

1B3N16128

(Pages :2)

Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester BVOC Degree Examination, November 2016

SDC3IT09 - Basic Networking Concepts

(2015 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

PART - A

Answer *all* questions. Each question carries *one* mark

1. The TCP/IP network model has ----- layers
(A) 5 (C) 7
(B) 6 (D) 4
2. Which of the following network devices belongs at the OSI network layer?
(A) Repeater (C) Switch
(B) Router (D) Bridge
3. Hamming code is used for -----
(A) Error detection (C) Error correction
(B) Error generation (D) Both (A) and (B)
4. Piggy backing is a method of -----
(A) Backtracking (C) Method to combine a data frame and ACK
(B) Forwarding (D) none of these
5. RIP is based on -----
(A) Link state routing (C) Distance vector routing
(B) Dijkstra's algorithm (D) Path vector routing
6. What class of IP address is reserved for multicast communication?
(A) Class A (C) Class B
(B) Class C (D) Class D
7. FTP is -----
(A) Used to send email (C) Used to browse the web
(B) Is part of netscape (D) A protocol for the transfer of files
8. Which one is not provided by the digital signature?
(A) Privacy (C) Authentication
(B) Integrity (D) Non-repudiation
9. In Public key method the key known publicly is -----
(A) Encryption key (C) Decryption key
(B) Both (A) and (B) (D) none of these
10. A client message usually needs ----- to send mail.
(A) SMTP (C) POP
(B) Both (A) and (B) (D) none of these
11. What is the protocol data unit employed at the transport layer?
(A) Bits (C) Packets
(B) Frames (D) Segments
12. Small files that are deposited on a user's hard drive when they visit a website are called --

(A) Codes (C) Cookies
(B) Profiles (D) Trackers

12 x 1 = 12

PART - B

Answer *any seven* questions. Each question carries *two* marks

13. Explain the two types of duplex transmission modes?
14. What are the advantages of optical fiber over twisted pair and coaxial cable?
15. What is the minimum hamming distance?
16. Compare and contrast byte stuffing and bit stuffing?
17. How does router differ from a bridge?
18. What is meant by quality of service?
19. What is the purpose of DNS?
20. Give the format of HTTP?
21. What are the two types of firewalls?

7 x 2 = 14

PART - C

Answer *any six* questions. Each question carries *five* marks

22. Explain different types of network?
23. Explain different switching techniques?
24. Explain how CRC can be used for error detection?
25. Differentiate between CSMA and CSMA/CD?
26. Explain different implementations of ethernet?
27. What are the various classes of IP addressing?
28. Why transport layer protocols like TCP and UDP are called end-to-end protocols? What is the difference between them?
29. Explain different unguided transmission media?

6 x 5 = 30

PART - D

Answer *any three* questions. Each question carries *eight* marks

30. What is ISO-OSI reference model? Compare it with TCP/IP reference model. Why TCP/IP model is more popular than OSI model?
31. Explain different error detection and correction methods?
32. Compare and contrast distance vector and link state routing algorithms?
33. Explain the architecture of WWW?
34. Explain different encryption techniques?

3 x 8 = 24

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE
Third Semester BVOC Degree Examination, November 2016
SDC3AE10 - Circuit Theory & Power Systems
(2015 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

PART -A

Answer all questions. Each question carries one mark.

1. An inductor opposes sudden change in.....?
(a) current (b) flux
(c) voltage (d) resistance
2. The discharging current in R L series circuit isfunction.
(a) exponentially rising (b) exponentially decaying
(c) sinusoidally varying (d) sinusoidally varying exponentially decaying
3. Time constant in a network is the time taken by the voltage to reach of its final value.
(a) 36.8% (b) 50%
(c) 76.3% (d) 63.2%
4. Branches of a tree in a network are called.....?
(a) Twigs (b) Links
(c) nodes (d) graph
5. is an example of bilateral element?
(a) Diode (b) Transistor
(c) FET (d) None of these
6. The maximum power transfer takes place in a network when
(a) $R_{th}=R_L^2$ (b) $R_{th}=R_L$
(c) $R_{th}+R_L =0$ (d) $R_{th}<R_L$
7. In thevenin's theorem, thevenin voltage is
(a) Open circuit voltage across load (b) Short circuit voltage across load
(c) Source voltage (d) Node voltage
8. Corona is seen in a conductor at a potential gradient of
(a) 11KV/cm (b) 30KV/cm
(c) 1KV/m (d) 23KV/m
9. Most severe fault in electrical system is.....fault.
(a) Line to line (b) 3 line to ground
(c) Double line to ground (d) line to line
10. Circuit breaker capacity is based on....
(a) Line to line fault (b) 3line to ground fault
(c) Double line to ground fault (d) line to line fault
11. For transmitting power between 2 stations having different frequency system is used?
(a) HVAC (b) HVDC
(c) both a & b (d) none of these.
12. Meggar is used to measure....
(a) insulation resistance (b) earth resistance
(c) both (d) none of these

(12 X 1 = 12)

peculiarity we can observe?

15. Define passive filter?
16. What is the need of fault analysis?
17. What is the need of transposition of conductors for transmitting power?
18. Why bundled conductors are used for power transmission?
19. Define Norton current?
20. What do you meant by Ferranti effect?
21. What is the function of choke in fluorescent lamp? (7 X 2 = 14)

PART -C

Answer any six questions. Each question carries five marks.

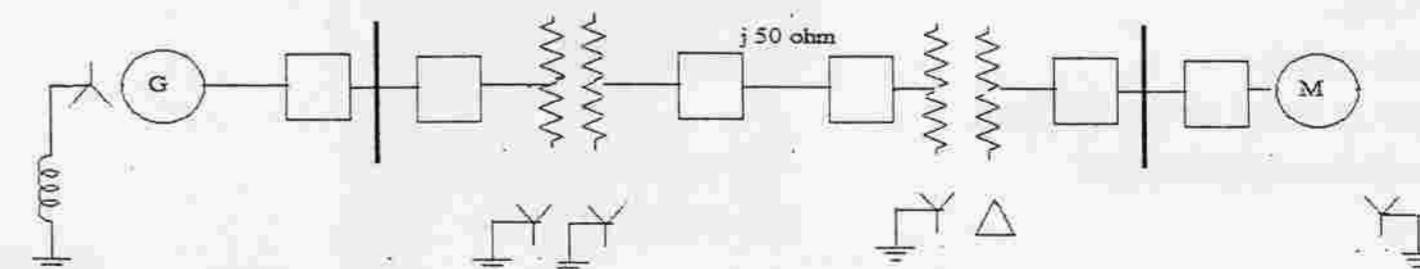
22. Calculate the time taken by a capacitor of $1\mu F$ connected in series with $1M\Omega$ resistance to be charged up to 80% of the final value?
23. With suitable diagram, explain Thevenin's theorem?
24. Find the value of load resistor for which maximum power transfer takes place in any network and the value of this maximum power?
25. Explain different types of overhead line insulators?
26. Write short notes about the methods employed for overvoltage protection in a power system?
27. Differentiate between symmetrical and asymmetrical fault in a power system?
28. What is the necessity of earthing in a power system?
29. Write a short note on insulation co-ordination in a power system?

(6 X 5 = 30)

PART -D

Answer any three questions. Each question carries eight marks.

30. Define the terms voltage regulation and transmission efficiency? Explain the effect of load on regulation and efficiency?
31. With diagram and switching conditions explain florescent lamp wiring?
32. Compare dc and ac power transmission?
33. The incremental cost characteristics of 2 generators delivering a total load of 200 MW are as follows;
 $d/dP_1(F_1)=0.01P_1+2$;
 $d/dP_1(F_2)=0.02P_2+1.6$.
What should be the values of P_1 and P_2 for economic operation?
34. Draw the pu reactance diagram for the power system shown in figure. Neglect resistance and use a base of 100 MVA, 220kv in 50 Ω line.



The rating of generator, motor and transformers are;

Generator : 40 MVA, 25 kV, $X'' = 20\%$

Motor : 50MVA, 11KV, $X'' = 30\%$

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester BVOC Degree Examination, November 2016

GEC3ES09 - Environmental Science

(2015 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

PART - A

I. Answer **all** questions. Each question carries **one** mark

(14x1=12 marks)

1. An example of lotic ecosystem
a.pond b.lake c.river d.pool
2. If the succession starts from bare water bodies it is called as
a. allogenic succession b. hydrarch succession c. xerarch succession
d. mesarch succession
3. An example for sedimentary cycle.
a.Nitrogen cycle b. Carbon cycle c.Sulphur cycle d.Oxygen cycle
4. Each developmental stage of succession is called
a.seral stage b.serule c.pioneer stage d.climax
5. The study of individual organisms is called
a.Ecology b.Autecology c. Synecology d.Ethology
6. A thin film of water on the soil particle held by surface tension forces is called
a. gravitational water b. capillary water c. hygroscopic water d. water table
7. Land slides occur in ----- lands
8. Pyramid of energy is always -----
9. Flow of energy in ecosystem is -----
10. -----is an example of pseudoscience.
11. Number of deaths per unit time is called as -----.
12. Atmosphere contains about ----- % of carbon dioxide .

PART - B

II. Answer **any seven** questions. Each question carries **two** marks

(7x 2=14 marks)

13. What is meant by scientific theory?
14. What is the scope of environmental science?
15. Differentiate between mesocoels and xerocoels .
16. What is meant by soil conservation?
17. What are ecological equivalents?
18. What is meant by ecological dominants?
19. Write notes on Guild.
20. What is meant by Detritus food chain?
21. Write notes on Estuary.

PART - C

III. Answer **any six** questions. Each question carries **five** marks

(6x5=30 marks)

22. What are wind breaks?
23. Distinguish between parasitism and predation.
24. What is meant by Nitrogen fixation ?
25. Write notes on the anatomical adaptations of xerophytes.
26. Write notes on age structure
27. What is meant by Polyclimax Theory
28. Rotation of crops
29. Primary Productivity

PART - D

IV. Answer **any three** questions. Each question carries **eight** marks

(3x8=24 marks)

30. Define ecological succession ? Give an account of the general pattern of succession?
31. What is meant by ecological pyramid ? Describe the different types ?
32. Write an account on ecological adaptation of halophytes?
33. Define Symbiosis? Give an account of various types of interactions among organisms.
34. What is meant by scientific method? Describe the various steps of scientific method.

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Voc Degree Examination, November 2016

GEC3EG07 (A03) - Inspiring Expressions

(2015 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

PART A**I Answer all the questions**

1. Milton's "On His Blindness" is _____ in form
2. Where was the narrator living twenty years ago in Maugham's "The Luncheon"?
3. Who is Sir Mohan Lal's partner in "Karma"?
4. Who scolded Hughie for giving a sovereign to a beggar in "Model Millionaire"?
5. Keats falls "half in love with easeful _____" in "Ode to a Nightingale"
6. Name the painter mentioned at the outset of the poem "My Last Duchess".
7. "I should be glad of another death." is the concluding line of the poem _____
8. Name Ulysses' son in Tennyson's poem.
9. The phrase 'Carpe diem' means _____
10. Who is the author of the poem "Indian Summer"?
11. What did the narrator order for himself in "The Luncheon"?
12. Give an example for a synaesthetic image from "Ode to a Nightingale". (1 x 12)

PART B**II Answer any Nine questions in one or two sentences each.**

13. What was the condition laid down by the Colonel to allow Hughie's engagement to Laura?
14. What solution does Milton find at the latter half of the poem "On His Blindness"?
15. How does Ulysses rate the people of Ithaca?
16. Why is the "wings of poesy" viewless in "Ode to a Nightingale"?
17. Why did the Duke put an end to the smile of the Duchess in Browning's poem?
18. How did the narrator convince himself that he could afford to take his friend for luncheon at the Foyot's?
19. What is the crime that the lady is accused of in the opening of "To His Coy Mistress"?
20. What reason was cited by Lachmi for not travelling in the same compartment with his husband?
21. What does crocodile stand for in "Indian Summer"?
22. How was the neighbor informed about the presence of a ghost in the house? (9 x 2=)

PART C**III Write a paragraph on any Four of the following.**

23. The ups and downs in the Journey of the Magi
24. Character of the Duchess in "My Last Duchess"
25. Appropriateness of the title 'Karma' to Kushwant's story.
26. Contrastive impulses in "Ode to a Nightingale"
27. The grandfather and grandmother in "The Night Ghost Got In"
28. Ending of "To His Coy Mistress" (4 x 5=)

PART D**IV Write an essay on any Two of the following**

29. The story The Luncheon is replete with instances of irony. Comment.
30. Marvell argues in verse in "To His Coy Mistress". Elucidate
31. "My Last Duchess" and "Ulysses" as monologues- dramatic and lyrical.
32. "Millionaires are rare enough, but model millionaires are rarer still" Expand the statement with

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE
Third Semester BVOC Degree Examination, November 2016
SDC3AE09 - Instrumentation for Automobile Engineers
(2015 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

PART -A

Answer all questions. Each question carries one mark.

- JFET has three terminals gate, drain and
(a) channel (b) source (c) substrate (d) cathode
- In a PNP transistor, the current carriers are
(a) acceptor ions (b) donor ions (c) free electrons (d) holes
- An SCR has -----PN junction
(a) one (b) two (c) three (d) none of these
- A MOSFET differs from JFET in the sense that it has no
(a) channel (b) gate (c) PN junction (d) substrate
- The science of measurement is called -----.
- The open loop gain of an ideal opamp is -----.
- The output of inverting opamp is -----.
- Micrometer and Vernier Caliper are the examples of.....method.
- Thermocouples are
(a)Passive transducer (b) Active transducer (c) Both of these (d) Output transducers
- In transmission the carrier signal is modulated so that its amplitude varies with the changing amplitudes of the modulating signal
(a)PWM (b) FM (c) PM (d) None of these
- The number of depletion layer in a transistor is
(a) one (b) two (c) three (d) four
- Gauge blocks are measured by their
(a) weight (b) height (c) length (d) width

(12 X 1 = 12)

PART -B

Answer any seven questions. Each question carries two marks.

- Why FET is called a voltage controlled device?
- Draw the symbol of NPN, PNP BJTs.
- What is meant by Pinch off voltage in JFET?
- Draw block diagram of opamp.
- Explain why BJT is called bipolar?
- Define measurand.
- Explain Line method.
- Draw diagram of LVDT.
- Define transducer.

(7 X 2 = 14)

PART -C

Answer any six questions. Each question carries five marks.

- Explain voltage divider bias method for BJT.
- Define measurement and factors needed for meaningful measurement.
- Explain Operational Amplifier characteristics and its applications.
- Explain BJT as an amplifier.
- Explain the working of n-channel JFET.
- Explain SCR as half wave rectifier and full wave rectifier.
- Explain interpolation and extrapolation method and its use in measurement systems.
- Explain working of MOSFET.

(6 X 5 = 30)

PART -D

Answer any three questions. Each question carries eight marks.

- Classify and list out various measuring instruments in-detail.
- Explain JFET as an amplifier and its output characteristics.
- Explain CB, CC and CE configurations of BJT in detail.
- Explain working of an opamp as (a) adder (b) subtractor(c) integrator (d) differentiator
- Explain Amplitude modulation and Frequency modulation of a sinusoidal signal.

(3 X 8 = 24)

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester BVOC Degree Examination, November 2016

SDC3IT10 - Introduction to RDBMS & SQL

(2015 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

PART - A

Answer all questions. Each question carries one mark

1. In an E-R diagram entity type represented by
(A) Rectangle (C) Square
(B) Ellipse (D) Triangle
2. Which of the following is record based logical model?
(A) Hierarchical model (C) Entity relationship model
(B) Object oriented model (D) none of these
3. Which of the following is DDL command?
(A) CREATE (C) SELECT
(B) INSERT (D) DELETE
4. Which of the following command is used for removal of all rows from a table?
(A) DROP (C) TRUNCATE
(B) DELETE (D) SELECT
5. In relational model, tuple is equivalent to
(A) Record (C) File
(B) Field (D) Data Base
6. An advantage of the data base approach is
(A) Elimination of data redundancy (C) Increase security
(B) Improve efficiency (D) All of these
7. In a relation, column whose data values correspond to the values of a key column in another relation is called
(A) Primary key (C) Foreign key
(B) Candidate key (D) super key
8. SQL stands for
(A) Structured Query Language (C) Sequential Query Language
(B) Structured Question Language (D) Sequential Question Language
9. Which of the following is an Aggregate function?
(A) AVG (C) COUNT
(B) MAX (D) All of the above
10. Which database level is closest to the user?
(A) External (C) Internal
(B) Physical (D) Conceptual
11. In relational model, data and relationship are represented by
(A) Collection of table (C) Collection of records
(B) Collection of attributes (D) Collection of trees
12. A transaction completes its execution is said to be
(A) Saved (C) Loaded
(B) Rolled (D) Committed

12x1=12

PART - B

Answer any seven questions. Each question carries two marks

13. Define DBMS
14. Define view of a database
15. What is a super key of a relation?
16. Define normal form
17. Define attribute
18. Define data model
19. Define DBA
20. Define transaction
21. What is data redundancy?

7x2=14

PART- C

Answer any six questions. Each question carries five marks

22. Explain E-R diagram notation
23. Explain 2NF
24. Explain the role of DBA
25. Explain primary key, candidate key and foreign key
26. Explain characteristics of database approach
27. Explain trigger
28. Explain views in SQL
29. What are the disadvantages of file processing system?

6x5=30

PART-D

Answer any three questions. Each question carries eight marks

30. With a neat diagram, explain the three schema architecture of a DBMS
31. Explain advantages and disadvantages of DBMS
32. Explain ACID properties of a transaction
33. Explain DDL and DML commands
34. Explain First Normal Form with an example

3x8=24

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Voc Degree Examination, November 2016

GEC3TW08 - Technical Writing & SEO

(2015 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

I Answer the following bunches of Questions

1. The word "communicate" is from -----
a. Greek b) Latin c) French d) none of these
2. Speech is primary and writing is
a) First b) last c) secondary d) none of these
3. Language is a ----- subject
a) Passive b) active c) skill d) oral
4. Antonym for "abolish" is -----
a) Accept b) diminish c) ridicule d) establish
5. Synonym for "courteous" is -----
a) Consider b) reveal c) polite d) discard
6. An example of irregular verb is -----
a) Behold b) walk c) arrive d) Look
7. The suffix in the word "rearrangement" is -----
a) re b) ment c) re arrange d) none of these
8. The phrase "set aside" means -----
a) postpone b) start c) cancel d) resemble
9. One word substitution for "A place where wild animals and birds are kept in a protected area" is -----
a) forest b) nest c) sanitary d) none of these
10. The rise and fall in human voice is
a) syllable b) song c) stress d) pitch
11. The word "beseech" means -----
a) placate b) beg c) request d) none of these
12. Communication among people of the same rank in an organization is -----
a) vertical b) down ward c) horizontal d) up ward

(12 x 1 = 12)

II. Answer nine of the following in two or three sentences each

13. Define 'circular'
14. Which are the reflective 'skills' ?
15. What is intra personal communication ?
16. Define ' body language'
17. What are the distinctions between sales letters and credit letters ?
18. What is internet ?
19. What is the distinction between periodical report and special report ?
20. What is audio visual communication ?
21. Define extra personal communication ?
22. Define kinesics ?
23. I am seeing a man on the road (correct the sentence)

(9 x 2 = 18)

III Answer any six of the following in a Paragraph of 100 words each

24. Barriers to communication
25. Importance of Technical Communication
26. Soft skills
27. Letters of 'quotation' and 'order' ?
28. Affixes in English
29. Memos and notices
30. Limitations of E-mail
31. Non verbal communication
32. Adjustment letters
33. Mass communication
34. The art of condensation

(6 x 5 = 30)

IV Answer any two of the following in not more than 400 words each.

35. Write a letter to the editor of a newspaper complaining about the cattle meance in your locality
36. Discuss the distinctions between General and Technical Communication
37. Describe the various steps in writing an effective report
38. Discuss briefly the various uses of search engines in Technical writings.

(2 x 10 = 20)