, fill = "red", start = 15, end = 50)

B

Answer analysis:B

9.16 How do you draw a red line from 100, 100 to 400, 500?

A. canvas.create\_line(100, 100, 100, 500, fill = "red")

B. canvas.create\_line(100, 100, 400, 100, fill = "Red")

C. canvas.create\_line(100, 100, 400, 500, filled = "red")

D. canvas.create\_line(100, 100, 400, 500, fill = "red")

D

Answer analysis:D

9.17 How do you draw a polygon consisting of points (30, 40), (50, 50), (10, 100) filled with red color?

A. canvas.create\_poly(30, 40, 50, 50, 10, 100, fill = "red")

B. canvas.create\_polygon(30, 40, 50, 50, 10, 100, filled = "red")

C. canvas.create\_polygon(30, 40, 50, 50, 10, 100, fill = "red")

D. canvas.create\_polygon((30, 40), (50, 50), (10, 100), fill = "red")

C

Answer analysis:C

9.18 How do you display a text "Good morning" centered at 30, 40 with color red?

A. canvas.create\_text(30, 40, text = "Good morning", fill = "red")

B. canvas.create\_polygon(30, 40, 50, 50, 10, 100, filled = "red")

C. canvas.create\_polygon(30, 40, 50, 50, 10, 100, fill = "red")

D. canvas.create\_polygon((30, 40), (50, 50), (10, 100), fill = "red")

A

Answer analysis:A

**Section 9.6 The Geometry Managers**

9.19 \_\_\_\_\_\_\_ are geometry managers in Tkinter.

A. pack

B. grid

C. place

D. flow

ABC

Answer analysis:ABC

9.20 To place a button in a specified row and column in its parent container, use \_\_\_\_\_\_\_\_.

A. pack manager

B. grid manager

C. place manager

D. flow manager

B

Answer analysis:B

9.21 Which option do you use to put the components in a container using the pack manager in the same row?

A. component.pack(LEFT)

B. component.pack(side = LEFT)

C. component.pack(side = "LEFT")

D. component.pack("LEFT")

B

Answer analysis:B

9.22 The side option of the pack manager may be \_\_\_\_\_\_\_\_\_\_\_\_\_.

A. LEFT

B. RIGHT

C. BOTTOM

D. TOP

ABCD

Answer analysis:ABCD

9.23 Using a grid manager, you can use the option \_\_\_\_\_\_\_\_\_ to place a component in multiple rows and columns.

A. row

B. column

C. rowspan

D. columnspan

CD

Answer analysis:CD

**Section 9.8 Displaying Images**

9.24 To create an image, use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A. image = PhotoImage(imagefilename)

B. image = Image(file = imagefilename)

C. image = PhotoImage(file = imagefilename)

D. image = PhotoImage(imagefilename)

C

Answer analysis:C

9.25 You can create an image from a \_\_\_\_\_\_\_\_\_\_\_\_ file.

A. .png

B. .gif

C. .bmp

D. .jpg

B

Answer analysis:B

9.26 You can display an image in \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A. a label

B. a button

C. a check button

D. a radio button

E. an entry

ABCD

Answer analysis:ABCD

**Section 9.9 Menus**

9.27 To create a menu in a window, use \_\_\_\_\_\_\_\_\_\_

A. menubar = Menu(window)

B. menubar = MenBar(window)

C. menubar = Menu()

D. menubar = MenBar()

A

Answer analysis:A

9.28 To add a menu in a menubar, use \_\_\_\_\_\_\_\_\_\_

A. menu1 = Menu(menubar)

B. menu1 = menu(menubar)

C. menu1 = Menu(winodw)

D. menu1 = Menu()

A

Answer analysis:A

9.29 To add a menubar, use \_\_\_\_\_\_\_\_\_\_

A. window.configure(menu = menubar)

B. window.config(menubar)

C. window.config(menu = menubar)

D. window.configure(menubar)

C

Answer analysis:C

**Sections 9.10-9.11**

9.30 To display a popup menu, use \_\_\_\_\_\_\_\_\_\_

A. menu.display()

B. menu.post()

C. menu.display(300, 300)

D. menu.post(300, 300)

D

Answer analysis:D

9.31 To bind a canvas with a left mouse click event p, use \_\_\_\_\_\_\_\_\_\_

A. canvas.left(p)

B. canvas.bind("<Button-1>", p)

C. canvas.bind("Button-1", p)

D. canvas.bind(<Button-1>, p)

B

Answer analysis:B

9.32 To bind a canvas with a right mouse click event p, use \_\_\_\_\_\_\_\_\_\_

A. canvas.left(p)

B. canvas.bind("<Button-1>", p)

C. canvas.bind("Button-1", p)

D. canvas.bind(<Button-1>, p)

E. canvas.bind("<Button-3>", p)

E

Answer analysis:E

9.33 To bind a canvas with a mouse entered event p, use \_\_\_\_\_\_\_\_\_\_

A. canvas.entered(p)

B. canvas.bind("<Enter>", p)

C. canvas.bind("<Entered>", p)

D. canvas.bind(<Enter>, p)

B

Answer analysis:B

9.34 The event \_\_\_\_\_\_\_\_\_\_\_\_\_ is fired when the mouse is moved while the middle mouse is being held down.

A. <B1-Motion>

B. <B2-Motion>

C. <B3-Motion>

D. <Button-1>

E. <Button-2>

B

Answer analysis:B

9.35 The event \_\_\_\_\_\_\_\_\_\_\_\_\_ is fired when the right mouse button is released.

A. <ButtonReleased-1>

B. <ButtonReleased-2>

C. <ButtonReleased-3>

D. <ButtonPressed-1>

E. <ButtonPressed-2>

C

Answer analysis:C

9.36 The event \_\_\_\_\_\_\_\_\_\_\_\_\_ is fired when the right mouse button is double-clicked.

A. <Double-Button-1>

B. <Double-Button-2>

C. <Double-Button-3>

D. <Triple-Button-1>

E. <Triple-Button-2>

C

Answer analysis:C

9.37 To bind a canvas with a key event p, use \_\_\_\_\_\_\_\_\_\_

A. canvas.entered(p)

B. canvas.bind("<Enter>", p)

C. canvas.bind("<Key>", p)

D. canvas.bind(<Enter>, p)

E. canvas.bind("<Enter>", p)

C

Answer analysis:C

9.38 The mouse event object has the property \_\_\_\_\_\_\_\_\_\_\_\_.

A. x

B. y

C. widget

D. X

E. Y

ABC

Answer analysis:ABC

**Section 9.14 Standard Dialogs**

9.39 To display a message dialog named "Programming is fun", use \_\_\_\_\_\_\_\_\_\_

A. tkinter.messagebox.showinfo("showinfo", "Programming is fun")

B. tkinter.messagebox.showwarning("showwarning", "Programming is fun")

C. tkinter.messagebox.showerror("showerror", "Programming is fun")

D. tkinter.messagebox.askyesno("ashyesno", "Programming is fun")

A

Answer analysis:A

9.40 To display a warning dialog named "Variable is assigned, but not used", use \_\_\_\_\_\_\_\_\_\_

A. tkinter.messagebox.showinfo("showinfo", "Variable is assigned, but not used")

B. tkinter.messagebox.showwarning("showwarning", "Variable is assigned, but not used")

C. tkinter.messagebox.showerror("showerror", "PVariable is assigned, but not used")

D. tkinter.messagebox.askyesno("ashyesno", "Variable is assigned, but not used")

B

Answer analysis:B

9.41 To display an error dialog named "Variable is not assigned", use \_\_\_\_\_\_\_\_\_\_

A. tkinter.messagebox.showinfo("showinfo", "Variable is not assigned")

B. tkinter.messagebox.showwarning("showwarning", "Variable is not assigned")

C. tkinter.messagebox.showerror("showerror", "Variable is not assigned")

D. tkinter.messagebox.askyesno("ashyesno", "Variable is not assigned")

C

Answer analysis:C

9.42 To display an input dialog named "Is this an integer?", use \_\_\_\_\_\_\_\_\_\_

A. tkinter.messagebox.showinfo("showinfo", "Is this an integer?")

B. tkinter.messagebox.showwarning("showwarning", "Is this an integer?")

C. tkinter.messagebox.showerror("showerror", "Is this an integer?")

D. tkinter.messagebox.askyesno("ashyesno", "Is this an integer?")

D

Answer analysis:D