

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
MSc DEGREE EXAMINATION MAY 2024
(Fourth Semester)

Branch – COMPUTER SCIENCE
BLOCKCHAIN TECHNOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions
ALL questions carry EQUAL marks (5 x 1 = 5)

- 1) Blockchain can perform user transactions without involving any third-party intermediaries.
(i) With the help of the third party (ii) Without involving any third party
(iii) Without involving any owned (iv) Without involving any authenticated
- 2) Blockchain has _____ versions.
(i) 2 (ii) 3
(iii) 4 (iv) 5
- 3) Who introduced the digital online cryptocurrency known as Bitcoin?
(i) Satoshi Nakamoto (ii) Nick Szabo
(iii) Wei Dai (iv) Hal Finney
- 4) What is Blockchain?
(i) A currency (ii) A ledger
(iii) A type of currency (iv) A distributed ledger on a peer-to-peer network
- 5) Bitcoin is based on _____ blockchain.
(i) Private (ii) Public
(iii) Public Permissioned (iv) Permissioned

SECTION - B (15 Marks)

Answer ALL Questions
ALL Questions Carry EQUAL Marks (5 x 3 = 15)

6. a) Explain the cryptographic hash functions.
(OR)
b) Write a note on crypto-currency.
7. a) Compare centralization vs decentralization.
(OR)
b) Discuss the currency exchange markets.
8. a) Explain the Bitcoin scripts in detail.
(OR)
b) Write down the task of Bitcoin miners.
9. a) How to deanonymize Bitcoin? Explain.
(OR)
b) Discuss in detail about Zero coin and Zero cash.
10. a) Write a note on Bitcoin core softwares.
(OR)
b) What is source prediction market? Explain.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11. a) Give a detailed discussion about digital signatures with example.
(OR)
b) Explain the public keys as identities.
12. a) Analyze the consensus without identity using a block chain.
(OR)
b) Distinguish between the online wallets and exchanges in detail.
13. a) Analyze the mechanics of Bitcoin transactions.
(OR)
b) Examine the Bitcoin mining incentives and strategies.
14. a) Discuss the Bitcoin and anonymity basics.
(OR)
b) Give a detailed discussion about decentralized mixing.
15. a) Outline the antimoney laundering regulations in detail.
(OR)
b) Explain the secure multiparty lotteries in Bitcoin.

Z-Z-Z

END