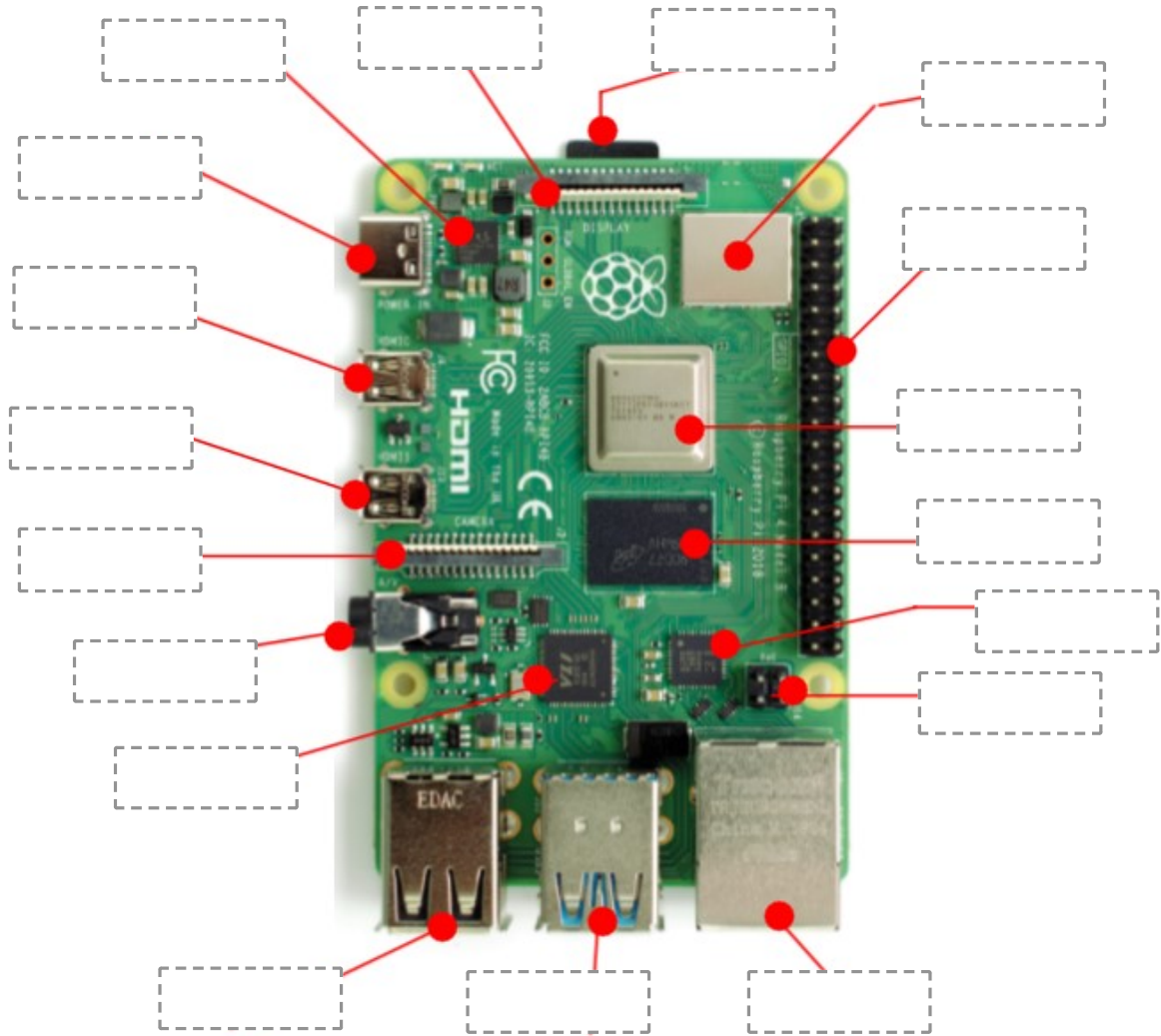


### 1.1 Pi-4 Components

QUESTION 1

/18



1  
**GPIO header** (general-purpose-input/output) which is used for physical computing with LEDs, buzzers, sensors, joysticks, motors, etc.

2

**SoC** (system-on-chip) which includes the CPU (central processing unit) and GPU (graphics processing unit)

3

**Radio** which includes WiFi to connect to computer networks and Bluetooth to connect to other devices

4

**RAM** (random access memory) which holds data you are working on only while the Pi is turned on

5

**USB controller** which runs the four USB ports

6

**PMIC** (power management integrated circuit) which converts power coming in through the micro USB port into the power the Pi needs to run

7

**Network controller** which handles the Pi's Ethernet network port

8

**USB 2.0** (Universal Serial Bus) ports which let you connect peripherals at a signaling rate of up to 480 megabits per second

9

**USB 3.0** (Universal Serial Bus) ports which let you connect peripherals at a signaling rate of up to 5 gigabits per second

10

**Network port**, also known as an Ethernet port) lets you connect to a wired computer network using a cable

11

**AV jack** (3.5 mm audio-visual jack) which lets you connect headphones, speakers, and video displays that support a composite video signal

12

**CSI** (Camera Serial Interface) which lets you connect the Raspberry Pi Camera Module to the Pi

13

**Main micro-HDMI port** (High Definition Multimedia Interface) to connect to a monitor, TV, or projector

14

14

**Secondary micro-HDMI port** (High Definition Multimedia Interface) to connect to a second display device

15

**USB Type-C power port** which connects the Pi to a power source

16

**DSI** (Display Serial Interface) which is a display connector used with touch activated displays

17

**microSD card connector** which reads the external memory card containing all the files you save, software you install, and the operating system

18

**POE Header** (power over Ethernet) used to power HATS which extend the capability of the Pi for various sensors and peripherals