# Module 17 · Digital finance P14 · 17.1–17.3

SM pp. 717–735 (exercise 736–740). **7–9 marks every paper** (expected 7.2): **Q8(a) a 5-mark note in all 6 papers** since Dec'23 + **MCQ (xv)** every paper. No sums. The notes are SM lists — learn them in the SM's order and wording; three of six Q8(a)s repeated an earlier one (stablecoin variants twice).

| Paper | Q8(a) / long | MCQ |
|---|---|---|
| Jun'23 | Q3(b) components of digital infrastructure (6) | not a component of digital infrastructure (stablecoins) |
| Dec'23 | **variants of stablecoins** | benefits of UPI to merchants · not a digital asset |
| Jun'24 | advantages of digital financial services | distributed ledger = blockchain · ecosystem components |
| Dec'24 | **neo-bank: meaning and benefits** | pegged crypto = stablecoin · not a benefit of CBDC |
| Jun'25 | **variants of stablecoins** (= D23) | API = the messenger |
| Dec'25 | **CBDC: meaning and advantages** | Dogecoin |
| Jun'26 | digital finance cube: business functions | how stablecoins stay stable |

**WHAT IS DUE FOR DEC'26 (PREDICTION, NOT A PROMISE)**

- Asked and repeatable: stablecoin variants, neo-banks, CBDC, cube, DFS advantages, infrastructure components.
- **Not yet asked as a note**: limitations of stablecoins; UPI features / benefits; cryptocurrency advantages / disadvantages; NFTs; fintech types; benefits of digital finance; regulators' role (17.3, a PTP MCQ).
- Answer style: a one-line meaning, then the SM list as points with the SM's headings (5 marks ≈ 5–7 points).

## A Meaning, traditional v digital, benefits 17.1

- **Digital finance** = delivery of traditional financial services digitally through computers, tablets and smartphones. [SM 717]
- **Benefits of digital finance** (7): boosts GDP through access to credit and products; long-term gains in banking performance (e.g. SWIFT); higher tax revenue for governments; regulators — less counterfeit currency and money laundering; users — control of personal finance, quick decisions, payments within seconds; affordable, secure banking for the poor in developing countries; **financial inclusion**. [SM 719]

**MODEL ANSWER · JUN'24 Q8(a) ADVANTAGES OF DIGITAL FINANCIAL SERVICES**

DFS = financial services (payments, remittances, credit) accessed and delivered through digital channels, including mobile devices. Advantages: **(a) improved customer experience** — information before availing the service; **(b) ease of access** — no branch visit, a click away; **(c) streamlined operations** — e.g. insurance from enquiry to claim settlement online; **(d) reduction in cost of delivery** — minimum physical facilities and manpower. [SM 726–727]

## B Regulation and governance · MCQ 17.3

- **Role of regulators**: users well informed; stop deceptive or biased actions by service organisations; accessible grievance and dispute routes without over-burdening providers. [SM 732]
- **Fintech laws in India**: Payment and Settlement Systems Act, 2007; Master Direction on Prepaid Payment Instruments; NPCI guidelines for UPI; RBI Act, 1934 (NBFCs); NBFC peer-to-peer lending directions 2017; payment aggregator / gateway guidelines; anti-money-laundering laws (RBI); data-privacy laws. [SM 733–734]
- **Governance issues**: governance of the internet economy; intellectual property and competition; taxation; customer privacy; owning and sharing data. **Principles**: foundational regulatory objectives; reflexive, iterative regulation; responsible actors; oversight and enforcement; sustainable development. [SM 734]

**Practise these**: Q8(a) D23, J24, D24, J25, D25, J26 · J23 Q3(b) · MQP Q8(a), PTP Q8(a) · MCQs every paper Q1(xv), MQP Q1(xv), PTP Q1(xv) (regulators) · SM exercise short essays 1–5, essays 1–5, MCQ 5, true / false and fill-in 1–5 (SM 736–737) · MCQ bank Q152–Q159, Q231–Q233 · ICMAI Practice Workbook: no problem on this module.

# C The digital finance ecosystem · Q8(a) 17.2

**MODEL ANSWER · VARIANTS OF STABLECOINS (D23, J25)**

A **stablecoin** is a cryptocurrency pegged to a reserve asset (fiat currency, commodity or another cryptocurrency) — a tokenized version of the asset. [SM 725]

a. **Fiat-collateralized** — linked to sovereign legal tender (Tether, TUSD).
b. **Commodity-backed** — real estate, gold, silver, other precious metals (Kitco Gold).
c. **Crypto-backed** — backed by another cryptocurrency; over-collateralised because of volatility.
d. **Algorithmic** — not backed; algorithms and code manage supply and demand.

[SM 726]

**Uses**: everyday currency (little fluctuation); smart contracts. **Limitations**: value rests on trust in the company holding the reserve; may lose value if it goes bankrupt; holders need solvency declarations; not meant for trading gains. [SM 725–726]

**MODEL ANSWER · CBDC: MEANING AND ADVANTAGES (D25)**

**CBDC** = digital tokens issued by a central bank, backed by it and pegged to the country's fiat currency; like paper notes a means of payment, unit of account and store of value, each unit uniquely identifiable. **Advantages**: (a) technological efficiency, lower cost; (b) tracking of transactions and location of money; (c) prevents money laundering, tax evasion, terror financing; (d) digital record of every transaction; (e) more secure payments; (f) competition and resilience in domestic payments; (g) financial inclusion. [SM 722]

**MODEL ANSWER · NEO-BANK: MEANING AND BENEFITS (D24)**

**Neo-bank** (online / internet-only / virtual / digital bank) = a direct bank operating exclusively online with no physical branches. **Benefits**: (i) convenient, user-friendly; (ii) built for a niche audience; (iii) cost-effective; (iv) savings accounts, prepaid cards, bill payments, money transfers; (v) financial management services; (vi) 24×7 support; (vii) high security; (viii) simple app interface; (ix) transparent, real-time notifications. Examples: Jupiter, Fi Money, Niyo. [SM 728–729]

**MODEL ANSWER · COMPONENTS OF DIGITAL INFRASTRUCTURE (J23)**

a. **Internet** — global network of networks (TCP/IP).
b. **Mobile telecom and digital communication suites**, including applications.
c. **Data centers and networks**.
d. **Enterprise portals, platforms, systems and software** (EIP).
e. **Cloud services** — on demand over the internet.
f. **Operational security, user identity and data encryption**.
g. **APIs and integrations** — the API is the "messenger" (J25 MCQ).

[SM 721]

**MODEL ANSWER · DIGITAL FINANCE CUBE (J26)**

Three dimensions: **(I) business functions** — digital financing (invoice financing / factoring, e-invoicing, lease financing, crowdfunding), digital investments, digital money, digital payments, digital insurance, digital finance advice; **(II) technologies** — blockchain, social networks, near field communication, peer-to-peer, big data analytics, enablers (mobile, cloud, security, automation, AI); **(III) institutions** — FinTech companies and traditional service providers. [SM 729–731]

- **UPI**: one mobile app for many bank accounts, immediate transfer round the clock, single-click two-factor authentication, virtual address (no card / account / IFSC details), QR code, merchant and bill payments, complaints from the app. [SM 727]
- UPI benefits to **merchants**: seamless collection with single identifiers; no risk of storing the customer's virtual address; reach customers without cards (D23 MCQ). [SM 728]
- **Fintech types**: alternative lending, insurtech, payments, wealthtech, regtech. [SM 729]
- **Cryptocurrency**: peer-to-peer, blockchain ledger, mined; Bitcoin (2009), Ethereum (2015), Litecoin, Dogecoin. Cons: pseudonymous, money laundering, energy use, volatility, hacks. [SM 724–725]
- **NFTs**: unique cryptographic tokens on a blockchain, created by asset tokenization; not interchangeable like cryptocurrency units. [SM 723]