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H – 2162

Reg. No. :

Name :

First Semester B.A./B.Sc. Degree Examination, November 2019

Career Related First Degree Programme under CBCSS

Language Course : HINDI

Additional Language

HN 1111.3 — POETRY AND MASS MEDIA

(2017 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

- I. एक या दो वाक्यों में उत्तर लिखिए :-
1. कबीरदास के गुरु कौन हैं?
 2. सूरदास के किन्हीं दो रचनाओं के नाम लिखिए।
 3. रामचरितमानस की भाषा कौन सी है?
 4. 'स्नेह निर्झर बह गया' किसकी रचना है?
 5. हिन्दी काव्य में हालावाद का प्रवर्तक कौन है?
 6. 'नदी और साबुन' किसकी रचना है?
 7. अरुण कमल की किन्हीं दो रचनाओं के नाम लिखिए।
 8. समाचार पत्र से मिलनेवाले किन्हीं दो लाभ लिखिए।
 9. 'ई-मेल' का पूर्णरूप क्या है?
 10. 'ई-रीडिंग' क्या है।

(10 × 1 = 10 Marks)

P.T.O.

II. किन्हीं आठ प्रश्नों के लघु उत्तर करीब 50 शब्दों में लिखिए :

11. “जाति न पूछो साधु की, पूछ लीजिए ज्ञान।
मोल करो तलवार का, पड़ा रहन दो म्यान।”
- इसका अर्थ लिखिए।
12. सूरदास की भक्ति पर प्रकाश डालिए।
13. तुलसीदास की किन्हीं चार रचनाओं के नाम लिखिए।
14. ‘भारत देश’ कविता में अभिव्यक्त भाव क्या है?
15. हरिवंशराय बच्चन की आत्मकथा के नाम लिखिए।
16. मधुशाला कविता का विषय क्या है?
17. ‘नदी और साबुन’ कविता में नदी प्रदूषण का चित्रण है। व्यक्त कीजिए।
18. संचार माध्यम की आवश्यकता क्या है?
19. संगणक क्या है?
20. रेडियो का महत्त्व लिखिए।
21. लघु सन्देश सेवा क्या है?
22. इन्टरनेट का लाभ लिखिए।

(8 × 2 = 16 Marks)

III. किन्हीं छह प्रश्नों के उत्तर करीब 120 शब्दों में लिखिए :

23. कबीर की भक्ति भावना।
24. कृष्ण की बाललीला।
25. “गोधन गजधन, बाजिधन और रतन-धन खान।
जब आवत सन्तोष-धन, सब धन धूरि समान॥” - अर्थ लिखिए।
26. “लघु सुरधानु से पंख पसोर शीतल मल्यसमीर सहोर।
उड़ते खग जिस ओर मुँह किये समझ नीड़ निज प्यारा॥” - अर्थ लिखिए।

27. 'सुख दुख' कविता का सारांश लिखिए।

28. मधुशाला में आनेवाले लोग कैसे व्यवहार करते हैं?

29. समाचार पत्र के लाभ लिखिए।

30. कंप्यूटर का महत्व लिखिए।

31. दूरदर्शन की आवश्यकता पर टिप्पणी लिखिए।

(6 × 4 = 24 Marks)

IV. किन्हीं दो प्रश्नों के उत्तर करीब 250 शब्दों में लिखिए :

32. पठित दोहों के संक्षिप्त परिचय देकर कबीर दास पर अपना विचार प्रस्तुत कीजिए।

33. 'स्नेह निर्झर बह गया' कविता का सारांश लिखिए।

34. 'नये श्लोक में' कविता की विशेषताएँ लिखिए।

35. आधुनिक सूचना माध्यम के बारे में लिखिए।

(2 × 15 = 30 Marks)

Reg. No. :

Name :

First Semester B.Sc. Degree Examination, November 2019

Career Related First Degree Programme under CBCSS

Complementary course I for Physics and Computer Applications

MM 1131.6 : MATHEMATICS I — COMPLEX NUMBERS, DIFFERENTIATION
AND THEORY OF EQUATIONS

(2014-2018 Admissions)

Time : 3 Hours

Max. Marks : 80

PART – A

all the first ten questions are compulsory. They carry 1 mark each :

1. State de Moivre's theorem.
2. State any two properties of n^{th} roots of unity.
3. Find $\lim_{x \rightarrow 2} \frac{x^2 - 4}{x - 2}$.
4. If $f(x) = x^3 - x$, what is $f'(x)$?
5. What is rectilinear motion?
6. Find $\lim_{(x, y) \rightarrow (1, 4)} (5x^3 y^2 - 9)$.
7. Find $\frac{\partial z}{\partial y}$, if $Z = x^4 \sin(xy^3)$.
8. A polynomial equation $f(x) = 0$ of degree 8 has exactly 2 imaginary roots. Then what is the number of real roots of $f(x) = 0$?

P.T.O.

9. What is a reciprocal equation?
10. Which type of polynomial equations are solved by Ferrari's method?

PART – B

Answer **any eight** questions from among the questions 11 to 22. These questions carry 2 marks each.

11. Prove that $\frac{(1 + \cos \theta + i \sin \theta)^n}{(1 + \sin \theta + i \cos \theta)^n} = \cos n\theta + i \sin n\theta$.
12. Find $\sqrt{1+i}$.
13. Find the domain of $\frac{1}{x^2 - 3x + 2}$.
14. Let $s(t) = t^3 - 6t^2$ be the position function of a particle moving along an s-axis, where s is in meters and t is in seconds. Find the instantaneous acceleration.
15. Find the Taylor series for $\frac{1}{x}$ about $x = 1$.
16. Find the derivative of e^x using power series expansion.
17. Show that $u(x, t) = \sin(x - ct)$ is a solution of $\frac{\partial^2 u}{\partial t^2} = c^2 \frac{\partial^2 u}{\partial x^2}$.
18. Find the critical points of $f(x, y) = 3x^2 - 2xy + y^2 - 8y$.
19. Find the quotient and remainder when $3x^4 - 5x^3 + 10x^2 + 11x - 61$ is divided by $x - 3$.
20. Find the maximum number of positive and negative roots for the equation $x^9 + 5x^8 - x^3 + 7x + 2 = 0$.

21. Solve the equation $x^3 - x^2 - 8x + 12 = 0$, given that it has multiple roots.
22. Find the value of k for which the roots of $2x^3 + 6x^2 + 5x + k = 0$ are in A.P.

PART – C

Answer **any six** questions from among the questions 23 to 31. These questions carry 4 marks each.

23. Separate into real and imaginary parts $\tan^{-1}(x + iy)$.
24. Sketch the graph of $y = \sqrt{x+3}$.
25. Find $\lim_{x \rightarrow \infty} \sqrt{x^6 + 5} - x^3$.
26. Find the n^{th} maclaurin polynomial for $\frac{1}{1-x}$.
27. Use macluarin series to evaluate an accproximate value of e .
28. Find all second order partial derivatives of $f(x, y) = x^2 y^3 + x^4 y$.
29. Solve the equation $x^4 + 2x^3 - 21x^2 - 22x + 40 = 0$, given that the roots are in AP.
30. Solve $2x^3 - x^2 - 22x - 24 = 0$ given that two of the roots are in the ratio 3 : 4.
31. If α, β and γ are the roots of the equation $x^3 + qx + r = 0$, find the values of $\Sigma \frac{\alpha}{\beta + \gamma}$ and $\Sigma \frac{\beta^2 + \gamma^2}{\beta + \gamma}$.

PART - D

Answer **any two** questions from among the questions 32 to 35. These questions carry 15 marks each.

32. (a) Express $\cos 5x$ in terms of powers of $\cos x$.
- (b) If $\cos(x + iy) = \cos A + i \sin B$, prove that $\cos 2x + \cosh 2y = 2$.
33. At what point or points on the circle $x^2 + y^2 = 1$ does the function $f(x, y) = xy$ have absolute maximum and what is the maximum value?
34. Solve the biquadratic equation $2x^4 + 6x^3 - 3x^2 + 2 = 0$.
35. Solve using Cardon's method the equation $28x^3 - 9x^2 + 1 = 0$.
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Reg. No. :

Name :

First Semester B.Sc. Degree Examination, November 2019

Career Related First Degree Programme under CBCSS

Physics with computer applications

Foundation Course I

**PC 1121 – MECHANICS, THERMODYNAMICS AND PROPERTIES
OF MATTER**

(2015 Admission onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **ALL** questions. Each question carries 1 mark.

1. State Bernoulli's theorem.
2. Define critical velocity for fluid flow.
3. Write Clausius–Clapeyron equation, explain the terms involved.
4. What is meant by isothermal and adiabatic process?
5. Define entropy.
6. Define the absolute zero of temperature.
7. Why do rain drop appear spherical in shape?

P.T.O.

8. Define Young's modulus.
9. State Wiedmann-Franz law.
10. Define the term moment of inertia.

(10 × 1 = 10 Marks)

SECTION – B

Answer **any eight** questions. Each question carries **2** marks.

11. What is Clausius inequality?
12. Explain Carnot's theorem.
13. Define angular momentum. How is it related to the moment of inertia?
14. State reversible and irreversible process.
15. State and explain third law of thermodynamics.
16. Draw T-S diagram for Carnot's cycle.
17. State Stefan's law and write its unit.
18. Define surface energy. How it is related to the surface tension?
19. Define thermal conductivity. Write its expression.
20. Write the working principle of refrigerator.
21. Derive the moment of inertia for a circular ring about its diameter.
22. State and explain Torricelli's theorem.

(8 × 2 = 16 Marks)

SECTION – C

Answer any six questions. Each question carries 4 marks.

23. Calculate the change in internal energy when 0.004 Kg of air is heated from 0°C to 2°C . The specific heat of air at constant volume being $0.172 \text{ Kcal /Kg } ^{\circ}\text{C}$.
24. A Carnot's engine has the same efficiency when operated between 1000 K and 500K and X K and 1000K. Find the value of X, being the temperature of sink.
25. A body stretched symmetrically from the lower end of the wire, 5m long and 1.22mm in diameter, oscillates about the wire with a period of 1.25sec. If the modulus of rigidity of the material of the wire is $8.0 \times 10^{10} \text{ N/m}^2$, calculate the moment of inertia about the axis of rotation.
26. Find the amount of work done in twisting a steel wire of radius 1mm and length 25 cm through an angle 45° , the modulus of rigidity of steel being $8 \times 10^{10} \text{ N/m}^2$.
27. A uniform thin bar of mass 6Kg and length 2.4m is bent to make a ring. Calculate the moment of inertia about an axis passing through the centre of mass and perpendicular to the plane of ring.
28. A solid sphere of mass 4 Kg and radius 1m is suspended from a wire. Find the period of oscillation, if the torque required twisting the wire is $4 \times 10^{-3} \text{ Nm/rad}$.
29. A 10cm wide and 0.2mm thick metal sheet is bent to form a cylinder of 10cm length and 50cm radius. If the Young's modulus of the metal is $1.5 \times 10^{11} \text{ Nm}^{-2}$. Calculate the stress and strain on the convex surface.
30. What would be the pressure inside a small air bubble of 0.1mm radius situated just below the surface of water? Surface tension of water = 0.072 N/m and atmospheric pressure = $1.013 \times 10^5 \text{ N/m}^2$.
31. Two ideal black bodies A and B at temperature 227°C and 327°C respectively are placed in a evacuated enclosure whose walls are blackened and kept at 27°C . Compare the rates of loss of heat.

(6 × 4 = 24 Marks)

SECTION – D

Answer any two questions. Each question carries 15 marks.

32. Explain the working of Carnot's heat engine. Derive the expression for its efficiency.
33. Explain the determination of surface tension by Quinck's method.
34. Determine the Young's modulus of the material of a cantilever loaded at one end.
35. Describes Lee's disc experiment to determine the thermal conductivity of a bad conductor.

(2 × 15 = 30 Marks)

Reg. No. :

Name :

First Semester B.Sc./B.Com./B.B.A./B.C.A./B.M.S./B.S.W./B.Voc. Degree
Examination, November 2019

Career Related First Degree Programme under CBCSS

Language Course — I

EN 1111/EN 111/EN 1111.4 : LANGUAGE SKILLS

(Common for Career Related 2(b) and B.Voc. Programmes)

(2019 Admission)

Time : 3 Hours

Max. Marks : 80

I. Answer **all** questions, each in a word or a sentence :

1. What does "channel" mean in communication?
2. What is entropy?
3. What is 'lingua franca'?
4. What is an active skill?
5. What is the primary difference between listening and hearing?
6. Why is communication considered as a biphasic process?
7. Why is English called Un-phonetic language?

P.T.O.

8. What is a syllable?
9. Question tags hold a _____ intonation.
10. What is bio-data?

(10 × 1 = 10 Marks)

II. Answer any **eight**, each in a short paragraph not exceeding **50** words :

11. Distinguish between micro-skills and macro skills.
12. What is plagiarism? Name some instances of plagiarism.
13. How can you keep up proper eye contact while engaging in a conversation?
14. Name some barriers to effective communication.
15. How is language acquisition different from language learning?
16. Which are the four types of reading?
17. How is editing classified?
18. What are the common characteristics of academic writing?
19. Write a paragraph about your dream job.
20. Role of gestures in communication.
21. Etiquette you have to bear in mind while engaging in a telephone conversation.
22. What are the do's and don'ts of netiquette?

(8 × 2 = 16 Marks)

III. Answer any **six**, each in a paragraph not exceeding **100** words :

23. Read the following passage carefully and answer all the questions that follow :

Deforestation, the act of clearing the forest land to serve different purposes, is a growing concern worldwide. It has led to numerous environmental problems. Some of these include the loss of wildlife, impact on biodiversity, climate change, global warming and impact on the water cycle.

Deforestation has disrupted the water cycle as well as the carbon cycle and thus attributed to climate change which in turn is causing numerous problems for humans as well as animals. Plants and trees inhale carbon dioxide and release oxygen which is one of the essentials for the human survival. Trees also absorb other harmful gases from the atmosphere thus making it cleaner. Deforestation leads to the loss of vast number of trees which in turn leads to an increase in the amount of carbon and poisonous gases such as methane in the atmosphere. This has contributed a great deal to the global warming.

Forests also play a significant role in managing the water cycle. Continuous cutting of forests is the root cause of disruption in the water cycle which causes erratic rainfalls in different regions. Deforestation also results in environmental imbalance by affecting the biodiversity adversely. Forests serve as safe habitats for a large species of flora and fauna. Clearing away the forest lands damages the habitat of these innocent creatures. Several species of animals and plants become extinct each day due to loss of habitat and lack of food. Our planet needs to sustain rich biodiversity in order to strike environmental balance. Deforestation thus creates an imbalance in the environment.

- (a) Why do people engage in deforestation?
- (b) How does deforestation affect climate change?
- (c) What are the effects of deforestation on environment?
- (d) How can we protect our flora and fauna?

24. Write an anchoring script for the prize distribution ceremony of state level athletic meet.

25. Write a report of the social extension activity conducted in your college.

26. You are interested in pursuing your higher studies abroad. You are making a telephone enquiry with the chairman of a reputed institution. What can be the contents of such a conversation? Write at least ten exchanges between you and the chairman about the course that you are interested in.
27. Write an email to a publisher enquiring about the availability of some important books that you require for your degree project.
28. Write minutes of a meeting that was arranged in connection with the forthcoming College arts festival.
29. Edit the following Passage :
- Bhimrao Ramji Ambedkar, affectionate known as Babasaheb Ambedkar, was the main architecture of our Constitution. The first meeting of the Constituent Assembly for this purpose was held on December 6, 1946. Ambedkar elected on August 29, 1947 as the chairman of the drafting committee. He was insistent that the guarantees of fundamental right be clear incorporated in the Constitution and that remedy for their enforcement be easily accessible and swift. He belief that unless the moral values of a Constitution is uphold, grandiloquent words will not protect the freedom and democracy values of people.
30. Write a blog on the need for healthy food habits.
31. Prepare a speech on the topic: Impact of Social Media in public life.

(6 × 4 = 24 Marks)

IV. Answer any **two** each in about **300** words :

32. Write notes for the following passage : (10-15 points)

You might have heard the term 'Health is Wealth', but its essential meaning is still not clear to most people. Generally, people confuse good health with being free of any kind of illnesses. While it may be part of the case, it is not entirely what good health is all about. In other words, to lead a healthy life, a person must be fit and fine both physically and mentally. For instance, if you are constantly eating junk food, yet you do not have any disease, it does not make you healthy. You are not consuming healthy food which naturally means you are not healthy, just surviving. Therefore, to actually live and not merely survive, you need to have the basic essentials that make up for a healthy lifestyle.

If you wish to acquire a healthy lifestyle, you will certainly have to make some changes in your life. Maintaining a healthy lifestyle demands consistent habits and disciplined life. There are various good habits that you can adopt like exercising regularly which will maintain your physical fitness. It also affects your mental health as when your appearance enhances, your confidence will automatically get boosted.

Further, it will prevent obesity and help you burn out extra fat from your body. After that, a balanced diet is of great importance. When you intake appropriate amounts of nutrition, vitamins, proteins, calories and more, your immune system will strengthen. This will, in turn, help you fight off diseases powerfully resultant in a disease-free life. Above all, cleanliness plays a significant role in maintaining a healthy lifestyle. Your balanced diet and regular exercise will be completely useless if you live in an unhealthy environment. One must always maintain cleanliness in their surroundings so as to avoid the risk of getting communicable diseases.

33. Write about the achievements in your life.
34. The following passage is in jumbled manner. Arrange them in the correct order so as to make a sensible passage. The first and last one is done for you :

Global warming has become a grave problem which needs undivided attention.

The natural causes include the release of greenhouses gases which increases temperature. It is not happening because of a single cause but several causes. Further, volcanic eruptions are also responsible for global warming. One of the most common issues that are taking place rapidly is deforestation. So, when one of the biggest sources of absorption of carbon dioxide will only disappear, there will be nothing left to regulate the gas. After that, the excessive use of automobiles and fossil fuels results in increased levels of carbon dioxide.

In addition, activities like mining and cattle rearing are very harmful to the environment. Thus, it will result in global warming. These causes are both natural as well as manmade. Similarly, methane is also one big issue responsible for global warming. That is to say, these eruptions release tons of carbon dioxide which contributes to global warming.

Steps must be taken immediately to stop global warming and make the earth better again.

35. Tata Motors is looking for Sales Executives in their newly opened showroom in Kochi. You saw the advertisement in a daily and like to apply for the same. Draft a covering letter and prepare a CV.

(2 × 15 = 30 Marks)

Reg. No. :

Name :

First Semester B.Sc. Degree Examination, November 2019
Career Related First Degree Programme under CBCSS
Complementary Course I for Physics and Computer Applications
MM 1131.6 : Mathematics I — CALCULUS, INFINITE SERIES AND
VECTOR ALGEBRA
(2019 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – I

All the first ten questions are compulsory. They carry 1 mark each :

1. State chain rule of differentiation.
2. Find the derivative of a^x .
3. State Rolle's Theorem.
4. State rule of integration by parts.
5. What is the mean value of a function $f(x)$ between $x = a$ and $x = b$?
6. Find the sum to infinity of a geometric series having first term $\frac{1}{2}$ and common ratio $\frac{1}{2}$.
7. Sum the series $S = 2 + \frac{5}{2} + \frac{8}{2^2} + \frac{11}{2^3} + \dots$

P.T.O.

8. State D'Alembert's ratio test.
9. What is vector triple product?
10. Define reciprocal vector.

(10 × 1 = 10 Marks)

SECTION – II

Answer **any eight** questions from among the questions 11 to 22. These questions carry **2** marks each.

11. Find the derivative with respect to x of $x^3 \sin x$.
12. Differentiate $\frac{\sin x}{x}$.
13. What are the three types of stationary points?
14. Evaluate $\int x^2 e^{-x^2} dx$.
15. Evaluate $\int_0^2 (2-x)^{-1} dx$.
16. Find the volume of a cone enclosed by the surface formed by rotating about x -axis the line $y = 2x$ between $x = 0$ and $x = b$.
17. Evaluate the sum $\sum_{n=1}^2 \frac{1}{n(n+2)}$.
18. Test for convergence the series $\sum_{n=1}^{\infty} \frac{1}{n^{!+1}}$.
19. Determine whether the series $\sum_{n=1}^{\infty} \left(\frac{1}{n}\right)^n$ is convergent.

20. Find $\mathbf{a} \cdot \mathbf{b}$, where $\mathbf{a} = \mathbf{i} + 2\mathbf{j} + 3\mathbf{k}$ and $\mathbf{b} = 2\mathbf{i} + 3\mathbf{j} + 4\mathbf{k}$.
21. Show that if $\mathbf{a} = \lambda \mathbf{c}$, for some scalar λ , then $\mathbf{a} \times \mathbf{c} = \mathbf{b} \times \mathbf{c}$.
22. Find the area of the parallelogram with sides $\mathbf{a} = \mathbf{i} + 2\mathbf{j} + 3\mathbf{k}$ and $\mathbf{b} = 4\mathbf{i} + 5\mathbf{j} + 6\mathbf{k}$.

(8 × 2 = 16 Marks)

SECTION – III

Answer **any six** questions from among the questions 23 to 31. These questions carry **4** marks each.

23. Find positions and number of stationary points of $f(x) = 2x^3 - 3x^2 - 36x + 2$.
24. Show that the radius of curvature at the point (x, y) on the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ has magnitude $\frac{(a^4y^2 + b^4x^2)^{3/2}}{a^4b^4}$ and the opposite sign to y .
25. Find the area of the ellipse with semi-axes a and b using its polar coordinates.
26. Find the length of the curve $y = x^{2/3}$ from $x = 0$ to $x = 2$.
27. Sum the series $S(x) = \frac{x^4}{3(0!)} + \frac{x^5}{4(1!)} + \frac{x^6}{5(2!)} + \dots$
28. Determine the range of values of z for which the complex power series $P(z) = 1 + \frac{z}{2} + \frac{z^2}{4} - \frac{z^3}{8} + \dots$ is convergent.
29. Find the angle between the vectors $\mathbf{a} = \mathbf{i} + 2\mathbf{j} + 3\mathbf{k}$ and $\mathbf{b} = 2\mathbf{i} + 3\mathbf{j} + 4\mathbf{k}$.
30. Find the volume of the parallelepiped with sides $\mathbf{a} = \mathbf{i} + 2\mathbf{j} + 3\mathbf{k}$, $\mathbf{b} = 4\mathbf{i} + 5\mathbf{j} + 6\mathbf{k}$ and $\mathbf{c} = 7\mathbf{i} + 8\mathbf{j} + 10\mathbf{k}$.
31. Find the minimum distance from the point P with coordinates $(1, 2, 1)$ to the line $\mathbf{r} = \mathbf{a} + \lambda \mathbf{b}$, where $\mathbf{a} = \mathbf{i} + \mathbf{j} + \mathbf{k}$ and $\mathbf{b} = 2\mathbf{i} - \mathbf{j} + 3\mathbf{k}$.

(6 × 4 = 24 Marks)

SECTION – IV

Answer **any two** questions from among the questions 32 to 35. These questions carry **15** marks each.

32. (a) State and prove Mean Value Theorem.
- (b) What semi-quantitative results can be deduced by applying Rolle's Theorem to the following functions
- (i) $\sin x$
 - (ii) $\cos x$
 - (iii) $x^2 - 3x + 2$
 - (iv) $x^2 + 7x + 3$.
33. (a) Find the surface area of a cone formed by rotating about the x-axis the line $y = 2x$ between $x = 0$ and $x = h$.
- (b) Evaluate $\int_0^{\infty} \frac{x}{(x^2 + a^2)^2} dx$.
34. Expand $f(x) = \cos x$ as a Taylor series about $x = \frac{\pi}{3}$.
35. The vertices of a triangle ABC have position vectors **a**, **b** and **c** relative to some origin O. Find the position vector of the centroid G of the triangle.

(2 × 15 = 30 Marks)

Reg. No. :

Name :

First Semester B.Sc./B.C.A. Degree Examination, November 2019

Career Related First Degree Programme Under CBCSS

Group 2(b) – Computer Science/Computer Applications

Group 2(a) – Physics with Computer Applications

**Foundation / Vocational Course – CS 1121/CP 1121/PC 1171 – COMPUTER
FUNDAMENTALS AND ORGANIZATION**

(2018 Admission onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A

(Very short answer type)

(One word to maximum of one sentences, Answer **all** questions)

1. What is an auxiliary storage?
2. What is DRAM?
3. Define ports and interfaces.
4. Write about any one CPU register.
5. What is POST?
6. What is DMA?

P.T.O.

7. Explain hit ratio.
8. Define CISC.
9. What is meant by Data transfer?
10. What is pipelining? (10 × 1 = 10 Marks)

SECTION – B
(Short answer)

(Not to exceed **one** paragraph. Answer **any eight** questions. Each question carries **two** marks)

11. What do you mean by instruction format?
12. What are the advantage of assembly language over high level language?
13. Explain any three Arithmetic Instructions.
14. What is meant by microinstructions?
15. Explain the role of DMA controller.
16. Explain Page Fault.
17. What do you mean by Pipelining of Operations?
18. Explain memory Interleaving.
19. What are the advantage of Multiprocessor System?
20. Define a cache memory.
21. What is an Interrupt?
22. What do you meant by Parallel Processing? (8 × 2 = 16 Marks)

SECTION – C

(Short Essay)

(Not to exceed 120 words. Answer **any six** questions. Each question carries **four** marks)

23. Explain about motherboard.
24. How an instruction is executed?
25. Explain the concept of Main Memory. What are the different types?
26. Explain Direct Memory Access.
27. Briefly discuss the different mapping techniques used in Cache memory system.
28. Explain different types of Input and Output Devices.
29. Explain Vector Processing.
30. What does 'Device Polling' means?
31. Explain about general purpose Multiprocessor. **(6 × 4 = 24 Marks)**

SECTION – D

(Long Essay)

(Answer any **two** questions. Each questions carries **fifteen** marks)

32. Explain in detail about secondary storage devices.
33. Explain the following
 - (a) SRAM
 - (b) ROM
 - (c) Asynchronous Data Transfer
34. Explain DMA, DMA Controller and DMA transfer modes.
35. Explain in detail about Instruction Format and Instruction cycles.

(2 × 15 = 30 Marks)

Reg. No. :

Name :

**First Semester B.Sc/B.Com/B.B.A/B.C.A/B.M.S/B.S.W.
Degree Examination, November 2019**

Career Related First Degree Programme Under CBCSS

Language Course I

EN 1111.4 – LISTENING, SPEAKING AND READING

(For Career Related 2(b) Courses)

(2016 Admission to 2018 Admission)

Time : 3 Hours

Max. Marks : 80

- I. Answer all questions in one or two sentences. Each question carries 1 mark.
1. What is aspiration?
 2. Write a word where // is silent.
 3. How many syllables are there in the word 'caricature'?
 4. Name a physical barrier in listening.
 5. What is good listening?
 6. Write two words where 'd' occurs initially.
 7. Write two common expressions for polite request.

8. Write a word where all the consonants are nasal.
9. Write the syllable structure of the word 'rustle'.
10. Write the last sound in the word 'ruse'.

(10 × 1 = 10 Marks)

II. Answer any **eight**, each in a short paragraph not exceeding 50 words.

11. Write some attributes of poor listening?
12. What are some barriers in listening?
13. What is word stress?
14. What is skimming?
15. How can you classify a reader according to his reading speed?
16. Explain the difference in pronunciation for (a) wanted (b) picked
17. What is intonation?
18. Transcribe the following words: (a) cure (b) wear
19. You went to see off a relative at the airport. Construct the dialogue.
20. You meet a friend of yours. Make a conversation with him about applying for a job.
21. Mention two ways of introducing your friend.
22. How do graphics and visual aids help in reading?

(8 × 2 = 16 Marks)

III. Answer any **six** each in a paragraph not exceeding 100 words.

23. Explain Extensive reading.

24. Transcribe the following words: rose, finish, camera, dogs, phonetics, killed, pure, theory.

25. What are form class and function class words?

26. Complete the conversation given below:

Arundhati : May I come in Sir?

Tutor : _____

Arundhati: Goodmorning Sir. Sir I would like to clarify certain doubts regarding my project if you aren't too busy.

Tutor : _____

Aruridhati: _____

Tutor: Yes there should be an Introduction wherein you give a brief outline of the things you plan to do.

Arundhati : _____

Tutor: The content is more important than the page numbers, Still there should be minimum 25 pages.

Arundhati : _____

Tutor: Start working on it. Bring the manuscript to me by the end of next week.

Arundhati : _____

Tutor : _____

27. Your friend is admitted in the hospital. You pay him a visit. Construct the dialogue.
28. Imagine the roles of a counter clerk and a customer at the bank. The customer wants to open an account. Construct a dialogue.
29. What are the deviations of Indian English from R.P.?
30. Scan the following poem and find answer to the following questions:

Mind Wanting More

Only a beige slat of sun
above the horizon, like a shade pulled
not quite down. Otherwise,
clouds. Sea rippled here and
there. Birds reluctant to fly.

The mind wants a shaft of sun to
stir the grey porridge of clouds,
an osprey to stitch sea to sky
with its barred wings, some dramatic
music: a symphony, perhaps
a Chinese gong.

But the mind always
wants more than it has –
one more bright day of sun,
one more clear night in bed
with the moon; one more hour

to get the words right; one
more chance for the heart in hiding
to emerge from its thicker
in dried grasses-as if this quiet day
with its tentative light weren't enough,
as if joy weren't strewn all around.

- (a) What does the mind want?
- (b) What is the sun likened to?
- (c) What is the theme of the poem?
- (d) What can one more hour do?

31. Read the passage intensively and answer the questions:

"I have a dream" is a public speech delivered by American civil rights activist Martin Luther King Jr. during the March on Washington for Jobs and Freedom on August 28, 1963, in which he calls for an end to racism in the United States and called for civil and economic rights. Delivered to over 2,50,000 civil rights supporters from the steps of the Lincoln Memorial in Washington D.C. the speech was a defining moment of the civil rights movement. Beginning with a reference to the Emancipation Proclamation which freed millions of slaves in 1863, he observes that "one hundred years later, the Negro is still not free". Toward the end of the speech he departed from his prepared text for a partly improvised one on the theme "I have a dream" prompted by Mahalia Jackson's cry: "Tell them about the dream, Martin!" In this part of the speech which most excited the listeners and has now become its most famous, he describes his dreams of freedom and equality arising from a land of slavery and hatred.

- (a) What issues does King's speech address?
- (b) What compelled him to use the phrase "I have a dream"?
- (c) Where was the address made?
- (d) What is his dream?

(6 × 4 = 24 Marks)

IV. Answer any **two** each in about **300** words.

32. Explain different kinds of reading.

33. Write an essay on the importance of various reading skills in student life.

34. Transcribe the following words:

foetus, endure, clerk, shuttle, judge, chef, machine, gather, sample, photograph, receipt, knot, magic, curtain, tall

35. You have to attend an interview in Chennai. You reach Chennai and you ask the local people about the way to your hotel. At the hotel you order your menu to the waiter. Then you ask them about the way to the office where the interview is being conducted. Construct the three dialogues.

(2 × 15 = 30 Marks)

Reg. No. :

Name :

First Semester B.A./B.Sc./B.Com. Degree Examination, November 2019

Career Related First Degree Programme under CBCSS

Language Course II

ML 1111.3 (Additional Language I) : ശബ്ദസാഹിത്യം

(2018 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

1. ഒരു വാക്കിലോ പരമാവധി രണ്ടു വാക്യത്തിലോ ഉത്തരമെഴുതുക.
 1. തകഴിയുടെ ആദ്യ നോവൽ ഏത്?
 2. 'അഗ്നി' എന്ന ചെറുകഥ രചിച്ചതാര്?
 3. 'പാരമ്പര്യവും വ്യക്തിപരമായ വാസനാവിശേഷവും' എന്ന ലേഖനം ആരുടേതാണ്?
 4. വ്യഭാസദനത്തിന്റെ ഡയറക്ടറുടെ പേരെന്ത്?
 5. "ഇന്ത്യയുടെ മംഗളമണിദീപമായ മഹാത്മജിയെ ദൈവാംശമാക്കുമ്പോൾ മാത്രമേ അദ്ദേഹം മരിക്കുന്നുള്ളൂ" - ഇങ്ങനെ പ്രസ്താവിച്ചതാര്?
 6. ശരിയായ പദം എടുത്തെഴുതുക.
 - (a) അതിഥി – അഥിതി
 - (b) സൂഷ്യാവ് – സ്രഷ്യാവ്

31. മലയാളത്തിലേക്ക് വിവർത്തനം ചെയ്യുക.

The man and writer in Kovilan are highly critical of the contemporary society and its dubious value system. Self-critically, he asserts that "Ours is a criminal society". His articles and speeches are cannons trained against the establishment. Neither age nor fame could dampen the fighting spirit of this old soldier.

(6 × 4 = 24 Marks)

IV. മൂന്നു പുറത്തിൽ കവിയാൽ രണ്ട് ചോദ്യത്തിന് ഉത്തരമെഴുതുക.

32. ഭാഷയുടെ തെളിച്ചവും അനുഭവങ്ങളുടെ ഛായയും കണ്ണീരും കിനാവും എന്ന ആത്മകഥയെ ഹൃദ്യമാക്കുന്നു - പരിശോധിക്കുക.

33. നാടകത്തിന്റെ അരങ്ങും അണിയറയും കർണ്ണപർവ്വത്തിന്റെ പ്രമേയാവിഷ്കാരത്തിൽ വഹിക്കുന്ന പങ്ക് വിലയിരുത്തുക.

34. കവിയുടെ ജീവചരിത്രം കവിതയുടെ അകപ്പൊരുൾ കണ്ടെത്തുന്ന അന്വേഷണമാണെന്ന് 'സ്നേഹിക്കുന്ന അസ്ഥിമാടം' സമർത്ഥിക്കുന്നതെങ്ങനെ?

35. 'വ്യഭാസദനം' എന്ന നോവലിനെ വ്യതിരിക്തമാക്കുന്നത് അതിന്റെ ഭാഷയും ആഖ്യാനസവിശേഷതകളുമാണ്. പരിശോധിക്കുക.

(2 × 15 = 30 Marks)