1B2A23009   (Pages : 3)   Reg. No:...........................

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE
Second Semester BVOC AUTO Degree Examination, April 2023
SDC2CA06 – Financial and Management Accounting
(2021 Admission onwards)

Time: 2 ½ hours   Max. Marks : 80

PART – A
Answer all questions.
Each question carries Two mark.
Ceiling -25 Marks

1.   Define accounting.

2.   Write any two examples of fixed assets.

3.   What is Dual aspect principle?

4.   What is budget?

5.   Purchased goods for cash Rs.10000, pass the journal entry.

6.   Explain margin of safety.

7.   What is petty cash book?

8.   Write a short note on master budget.

9.   What is standard costing?

10. Briefly explain horizontal analysis.

11. What is BEP?

12. What is ledger?

13. What is contribution?

14. Find contribution from the following,

     Sales   1000000

     Variable cost   500000

     Fixed cost   300000

15. What is gross profit?

PART – B
Answer all questions.
Each question carries Five marks.
Ceiling -35 Marks

16. Explain types of budgets.

17. Explain trial balance and its features.

18. The Harper Company uses a single column cash book to record all cash transactions. It engaged in the following cash transactions during the month of September 2016.

   - Sep.01: Cash in hand Rs.4,654.
   - Sep.02: Paid salaries to employees Rs.3,000.
   - Sep.06: Purchased goods for cash Rs.1,400.
   - Sep.07: Sold goods for cash Rs.4,700.
   - Sep.10: Office furniture purchased for cash Rs.3,080.
   - Sep.12: Stationary purchased for cash Rs.170.
   - Sep.17: Cash paid to A & Co. Rs.1,780.
   - Sep.24: Cash received from S & Co. Rs.2,400.
   - Sep.28: Paid office rent Rs.1,600.

19. Calculate P/V ratio from the following:

   Sales   500000

   Fixed cost 100000

   Profit   50000

20. Explain any 5 principles of accounting.

21. What is budgetary control, discuss about its advantages?

22. From the following information, prepare a comparative income statement:

Particulars	2010	2011
Sales	400000	500000
Cost of goods sold	200000	300000
Operating expenses	40000	100000
Other income	20000	30000

23. Prepare Trial Balance as on 31.03.2012 from the following balances of Ms. Maliha Afzal:

   Drawings Rs. 74,800

   Purchases Rs. 295,700

   Stock (1.04.2011) Rs. 30,000

   Bills receivable Rs. 52,500

   Capital Rs. 250,000

   Furniture Rs. 33,000

   Discount allowed Rs. 950

   Sales Rs. 300000

   Rent Rs. 72,500

   Bills payable Rs.9450

PART - C
Answer any two questions.
Each question carries Ten marks.

24. From the following balances extracted from the books of X & Co, Prepare a trading and profit and loss account and balance sheet on 31st December 2022.

Stock on 1st January	11000	Purchase return	500
Bills receivables	4500	Trade expenses	200
Purchases	39000	Furniture	1000
Wages	2800	Cash in hand	500
Insurance	700	Cash at bank	4750
Sundry debtors	30000	Rent	1100
Carriage inwards	800	Carriage outward	1450
Commission	800	Sales	60000
Interest on capital	700	Bills payable	3000
Stationary	450	Creditors	19650
Sales return	1300	Capital	17900

The closing stock is valued at 25000

25. Following particulars are obtained from the costing records of a manufacturing company:

	2014	2015
Sales	450000	600000
Profit	50000	87500

Calculate:

(a) P/V ratio

(b) Fixed cost

(c) BEP

(d) Profit when sales are Rs.550000

(e) Sales required to earn a profit of Rs.100000

26. Explain features & objectives of accounting.

27. Explain cash book & types of cash book with formats.

2 x 10 = 20 Marks

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Second Semester BVOC AUTO Degree Examination, April 2023

SDC2AU07 – Introduction to Automobile Engineering

(2021 Admission onwards)

Time: 2 hours   Max. Marks : 60

PART – A
Answer all questions.
Each question carries Two mark.
Ceiling -20 Marks

1. Classify automobiles on purpose of vehicle

2. Define the term Wheel base.

3. Explain Cylinder block.

4. What do you mean by MPFI?

5. What are the different components of the Battery Ignition system?

6. Where is the turbocharger located on the engine?

7. Name any four transmissions.

8. What is double de clutching.

9. What is a stub axle?

10. What is a service brake?

11. What is in biodiesel?

12. What do you understand about the term fuel cell vehicles?

PART – B
Answer *all* questions.
Each question carries Five marks.
Ceiling -30 Marks

13. Explain functions in the GearBox, Universal Joints and Differential.

14. What are the advantages and disadvantages of front axle live axle vehicles?

15. What are the advantages and disadvantages of a carburettor over Fuel injection.

16. Draw Battery Ignition system

17. Draw and explain cone Clutch

18. Define 'understeer' and 'oversteer.

19. List out the few advantages of CNG over diesel.

PART - C
Answer any One questions.
Each question carries Ten marks.

20   Draw the layout of Transmission system of a 4X2 and 4X4 automobile.

21   Explain the working of a simple Carburettor with necessary diagrams.

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Second Semester BVOC AUTO Degree Examination, April 2023

SDC2AU08 – Instrumentation for Automobile Engineers

(2021 Admission onwards)

Time: 2 ½ hours

Max. Marks : 80

PART – A
Answer *all* questions.
Each question carries Two mark.
Ceiling - 25 Marks

1. What is absolute instrument? Give examples.

2. What is analog instrument? Give examples.

3. Define accuracy and precision.

4. From the point of view of measurements, how can be resistance classified?

5. Name any four instruments used for the measurement of resistance.

6. Draw the figure of Schering Bridge.

7. Define transducer.

8. What are the characteristics of Op-amp?

9. What is primary and secondary transducer?

10. What is coolant temperature?

11. What is oil pressure?

12. Define vehicle speed.

13. What is a sensor?

14. Define fuel metering.

15. Define relays.

PART – B
Answer *all* questions.
Each question carries Five marks.
Ceiling - 35 Marks

16. Explain different classifications of secondary instruments in detail.

17. Differentiate between dynamometer and induction type wattmeter.

18. With the help of neat figure explain the construction and working of series type Ohmmeter.

19. Explain the construction and working of Wheatstone Bridge with the help of necessary figure.

20. Explain the working and modes of operation of photodiode using figure.

21. With neat diagram explain the working of piezoelectric transducer.

22. Explain the working of CRT using neat sketch.

23. Explain oxygen sensor using sketch.

PART - C
Answer any *Two* questions.
Each question carries Ten marks.

24. Explain the construction and working of PMMC and attraction type MI instrument using neat diagram.

25. With the help of neat figure explain the construction and working of Megohmmeter in detail.

26. Using diagram explain five different types of filters in detail.

27. Explain vehicle speed sensor and detonation sensor in detail.

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Name: ....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Second Semester BVOC SD Degree Examination, April 2023

SDC2IT06 – Programming in Java

(2022 Admission onwards)

Time: 2 ½ hours

Max. Marks : 80

Answer *all* questions.
Each question carries Two mark.
Ceiling -25 Marks

1. What is the difference between an applet and application program?

2. Which methods are used in inter thread communication in Java?

3. What do you mean by dynamic method dispatch ?

4. What is an event listener?

5. Explain finally with example

6. What is Layout manager in AWT? Explain.

7. What is adapter class?

8. What are static method ? Explain.

9. What is JDBC ? Explain its use.

10. What is a swing?

11. What is metadata in JDBC?

12. How thread can be created in java?

13. Explain SQL Exception class.

14. What is a byte stream?

15. Explain the structure and function of if..else statement

PART – B
Answer *all* questions.
Each question carries Five marks.
Ceiling -35 Marks

16. Explain how data and methods are organized in an object oriented program with suitable illustration

17. Explain structure and function of for and while statements in Java with examples.

18. Write a note on Java API packages.

19. Explain the major tasks of input and output stream classes

20. Write a program using while loop to reverse the digit for any number

21. What are Java threads? Explain the thread life cycle.

22. What is frame? Write a program to explain frame.

23. What is meant by event? Explain any five some event classes in Java.

PART - C
Answer any *two* questions.
Each question carries Ten marks.

24. Explain life cycle of Applet.

25. Explain exception handling in java with suitable example

26. Explain in detail the different types of operator in Java

27. What is polymorphism? Explain its types with suitable examples

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Second Semester BVOC SD Degree Examination, April 2023

SDC2IT07 – Relational Database Management System

(2022 Admission onwards)

Time: 2 ½ hours

Max. Marks : 80

PART – A
Answer *all* questions.
Each question carries Two marks.
Ceiling -25 Marks

1. What are the responsibilities of DBA?

2. Discuss how can you change the data in table?

3. Discuss about database users.

4. What is domain calculus in DBMS?

5. What are bound and unbound cursors?

6. Define atomicity.

7. Discuss the use of rename operation.

8. What is a weak entity? Explain with an example?

9. What do you mean by row level locking?

10. Explain projection operation in relational algebra?

11. What do you mean by good decomposition?

12. Explain deletion anomaly with an example.

13. What do you mean by referential integrity?

14. Explain functional dependency with an example.

15. Define the terms entity set and domain.

PART – B

Answer all questions.
Each question carries Five marks.
Ceiling -35 Marks

16. Explain the advantages of disadvantages of stored procedures.

17. What are the different types of data models?

18. Explain different type of attributes occurs in ER model.

19. How can we destroy a view? Explain the use of ORDER BY clause.

20. What is data independence? Explain the difference between physical and logical data independence?

21. What are two types of relational calculus?

22. Explain 3-schema architecture with a diagram.

23. What are triggers? Explain how triggers are created in SQL.

PART - C

24. What is Normalization? Explain different normal forms.

25. What is database? Describe the advantages and disadvantages of using DBMS.

26. List DML commands in SQL? Explain with an example.

27. What is relational algebra? Discuss about different operators used in algebra.

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