PYQAir

EPFO APFC Edge

UPSC EPFO APFC / EO-AO Exam

COMPUTER APPLICATIONS

Complete PYQ Bank with Answers (2015–2025)

45 questions • APFC 2015/2023/2025 • EO/AO 2017/2020/2023/2025 • Full options + answers + explanations

What's in this document

- Paper-wise coverage summary — how many Computer-Applications questions each EPFO paper carried.
- The full PYQ bank: every question exactly as asked, with all four options, the correct answer, and a short explanation — grouped by high-return cluster for focused practice.

Paper-wise Coverage

Exam Paper	Questions	Main areas tested
APFC 2015	11	Networking, OS, hardware terms, cloud, spreadsheets, GPS, mobile gen., LAN/WAN/MAN, plug-and-play, spam
EO/AO 2017	5	Memory & storage, Internet protocols, Bluetooth, computer fundamentals, hardware vs software
EO/AO 2020	9	Language translators, device drivers, CPU registers, file formats, digital electronics, cache, browsers, data units
APFC 2023	5	IP addressing, network topology, number systems, disk utilities, CPU registers
EO/AO 2023	5	HTML, spooling, Boolean algebra, OSI model
APFC 2025	5	Artificial intelligence, GPU/hardware, SSL, SSD, permanent memory
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EXAM WATCH: *Networking, Hardware/Memory/CPU, and Operating Systems together account for over half of all 45 questions — prioritise these while revising.*

Full PYQ Bank — Question Format (2015–2025)

All 45 Computer-Applications questions exactly as asked in EPFO papers, grouped by high-return cluster and given in full (question + options + correct answer + a short explanation).

Hardware, Memory & CPU

Q1. APFC 2015 — Q17 *(Hardware Terminology (SMPS))*
SMPS is the acronym for
A. Store Mode Power Supply B. Single Mode Power Supply C. Switch Mode Power Supply D. Start Mode Power Supply
Answer: C. Switch Mode Power Supply — *SMPS regulates and converts power efficiently using switching techniques, unlike older linear power supplies.*

Q2. APFC 2015 — Q18 *(Hardware Terminology (USB))*
USB is the acronym for
A. Uniform Service Broadcasting B. Unique Solution Bus C. Universal Serial Bus D. Universal Service Broadcasting
Answer: C. Universal Serial Bus — *USB is the standard interface used to connect peripherals to a computer.*

Q3. EO/AO 2017 — Q36 *(Secondary Storage (CD-ROM))*
CD-ROM is a
A. Secondary memory B. Magnetic memory C. Memory register D. Semiconductor memory
Answer: A. Secondary memory — *Optical discs like CD-ROM store data permanently outside the CPU, classifying them as secondary (auxiliary) memory.*

Q4. EO/AO 2017 — Q40 *(Hardware vs Software)*
Which one of the following is a hardware?
A. Power point B. Control unit C. Printer driver D. Operating system
Answer: B. Control unit — *Control Unit is a physical CPU component; PowerPoint, Printer driver and Operating System are all software.*

Q5. EO/AO 2020 — Q3 *(CPU Registers)*
Which one of the following registers is used to keep track of the next instruction to be executed?
A. Memory address register B. Memory buffer register C. Program counter D. Memory data register
Answer: C. Program counter — *The Program Counter register holds the address of the next instruction to be executed.*

Q6. EO/AO 2020 — Q7 *(Memory Hierarchy (Cache))*
Which one of the following memories is extremely fast and acts as a high-speed buffer between the CPU and the main memory?
A. RAM B. ROM C. Flash Memory D. Cache Memory
Answer: D. Cache Memory — *Cache sits between the CPU and RAM, storing frequently used data/instructions to speed up processing.*

Q7. EO/AO 2020 — Q9 *(Data Storage Units)*
Which one of the following represents 1 GB of information?
A. 1024 KB B. 1024 MB C. 1024 TB D. 1024 PB
Answer: B. 1024 MB — *Computer storage units always convert by 1024 (2^10), not 1000; 1 GB = 1024 MB.*

Q8. APFC 2023 — Q66 *(CPU Registers & Memory Addressing)*
Which one of the following registers contains the address of the next location in the memory to be accessed?
A. IR B. MAR C. MBR D. DR
Answer: B. MAR — *The Memory Address Register (MAR) holds the address of the memory location to be accessed next.*

Q9. APFC 2025 — Q32 *(Storage & Memory (SSD))*
Which of the following statements with regard to the solid-state drive (SSD) is/are correct? 1. Spinning speed of SSD is zero. 2. SSD consumes more energy compared to hard disk drive (HDD). 3. SSD could be used as virtual memory when RAM is insufficient. 4. SSD can replace the processor.
A. 1 only B. 1 and 3 C. 3 and 4 D. 2 and 4
Answer: B. 1 and 3 — *SSDs have zero spinning parts and can serve as virtual memory when RAM is insufficient; they consume LESS power than HDDs and cannot replace the processor.*

Q10. APFC 2025 — Q33 *(Memory & Storage (Permanent Memory))*
Which one among the following could be a permanent memory of a computer?
A. Hard Disk B. CPU C. RAM D. Motherboard
Answer: A. Hard Disk — *The hard disk is non-volatile permanent storage; CPU, RAM and the motherboard don't retain data without power.*

Q11. EO/AO 2025 — Q32 *(Storage & Memory (SSD))*
Which of the following statements with regard to the solid-state drive (SSD) is/are correct? 1. Spinning speed of SSD is zero. 2. SSD consumes more energy compared to hard disk drive (HDD). 3. SSD could be used as virtual memory when RAM is insufficient. 4. SSD can replace the processor.
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Networking & Communication

Q13. APFC 2015 — Q15 *(Transmission Modes)*
The method of communication in which transmission can take place in both directions, but happens only in one direction at a time, is called
A. Duplex B. Half Duplex C. Full Duplex D. Simplex
Answer: B. Half Duplex — *Half duplex allows two-way transmission but only one direction at a time (e.g., walkie-talkie); full duplex allows both directions simultaneously (e.g., telephone).*

Q14. APFC 2015 — Q24 *(LAN / WAN / MAN)*
LAN, WAN and MAN are computer networks covering different areas. Their first alphabets L, W and M respectively stand for
A. Local, World and Middle B. Long, Wireless and Metropolitan C. Local, Wide and Metropolitan D. Least, Wireless and Maximum
Answer: C. Local, Wide and Metropolitan — *LAN/WAN/MAN are classified purely by their geographical coverage area: Local, Wide and Metropolitan.*

Q15. EO/AO 2017 — Q38 *(Bluetooth)*
Bluetooth technology allows
A. Sending files within the range of 10 km B. Sending an email C. Wireless connection between various services/equipment over short distances D. Downloading Internet movies
Answer: C. Wireless connection between various services/equipment over short distances — *Bluetooth connects devices wirelessly over short distances (not 10 km, and not for sending e-mail).*

Q16. APFC 2023 — Q62 *(IP Addressing)*
Which one of the following is not a correct IP address?
A. 201.54.122.107 B. 102.45.221.710 C. 102.45.201.22 D. 250.234.123.124
Answer: B. 102.45.221.710 — *IPv4 octets must range 0–255; 102.45.221.710 has an octet (710) outside this range, making it invalid.*

Q17. APFC 2023 — Q63 *(Network Topology (Mesh))*
In mesh topology, if we have six computers, how many links must be there?
A. 6 B. 12 C. 13 D. 15
Answer: D. 15 — *Full mesh topology needs n(n−1)/2 links; for 6 nodes this is 6×5/2 = 15.*

Q18. EO/AO 2023 — Q70 *(OSI Model)*
Which OSI layer is responsible for managing the communication between computers in the network?
A. Network layer B. Transport layer C. Session layer D. Data link layer
Answer: B. Transport layer — *The Transport layer manages end-to-end communication and reliable data delivery between computers on a network.*

Internet, Web & Cybersecurity

Q19. APFC 2015 — Q25 *(Plug-and-Play)*
The devices that work with computer systems as soon as they are connected are described as
A. Hot Swapping B. Bay Swap C. Plug-N-Play D. USB Swapping
Answer: C. Plug-N-Play — *Plug-and-Play devices are automatically recognised and configured by the OS as soon as they are connected, without manual driver setup.*

Q20. APFC 2015 — Q26 *(Spam)*
SPAM in a system (e-mail) is
A. A message distributed indiscriminately B. A search engine C. An activity of the user D. A command initiated by the sender
Answer: A. A message distributed indiscriminately — *Spam refers to unsolicited bulk messages sent without the recipient's consent.*

Q21. EO/AO 2017 — Q37 *(Internet Protocols (WAP))*
WAP stands for
A. Wireless Addition Protocol B. Wireless Automation Protocol C. Wireless Adaptation Protocol D. Wireless Application Protocol
Answer: D. Wireless Application Protocol — *WAP enables Internet access and data services on mobile/wireless devices.*

Q22. EO/AO 2020 — Q8 *(Web Browsers)*
Which one of the following is not a web browser?
A. Internet Explorer B. Firefox C. Fedora D. Google Chrome
Answer: C. Fedora — *Fedora is a Linux operating system; Internet Explorer, Firefox and Chrome are web browsers.*

Q23. EO/AO 2023 — Q66 *(HTML & Web Development)*
Which of the following tags is used to insert comments in the HTML source code?
A. </-- --> B. <!-- --> C. <-- !--> D. </-- --/>
Answer: B. <!-- --> — *<!-- --> is the standard HTML syntax for inserting a comment that is not rendered on the page.*

Q24. EO/AO 2023 — Q67 *(HTML & Web Development)*
Which one among the following is used to create an email hyperlink to a webpage?
A. mail: B. mailto: C. tomail: D. to_mail:
Answer: B. mailto: — *The mailto: tag creates a clickable hyperlink that opens the user's default e-mail client.*

Q25. APFC 2025 — Q31 *(Cybersecurity & Web Security (SSL))*
Which one among the following correctly stands for SSL encryption with regard to banking websites?
A. Secure Socket Layer encryption B. Superior Safety Level encryption C. Server-to-Server Linked encryption D. Safety Server Level encryption
Answer: A. Secure Socket Layer encryption — *SSL encryption secures data transmitted between a browser and a website, indicated by HTTPS.*

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Operating Systems & System Software

Q27. APFC 2015 — Q16 *(Operating System Definition)*
A collection of programs that controls how the computer system runs and processes information is called
A. Compiler B. Operating System C. Linker D. Assembler
Answer: B. Operating System — *The OS controls how the system runs and processes information; Compiler/Linker/Assembler are translators/utilities, not the OS itself.*

Q28. EO/AO 2020 — Q1 *(Language Translators)*
Which one of the following is not a language translator?
A. Assembler B. Linker C. Interpreter D. Compiler
Answer: B. Linker — *Assembler, Compiler and Interpreter all translate code; a Linker combines compiled object modules into a single executable — it does not translate.*

Q29. EO/AO 2020 — Q2 *(Device Drivers)*
Which one of the following statements is correct? A device driver of output devices
A. interprets input provided by users into computer usable form. B. interprets computer outputs into user understandable form. C. translates user inputs into output devices. D. facilitates the user to communicate with the output device.
Answer: B. interprets computer outputs into user understandable form. — *An output device driver converts the computer's internal output into a form the output device/user can use.*

Q30. EO/AO 2020 — Q4 *(File Formats)*
Which one of the following is not an audio file format?
A. MIDI B. WAV C. SWF D. MPEG
Answer: C. SWF — *SWF is a Flash animation/multimedia format; MIDI, WAV and MPEG are audio-related formats.*

Q31. APFC 2023 — Q65 *(Disk Utilities (CHKDSK))*
Which one among the following commands is used to check the error status of the hard disk drive?
A. CHKDK B. CHECKDISK C. CHKDSK D. DSKCHK
Answer: C. CHKDSK — *CHKDSK is the Windows command that checks a disk for file-system errors and bad sectors.*

Q32. EO/AO 2023 — Q68 *(Spooling)*
In the context of a buffer in memory area or disk, spool refers to:
A. Simple peripheral operation on-line B. Simple peripheral operation off-line C. Simultaneous peripheral operation on-line D. Simultaneous peripheral operation off-line
Answer: C. Simultaneous peripheral operation on-line — *Spooling queues data in a buffer so slower devices (like printers) don't hold up the CPU.*

AI, Cloud & Emerging Tech

Q33. APFC 2015 — Q19 *(Cloud Computing Definition)*
The 'Cloud Computing' technology refers to

A. A set of algorithms that solves problems using fuzzy logic B. Many computers interconnected through wireless networks and satellites C. A distributed computer architecture that provides software, infrastructures and platforms as required by applications/users D. A futuristic technology that will use clouds to perform computing

Answer: C. A distributed computer architecture that provides software, infrastructures and platforms as required by applications/users — *Cloud computing is a distributed architecture delivering software, infrastructure and platforms as services over the Internet, not a satellite network or fuzzy-logic algorithm.*

Q34. APFC 2015 — Q22 *(GPS Applications)*

Consider the following statements on Global Positioning System (GPS): 1. GPS allows accurate time-stamping on ATM transactions. 2. GPS relies on a set of satellites for transferring signals worldwide. Which of the above statements is/are correct?

A. 1 only B. 2 only C. Both 1 and 2 D. Neither 1 nor 2

Answer: C. Both 1 and 2 — *GPS satellites provide worldwide location/time signals, which is what enables accurate time-stamping in applications such as ATM transactions.*

Q35. APFC 2025 — Q29 *(Artificial Intelligence (ChatGPT/LLM))*

Which one among the following with regard to ChatGPT is correct?

A. It is based on large language model (LLM) B. It is a predictive Artificial Intelligence C. It is a high-level scientific computer language D. It is a chatting software

Answer: A. It is based on large language model (LLM) — *ChatGPT is built on a Large Language Model (LLM), a form of generative/predictive AI trained on massive text data.*

Q36. APFC 2025 — Q30 *(AI & Hardware (GPU))*

For training and deploying complex models in Artificial Intelligence, which one among the following is preferred?

A. Central Processing Units B. Graphics Processing Units C. Read Only Memory D. Solid State Drives

Answer: B. Graphics Processing Units — *GPUs have thousands of parallel cores ideal for the matrix/tensor computations used in training and running AI models.*

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Digital Fundamentals

Q39. EO/AO 2017 — Q39 *(Basic Functions of a Computer)*

Which one among the following is not a basic function of a computer?

A. Accept and process data B. Store data C. Scan text D. Accept input

Answer: C. Scan text — *The basic computer functions are Input, Process, Store and Output; scanning text is a specific input task, not one of the defining basic functions.*

Q40. EO/AO 2020 — Q5 *(Digital Electronics (Flip-flop))*

Which one of the following denotes a sequential electronic circuit that is used to store 1-bit of information?

A. Register B. Transistor C. Flip-flop D. Capacitor

Answer: C. Flip-flop — *A flip-flop is a sequential digital circuit that stores exactly one bit of information — the basic building block of registers.*

Q41. EO/AO 2020 — Q6 *(Basic Computer Operations)*

Which one of the following basic operations for converting raw input data into useful information is not performed by all computers?

A. Inputting B. Storing C. Switching D. Outputting

Answer: C. Switching — *The four core data-processing operations are Inputting, Processing, Storing and Outputting; 'switching' is not one of them.*

Q42. APFC 2023 — Q64 *(Number Systems)*

The binary equivalent of the octal number 473 is

A. 100111011 B. 100111111 C. 110111011 D. 110001011

Answer: A. 100111011 — *Convert each octal digit to 3 binary bits: 4=100, 7=111, 3=011 → combine to get 100111011.*

Q43. EO/AO 2023 — Q69 *(Boolean Algebra)*

Which one of the following is not a commutative law?

A. A·b = b·A B. A+b = b+A C. A−b = b−A D. A·B = B·A

Answer: C. A−b = b−A — *Subtraction is not commutative in ordinary/Boolean algebra, unlike AND (·) and OR (+), which are.*

Office / Productivity & Mobile

Q44. APFC 2015 — Q21 *(Spreadsheet Software)*

Which software application would be the most appropriate for performing numerical and statistical calculations?

A. Database B. Spreadsheet C. Graphics package D. Document processor

Answer: B. Spreadsheet — *Spreadsheets (e.g., MS Excel) are purpose-built for numerical and statistical calculation using formulas and functions.*

Q45. APFC 2015 — Q23 *(Mobile Generations & Standards)*

Consider the following statements: Cellular technology evolves in stages called Generation (G), where 1. A Generation represents the number of subscribers; higher Generation has more subscribers. 2. 2G technology has two standards CDMA and GSM. 3. 2G technology has CDMA standard and 3G has GSM standard. Which statements are correct?

A. 1 and 3 only B. 1 only C. 3 only D. 2 only

Answer: D. 2 only — *2G technology has two competing standards, CDMA and GSM; Generation number reflects technology capability, not subscriber count.*