(Pages: 2)

Name: Reg. No:

THIRD SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2023

(Regular/Supplementary/Improvement)

CC21U GEC3 A11 – BASIC MATHEMATICS AND GENERAL AWARENESS

(General Course)

(2021 Admission onwards)

Time: 2.5 Hours

Maximum: 80 Marks Credit: 4

PART – A

Answer *all* questions. Each question carries 2 marks.

- 1. Find the L.C.M. of 72, 108 and 2100.
- 2. Two numbers are in the ratio 15: 11. If their H.C.F. is 13, find the numbers.
- 3. Solve: 4368 + 2158 596-? = 3421 + 1262.
- 4. Simplify: $1 \div [1 + 1 \div \{1 + 1 \div 1(1 + 1 \div 2)\}] + 1$.
- 5. If in a certain code 15789 is written as *XTZAL* and 2346 as *NPSU* then how will 23549 be written in the same code?
- 6. If in a certain code language,' phi lem ta' means 'you are good' 'lem se par' means 'they are well', 'par lem mag' means 'they are innocent' and 'phi gir' means 'you go'. What will be 'you are innocent' in the same code?
- 7. A man walks 2 km. towards North. Then he turns to East and walks 10 km. After this he turns to North and walks 3 km. Again, he turns towards East and walks 2 km. How far is he from the starting point?
- 8. 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. Who is to the right of P?
- 9. Define action research.
- 10. What do you mean by problem?
- 11. Who invented mouse?
- 12. Explain OMR.
- 13. Define application software. Give example.
- 14. What are the parties of an insurance?
- 15. What is a cheque?

(Ceiling: 25 Marks)

PART – B

Answer *all* questions. Each question carries 5 marks.

- 16. Find the simple interest on *Rs*. 68000 at 16_3^2 % per annum for 9 months.
- 17. At what rate percent per annum of compound interest will *Rs*. 1600 amount to *Rs*. 1852.20 in 3 years?

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18. **Directions** – In each of the following questions two statements are given and these statements are followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

Give Answer:

- (a) If only I conclusion follows (b) If only II conclusion follows
- (c) If either I or II follows (d) If neither I nor II follows

(e) If both I and II follow

Statements: Some poets are poems. No poem is song.

Conclusions:

I. Some poems are not songs. II. Some songs are poems.

19. **Directions** – In each of the following questions two statements are given and these statements are followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

Give Answer:

- (a) If only I conclusion follows (b) If only II conclusion follows
- (c) If either I or II follows (d) If neither I nor II follows
- (e) If both I and II follow

Statements: All the poets are goats. Some Goats are trees.

Conclusions:

- I. Some poets are not trees. II. Some trees are goats.
- 20. Describe (i) Longitudinal approach of research (ii) Cross-Sectional approach of research.
- 21. Define sampling. What are its characteristics?
- 22. Describe (i) LINUX (ii) UNIX.
- 23. Explain (i) overdraft (ii) educational loan.

(Ceiling: 35 Marks)

PART – C

Answer any two questions. Each question carries 10 marks.

- 24. Describe the philosophical foundation of education.
- 25. Explain the components of computer hardware.
- 26. What is MS-Excel? Draw the excel worksheet and explain the terms in the menu bar.

27. Describe the types of cheques.