QP Code: UV25C003

Reg. No : .....

Name : .....

III SEMESTER (CBCSS-VUG) DEGREE EXAMINATIONS, OCTOBER 2025

B.Voc Software Development

A11 : BASIC MATHEMATICS AND GENERAL AWARENESS

2024 Admission Onwards

Time: 2.5 Hours **Maximum Marks: 80**

Section A

Short answer type carries **2 Marks** each **(Ceiling 25)**

1. Discuss the average of the first 100 natural numbers.
2. If a person walks at 14 km/hr instead of 10 km/hr, he would have walked 20 km more. Generate the actual distance travelled by him.
3. Arrange the letters of the word LEADER in different ways.
4. A, P, R, X, S, and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A identity who is on the right of P.
5. Complete the series by adding 3 terms BDF, CFI, DHL, ___, ____
6. Define research.
7. Explain thesis.
8. Examine ethics.
9. Explain the role of information and communications technology (ICT) in research.
10. Identify the different types of secured loans
11. Simplify:
    (a) 896 × 896 - 204 × 204
    (b) 81 × 81 + 68 × 68 - 2 × 81 × 68.SDS
12. Introducing a boy, a girl said, "He is the son of the daughter of the father of my uncle." Report the boy related to the girl.
13. What is the difference between open-ended and close-ended mutual funds?
14. Explain the meaning of the idiom "Bite the bullet" and use it in a sentence of your own.
15. Spot the error in the sentence:
    She do not likes to go to the market.
    (a) She does not like to go to the market.
    (b) She did not likes to go to the market.
    (c) She do not like to go to the market.
    (d) No error.

Turn Over

Section B

Paragraph types carries **5 Marks each (Ceiling 35)**

16. Find the compound interest on Rs 12600 for 2 years at 10% per annum compounded annually.
17. Rasik walked 20 metres towards the north from his starting point. Then he turned right and walked 30 metres. Again, he turned right and walked 35 metres. Then he turned left and walked 15 metres. Finally, he turned left and walked 15 metres.

    Find:

    a. In which direction is Rasik from his starting point?

    b. How many metres away is he from the starting point?

    (Draw a rough diagram to support your answer.)
18. Identify different types of research.
19. Study the following information carefully and answer the questions given below. In a certain code language:

    'this is not me' is written as 'ar rt st pt'

    'not you but him' is written as 'mn we rt qs'

    'me and you come' is written as 'yu mn pt xr'

    'but this is him' is written as 'ar we st qs'

    Answer the following:

    a) What is the code for 'me' according to the given code language?

    b) For which word does the code 'mn' stand, according to the given code language?

    c) The code for 'but this is my' is written as 'st wx ar qs'. Find the code for 'him'.
20. Distinguish between qualitative research and quantitative research.
21. Define the features of green banking.
22. What is cheque? What are the essentials of a cheque?
23. Fill in the blanks with suitable words:

    Education is the most powerful ____ (i) ____ which you can use to change the (ii). It helps people to become more (iii) and confident. A good education gives people the skills they need to (iv) jobs and contribute to the (v).

Section C

Essay-type carries **10 Marks:** Answe**r any two** questions.

24. List and explain the different steps in the research process.
25. Explain the primary and secondary functions of the bank.
26. a) Explain the meaning of the following idioms:

    i. A blessing in disguise

    ii. Break the ice

    b) Use the following idioms correctly in sentences of your own:

    i. Burn the midnight oil.

    ii. Once in a blue moon.

    iii. Hit the nail on the head.

27. The following table gives the percentage of marks obtained by seven students in six different subjects in an examination. The numbers in brackets indicate the maximum marks in each subject.

Student	Physics(100)	Chemistry(100)	Maths(200)	Biology(100)	English(50)	Hindi(50)
Amit	65	70	60	75	80	72
Bhavana	58	62	55	60	74	68
Charu	72	75	68	70	78	80
Divya	80	82	77	84	88	90
Sajal	60	55	65	58	70	64
Tharun	68	64	72	66	76	70
Vikas	75	78	80	72	82	74

Answer the following questions:

1. What are the average marks obtained by all the seven students in Physics? (Round off to two decimal places.)
2. How many students obtained 60% and above marks in all subjects?
3. What was the aggregate of marks obtained by Sajal in all the six subjects?
4. In which subject is the overall percentage the best?
5. What is the overall percentage of Tarun?

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