F–1380	Sub. Code
	9VSD2C1

B.Voc DEGREE EXAMINATION, APRIL 2024

Second Semester

Software Development

WEB TECHNOLOGY

(CBCS – 2019 onwards)

Time : 3 Hours   Maximum :75 Marks

Part A   (10 × 2 = 20)

Answer **all** questions.

1.   What is internetworking?

2.   Define ICMP.

3.   What is DNS server?

4.   What are features of Email?

5.   What are the features of HTML?

6.   What is formatting text?

7.   Write syntax of do while structure?

8.   Define conditional operator.

9.   Define event onload.

10.   What is XML?

Part B $(5 \times 5 = 25)$

Answer **all** questions choosing either (a) or (b).

11. (a) Explain the process of message transfer between two computers.

    Or

    (b) How does the address resolution protocol work?

12. (a) Explain about history of WWW.

    Or

    (b) Explain about Trivial file transfer protocol.

13. (a) Explain about editing HTML.

    Or

    (b) Explain about linking images.

14. (a) Explain about while structure with example.

    Or

    (b) Discuss in detail about break and continue statement with example.

15. (a) Explain about form processing with onfocus and onblur.

    Or

    (b) Write a short note on structuring data in XML.

F–1380

Part C $(3 \times 10 = 30)$

Answer any **three** questions.

16. Describe the various fields in the IP datagram header.

17. Explain about Domain name system.

18. Explain about tables and formatting.

19. Describe in detail about logical operators with example.

20. Explain about event onmousemove and onmouseout.

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F–1380

B.Voc. DEGREE EXAMINATION, APRIL 2024

Second Semester

Software Development

Allied – MATHEMATICS-OPTIMIZATION TECHNIQUES

(CBCS – 2019 onwards)

Time : 3 Hours   Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** questions.

1.   What is an infeasible solution and how does it occur?

2.   State the Existence theorem.

3.   Write down the mathematical formulation of an assignment problem.

4.   Give two applications in health care administration of assignment problem.

5.   Define queue discipline.

6.   What do you understand by steady and transient state?

7.   Define total float.

8.   How are the time estimate make in the PERT model?

9.   Define "Idle time on a machine".

10.   What is sequencing?

Part B $(5 \times 5 = 25)$

Answer **all** questions, choosing either (a) or (b).

11. (a) Formulate the dual of the following L.P.P.

Maximize $Z = 5x_1 + 3x_2$

Subject to the constraints

$3x_1 + 5x_2 \leq 15$
$5x_1 + 2x_2 \leq 10$
$x_1 \geq 0$
and $x_2 \geq 0$

Or

(b) Describe the general rules for writing the dual of a L.P.P.

12. (a) Use graphical method to solve the L.P.P.

Maximize $z = 2x_1 + 4x_2$

Subject to the constraints:

$x_1 + 2x_2 \leq 5,$
$x_1 + x_2 \leq 4$
and $x_1, x_2 \geq 0$

Or

(b) Solve the assignment problem.

	1	2	3
I	9	26	15
II	13	27	6
III	35	20	15
IV	18	30	20

F–1381

13. (a) A T.V repairman finds that the time spent on his jobs has an exponential distribution with mean 30 minute. If he repair sets in the order in which they came in. and if the arrival of sets is approximately Poisson with an average rate of 10 per 8 hour day, what is repairman's expected idle time each day? How many jobs are ahead of the average set just brought in?

Or

(b) Explain customer's behavior.

14. (a) Draw a network diagram for the following data:

Activity: A B C D E F G H I J

Preceding activities: None A A B A B, E C D, F G H, I

Or

(b) Write down the major rules of network construction.

15. (a) We have five jobs, each of which must go through the two machines A and B in the order AB. Processing times in hours are given in the table below:

Job (i) :   1 2 3 4 5
Machine A(A_i) :   5 1 9 3 10
Machine B(B_i):   2 6 7 8 4

Determine a sequence for the five jobs that will minimize the elapsed time.

Or

F–1381

(b) A book binder has one printing press, one binding machine, and the manuscripts of a number of different hooks. The time required to perform the printing and binding operations for each books total time required to turn out all the books:

Job :	1	2	3	4	5	6
Printing time (hrs) :	1	3	8	5	6	3
Binding time (hrs) :	5	6	3	2	2	10

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Use simplex method to solve the following L.P.P:

Maximize $Z = 4x_1 + 10x_2$

Subject to the constraints

$2x_1 + x_2 \leq 50$
$2x_1 + 5x_2 \leq 100$
$2x_1 + 3x_2 \leq 90$
$x_1 \geq 0$
and $x_2 \geq 0$

17. A department head has four subordinates, and four tasks to be performed. The subordinates differ in efficiency. And the tasks differ in their intrinsic difficulty. His estimate, of the time each man would take to perform each task, is given in the matrix below:

		Men		
Task	E	F	G	H
A	18	26	17	11
B	13	28	14	26
C	38	19	18	15
D	19	26	24	10

How should the tasks be allocated, one to a man, so as to minimize the total man-hours?

4

F–1381

18. In a railway marshalling yard, goods train arrives at a rate of 30 trains per day. Assume that the inter arrival-time follows an exponential distribution and the service time distribution is also exponential with an average of 36 minutes, calculate

   (a) The probability that the yard is empty

   (b) Average queue length assuming that the line capacity of the yard is 9 trains.

19. A project consists of a series of tasks labeled A, B,...., H, I with the following relationships (W<X, Y means X and Y cannot start until W is completed; X, Y<W means W cannot start until both X and Y are completed). With this notation construct the network diagram having the following constraints: A<D, E; B, D<F; C<G; B,G<H; F,G<I.

   Find also the minimum time of completion of the project, when the time (in day) of completion of each task is as follows:

   Task: A   B   C   D   E   F   G   H   I

   Time: 23 8   20 16 24 18 19 4   10

20. Determine the optimal sequence of jobs that minimize the total elapsed time based on the following information processing time on machines is given in hours and passing is not allowed:

Job :	A	B	C	D	E	F	G
Machine M1 :	3	8	7	4	9	8	7
Machine M2 :	4	3	2	5	1	4	3
Machine M3 :	6	7	5	11	5	6	12

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F–1381

B.Voc. DEGREE EXAMINATION, APRIL 2024.

Fifth Semester

Software Development

MIS AND EDI

(CBCS – 2019 onwards)

Time : 3 Hours   Maximum : 75 Marks

Part A   (10 × 2 = 20)

Answer **all** questions.

1.   Define information systems solution.

2.   What do you mean by information technology?

3.   What are the characteristics of MIS?

4.   Define Management information systems.

5.   What is an internet?

6.   What do you mean by EDI?

7.   What is an web portal?

8.   What is CRM and expand?

9.   Define Cloud.

10.   Define Server.

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) What are the needs of information technology in business? Explain.

    Or

    (b) Describe in detail about trends in the global business environment that have made information systems so important.

12. (a) Explain about decision support systems.

    Or

    (b) Write a short note on human resource in information systems.

13. (a) Explain about FTP based messaging.

    Or

    (b) Discuss in detail about EDI standards.

14. (a) Write a short note on postpaid e-payment system.

    Or

    (b) Explain about strategies for marketing in e-commerce.

15. (a) Write a short note on HDFs.

    Or

    (b) Explain about virtualization techniques.

2   **F–1384**

Answer any **three** questions.

16. Explain about fundamentals of information system concepts.

17. Discuss in detail about transaction processing system.

18. Explain about internet based EDI.

19. Describe in detail about electronic payment system.

20. Briefly explain about google apps engine.

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B.Voc. DEGREE EXAMINATION, APRIL 2024

Fifth Semester

Software Development

PROGRAMMING WITH JAVA

(CBCS – 2019 onwards)

Time : 3 Hours   Maximum : 75 Marks

Part A   (10 × 2 = 20)

Answer **all** questions

1. Define variable.

2. What is an tokens?

3. Define strings.

4. What is an class?

5. Write a difference between applications and applets.

6. What is appletstab interface?

7. Write a term static method.

8. Define thread.

9. What is an input stream?

10. Define ODBC.

Part B $(5 \times 5 = 25)$

Answer **all** questions choosing either (a) or (b).

11. (a) Explain about decision making and branching with example program.

Or

(b) State five features of java.

12. (a) Write a short note on overriding methods with example program.

Or

(b) Explain about abstract classes with example program.

13. (a) Give the attributes of applet tag.

Or

(b) Write a short note on abstract window toolkit.

14. (a) Discuss in detail about dead lock.

Or

(b) How to creating and running threads?

15. (a) Explain about data output stream.

Or

(b) Write a short note on JDBC connection.

F–1385

Answer any **three** questions.

16. Briefly explain about different type of operators in java with example program.

17. Explain about inheritance in java with example.

18. Write an applet for each of following graphics methods.

    (a) draw oval()

    (b) draw rect()

    (c) draw line()

    (d) fill oval()

19. Describe in detail about the complete life cycle of thread.

20. Briefly explain about data input stream and data output stream.

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B.Voc. DEGREE EXAMINATION, APRIL 2024.

Fifth Semester

Software Development

Elective – SOFTWARE ENGINEERING

(CBCS – 2019 onwards)

Time : 3 Hours   Maximum : 75 Marks

Part A   (10 × 2 = 20)

Answer **all** questions.

1.   Define software engineering methods.

2.   What is an verification?

3.   What is an requirement specifications?

4.   Define use case.

5.   What is an coupling?

6.   Define user interface classes.

7.   Define coding.

8.   What is an testability?

9.   What is reuse software?

10.   Define reverse engineering.

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Discuss in detail about spiral model.

Or

(b) Explain about iterative waterfall model.

12. (a) Write a short note on SRS.

Or

(b) Write a metrics for project size estimation.

13. (a) Discuss in detail about state chart diagram.

Or

(b) Write a characteristics of a good user interface.

14. (a) Explain about debugging.

Or

(b) Write a short note on system testing.

15. (a) Explain about estimation of maintance cost.

Or

(b) Write a characteristics of CASE tools.

F–1386

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Explain about software development projects.

17. Briefly explain about responsibilities of a software project manager.

18. Explain about user interface design.

19. Discuss in detail about software quality and management system.

20. Explain about software reverse engineering.

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3 **F–1386**

B.Voc. DEGREE EXAMINATION, APRIL 2024.

Sixth Semester

Software Development

CORPORATE GROOMING AND FINISHING SKILLS

(CBCS – 2019 onwards)

Time : 3 Hours   Maximum : 75 Marks

Part A   (10 × 2 = 20)

Answer **all** questions.

1.   What are the essential soft skills?

2.   Define professional.

3.   What is your work etiquette?

4.   Define proximity.

5.   How would dressing right impact you image?

6.   Why are our services so undervalued?

7.   When is this supplier going to call?

8.   Define office skills.

9.   How to type efficiently?

10.   Define report writing.

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Explain about professionalism.

Or

(b) Write a short note on self confidence.

12. (a) What are the rules of etiquette? Explain.

Or

(b) Write a short note on table manners.

13. (a) Discuss in detail about house keeping skills.

Or

(b) Explain about spatial utility habits.

14. (a) Explain about reception and greeting.

Or

(b) How to preparation to hold office meetings.

15. (a) How to write minutes? Explain.

Or

(b) What are the steps preparation methods for report? Explain.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Explain about rational and emotional decisions.

17. Discuss in detail about

(a) Kinesics

(b) Proximity.

2 | **F–1387**

18. Briefly explain about office files and personal computer and laptop management.

19. Explain about front office skills.

20. Describe in detail about report for media.

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F–1387

B.Voc. DEGREE EXAMINATION, APRIL 2024.

Sixth Semester

Software Development

Elective — SOFTWARE PROJECT MANAGEMENT

(CBCS – 2019 onwards)

Time : 3 Hours   Maximum : 75 Marks

Part A   (10 × 2 = 20)

Answer **all** questions.

1.   What is software process?

2.   Define process.

3.   Define estimate time.

4.   Define project plan.

5.   What is project execution?

6.   What is process?

7.   Define specifications.

8.   What is requirement engineering?

9.   What are the major sources of risk?

10.   Define risk identification.

Answer **all** questions, choosing either (a) or (b).

11. (a) Write a characteristics of software.

    Or

    (b) Explain about management function in software.

12. (a) Explain about project scope.

    Or

    (b) What are the characteristics of project analysing?

13. (a) Explain about evolutionary model.

    Or

    (b) Discuss in detail about incremental delivery.

14. (a) Write a short note on software requirement specifications.

    Or

    (b) Explain about expert judgement.

15. (a) What are the types of risk? Explain.

    Or

    (b) Write a short note on risk avoidance.

F–1388

Part C ($3 \times 10 = 30$)

Answer any **three** questions.

16. Briefly explain about software process.

17. Explain about,

    (a) Estimating time and effort

    (b) Review plan.

18. Discuss in detail about V-process model.

19. Briefly explain about COCOMO model.

20. Explain about resource planning and resource allocation.

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F–1388