

## **QUESTIONS ON WIRELESS APPLICATIONS PROTOCOL**

### **Q1. What is Wireless Application Protocol (WAP)?**

**Answer:** Meaning really arises from the full form itself-

**Wireless-** that does not require wires, enabling radio transmission.

**Application-** software designed to complete a particular task.

**Protocol-** means a set of rules.

So the mix of these three simply means a set of rules governing the transmission and reception of signals through computer applications. Computer may include mobiles, tablets also. WAP has spearheaded today's Internet communication and advanced telephony services. WAP allows allow the devices to view pages from Internet. But, the pages displayed have only a plain text and the images are black and white.

WAP is similar to HTML, except that it has been optimized for-

- Low-display capability.
- Low-memory.
- Low band width devices like mobile phones etc.

### **Q2. How WAP was introduced?**

**Answer:** The saga of WAP started like this.....On June 26, 1997; Nokia, Motorola and Unwired Planet companies took a joint effort to create a standard for advancement of wireless technologies. So this was how WAP Forum was formally created in December 1997 and after releasing WAP 1.0, WAP forum was publically opened to all. The WAP Forum now has over 500 members and represents over 95 percent of the global handset market. Companies such as Nokia, Motorola and Ericsson are all members of the forum.

### **Q3. Why do we need WAP?**

**Answer:** Long before the first WAP devices came, Internet was limited to your computer

only. Now with WAP, you can communicate to your friends using Internet through your mobile phone too. Thus globally expanding massive communication and sharing of data.

**Q4. What is a Micro WAP Browser?**

**Answer:** Similar to your own internet browser, there is a browser for WAP too. This browser is called Micro WAP Browser that is used for visiting web-sites through a WAP device. What's special about it is, it makes minimal demands on hardware, memory and CPU and it displays the information in WML (it a restricted mark-up language).

**Q5. What are the different layers of WAP architecture?**

**Answer:** The whole WAP architecture has been divided into 5 main layers, namely:-

1. Application Layer
2. Session Layer
3. Transaction Layer
4. Security Layer
5. Transport Layer

**Q6. What are the various protocols in a WAP protocol suite?**

**Answer:** The WAP protocol suite consists of following protocols-

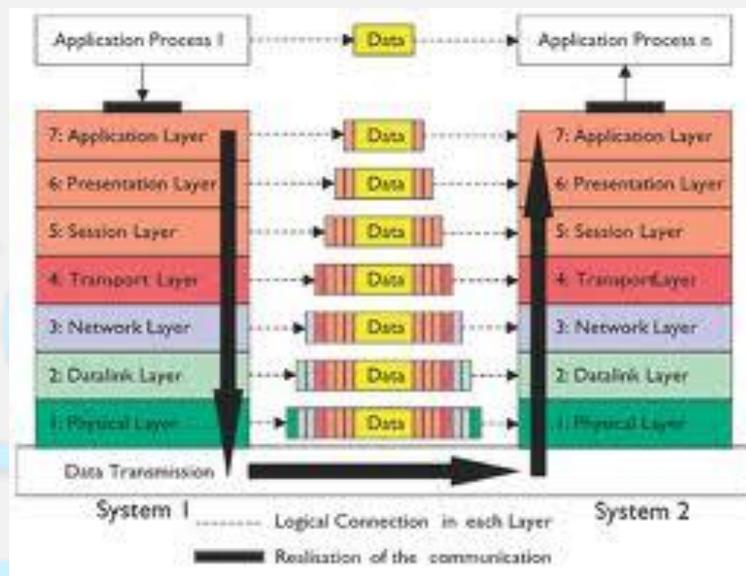
1. Wireless Application Environment (WAE)
2. Wireless Session Protocol (WSP)
3. Wireless Transaction Protocol (WTP)
4. Wireless Transport Layer Security (WTLS)
5. Wireless Datagram Protocol (WDP)

**Q7. What is WAP 2.0?**

**Answer:** WAP 2.0 is simply a blended mixture of XHTML, end to end HTTP, which was released in 2002. It has dropped the gateway and custom protocol suite used to communicate with it.

**Q8. On which Networking Model is WAP based upon?**

**Answer:** Open System Interconnection (OSI) model.



**Q9. Describe the Transport Layer of WAP.**

**Answer:** The Transport Layer consists of Wireless Datagram Protocol (WDP). WDP allows WAP to be bearer-independent by adapting the transport layer of the underlying bearer. The WDP presents a consistent data format to the higher layers of the WAP protocol stack, thereby offering the advantage of bearer independence to application developers.

**Q10. Define in brief, "Wireless Application Environment (WAE)".**

**Answer:** The Wireless Application Environment, or WAE, provides architecture for communication between wireless devices and Web servers. It consists of device specifications and the content development programming languages like WML