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TERM END EXAMINATION
SUMMER- 2018

PROGRAMME: DIPLOMA IN CE/EC/EE/ME/PP/CM/IF ENGINEERING

COURSE CODE & ITS TITLE: CC 561 ENTREPRENEURSHIP DEVELOPMENT

Time Allowed : 02 Hrs

Marks: 50

Instructions:

1. Write your Identity Code Number on question paper.
2. All questions are compulsory.
3. Illustrate your answers with neat sketches wherever necessary.
4. Use of non-programmable calculator is permissible.
5. Figures to the right indicate full marks.
6. Assume suitable additional data, - if necessary – and state the assumptions made.
7. Each sub-question in a question carries equal marks unless otherwise specified.

Marks

Q.1. Attempt any SEVEN.

14

- a) What is individual ownership?
- b) Explain "Partnership Deed".
- c) State any four barriers to Entrepreneurship.
- d) State any four needs to promote entrepreneurship.
- e) With reference to a firm (company). State any two strengths and two threats, for its business.
- f) State any four consumers where an entrepreneur can sell his products.
- g) State any four utilities of project report.
- h) Explain i) Book keeping ii) Liability
- i) Explain channels of distribution with reference to marketing.
- j) Explain modern concept of marketing.

Q.2. Attempt any TWO.

12

- a) Compare private limited with public limited company.
- b) State any six factors influencing entrepreneurship.
- c) What is balance sheet? Draw its typical format showing major components.

Q.3. Attempt any TWO.

12

- a) What is risk situation? Explain types of risk takers.
- b) What market information should collect entrepreneur in case of
 - i) Existing manufactures competitors.
 - ii) Consumers / customers
- c) State any six assumptions in project report.



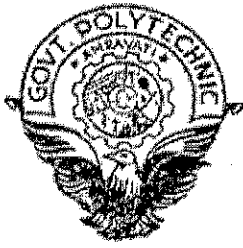
Q.4. Attempt any 'THREE.'

12

- a) Explain the importance of following competencies for successful entrepreneur
 - i) Need for independence
 - ii) Optimism
- b) What is the objective of project report? What do you understand by financial viability of project report?
- c) With reference to project report explain.
 - i) Fixed capital
 - ii) Working capital
 - iii) Depreciation
 - iv) Administrative expenses.
- d) State any four criteria for product selection.
- e) State need for market orientation.

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TERM END EXAMINATION
SUMMER - 2018

PROGRAMME: DIPLOMA IN CE/ME/EE/EC/CM/IF/PP ENGINEERING
COURSE CODE & ITS TITLE : CC1901 ENGLISH

Time Allowed : 03 Hrs

Marks: 80

Instructions:

1. Write your Identity Code Number on question paper.
2. All questions are compulsory.
3. Illustrate your answers with neat sketches wherever necessary.
4. Use of non-programmable calculator is permissible.
5. Figures to the right indicate full marks.
6. Assume suitable additional data, - if necessary – and state the assumptions made.
7. Each sub-question in a question carries equal marks unless otherwise specified.

Marks

Q.1. Answer the following questions in one sentence. (Any TEN)

20

- a) What is the principle of Ruskin Bond's book 'Unto this Last'?
- b) What does A.G.Gardiner abominate ?
- c) Which " Work Policy " did Kiran Bedi Follow?
- d) What resolution did G.B.Shaw carry out ?
- e) Why did Herman stay with his mother ?
- f) What does Gandhiji object to ?
- g) Who inspired Kalpana Chawla ?
- h) What is essential for the happiness, peace and prosperity ?
- i) What was Kiran Bedi determined about ?
- j) How did Shaw come out of his nervousness ?
- k) What was Kalpana's affinity towards ?
- l) What do the following stand for :
(i) PURA (ii) NASA
- m) Why did Joe and other cops stare at Thurber for a long time ?
- n) What is the difference between the painted face of age and youth ?

Q.2. Answer the following questions in four/five sentences. (Any THREE)

12

- a) How does Gardiner elaborate the beauty of sunrise and sunset ?
- b) What is the second vision as depicted in ' Vision for 2020'?
- c) How did Bernard Shaw secure perfect freedom of speech ?
- d) How are the astronauts prepared for water survival ?
- e) How did Kiran Bedi deal with her criminals in her 'Open door' policy ?



- Q.3.a)** Answer the following questions in about 150 words. (Any **ONE**) 08
- i) According to Dr. Kalam, what are the qualities of a magnetic leader ?
 - ii) Explain in your own words the impact of machinery on human life ?
- b)** Classify the following words under the given heads. 04
 [Adjective, Adverb, Verb, Noun]
 (i) Arrant (ii) Astronaut (iii) Slowly (iv) Regulate.
- Q.4. a)** Do as directed. (Attempt any **SIX**) 06
- i) They purchased a plot. [Add a question tag.]
 - ii) It is a great pity. [Make exclamatory]
 - iii) Health is better than wealth. [change the degree]
 - iv) Sometimes he tells lies. [Make Negative]
 - v) He is too young to marry. [Remove 'too']
 - vi) Renu likes coffee. [Change the voice]
 - vii) India expects that everyone should do his duty. [Make a simple sentence]
 - viii) Hard workintelligence has brought him success. [Use conjunction]
- b)** Attempt any **ONE**. 04
- I) Give the antonyms of the following :
 (i) Civilized (ii) Honour (iii) Simple (iv) Acceptance.
 - II) Give the synonyms of the following:
 (i) Brief (ii) Pride (iii) Gentle (iv) Knowledge.
- c)** Attempt any **ONE**. 02
- I) Fill in the blanks with appropriate Homophones.
 i) Yash was told to deposit ain the bank. (check, cheque)
 ii) The rat fell into the(whole, hole)
 - II) Give the homophones for the following words: see, week.
- Q.5. Attempt any TWO.** 12
- a) I) Punctuate and rewrite the following sentences. [Marks 04]
 (i) the problem is this which came first the hen or egg?
 (ii) The biggest cities in india are kolkatta, mumbai, chennai, delhi, and hydrabad.
 - II) Insert appropriate articles. [Marks 02]
 (i) Bill is American but Robinson isEuropean.
 (ii) This isHistoric occassion.
- b)** I) Change the following into indirect speech. [Marks 04]
 (i) "Who put salt in my coffee ?" he asked.
 (ii) He said, "My wife has just been made a lecturer."
- II) Correct the errors in the following sentences [Marks 02]
 (i) His hairs have turned grey.
 (ii) I have lost a ten- rupees note.



c) I) Insert appropriate preposition. [Marks 04]

(by, from, for, below, under, with)

(i) The examination will be held 10a.m. to 1p.m.

(ii) He isme in the office.

(iii) The competition will be over5 p.m.

(iv) The child has been sleepingthree hours.

II) Change the tense of the following sentences [Marks 02]

(i) He asked a question. [Change into simple present tense]

(ii) I go to work everyday. [Change into simple past tense]

Q.6. Attempt any **TWO**.

a) Develop a well organized paragraph in about 75 words. [Marks 06]

Internet Surfing.

b) Read the passage carefully and answer the questions given below. [Marks 06]

Some people think the aim of education is merely to give knowledge. These people want students to read books; books only and do nothing else but add to their knowledge. Other believes that knowledge alone is not enough; only that which enables man to earn his living can be called education. Such people think that bread is more important than anything else. Still others believe that education should aim solely at making good patriots. All these people see only one of the several purposes of education. As a matter of fact, education should aim at all these things together. It should give men knowledge, make them self- reliant and able to serve other. Education should not produce citizens who, while they love their own freedom, take away the freedom of others. It should produce men who love their own country but don't want to harm others.

Questions:

a) What do some people think to be the aim of education ?

b) What is the true aim of education ?

c) What kind of citizens should education produce ?

d) Find out the words from the passage which mean the following :

(i) Depending on one's own abilities.

(ii) Loyal to one's own Country

e) Write the meanings of the given words-

(i) Enable (ii) Solely

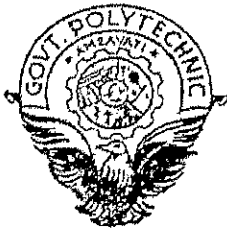
f) Suggest a suitable title for the passage.

c) Find the following text and using contextual clues supply the missing words from the list given below. [Marks 06]

[Greedy, Sufficient, hold, strange, possess, contained]

Once a man hadgoose. It laid a golden egg everyday. The man was very lucky to Such a precious creature. But he wastoo. One day he thought, " One golden egg a day is not I shall kill the goose and get of all the gold in it."





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TERM END EXAMINATION
SUMMER - 2018

PROGRAMME: DIPLOMA IN CE/ME/EE/EC/CM/IF/PP ENGINEERING

COURSE CODE & ITS TITLE : CC1902- BASIC PHYSICS

Time Allowed : 03 Hrs

Marks: 80

Instructions:

1. Write your Identity Code Number on question paper.
2. All questions are compulsory.
3. Illustrate your answers with neat sketches wherever necessary.
4. Use of non-programmable calculator is permissible.
5. Figures to the right indicate full marks.
6. Assume suitable additional data, - if necessary – and state the assumptions made.
7. Each sub-question in a question carries equal marks unless otherwise specified.

Marks

Q.1. Attempt any TEN.

20

- a) Classify the following units as a fundamental unit and derived unit- Joule, Ampere, Candela and Newton.
- b) Draw stress – strain diagram for high tension steel, cast iron, aluminium and concrete.
- c) Two capillary tubes of diameter 0.12 cm and 0.08 cm are dipped in liquid if the liquid rises to 4.8 cm in narrower tube calculate the rise of liquid in the other tube.
- d) Write definition of coefficient of viscosity and state its SI unit.
- e) Write definitions of resonance and reverberation time.
- f) The velocity of wave is 344 m/sec and its wavelength is 0.688 m calculate the frequency.
- g) State two applications of expansion of solid.
- h) Find the thickness of glass plate if the temperature difference is 50°C and the temperature gradient is $5^{\circ}\text{C}/\text{cm}$.
- i) Write definitions of diffraction of light and polarization of light.
- j) The velocity of light in air is 3×10^8 m/sec and velocity while travelling in water is 2.4×10^8 m/sec. Find refractive index of water.
- k) State any two assumptions of Huygen's wave theory of light.
- l) State any two applications of Holography.
- m) An accelerated electron emits a photon of frequency 4×10^{18} Hz, Calculate the energy of photon.
Given $h = 6.625 \times 10^{-34}$ J.sec.
- n) State any two applications of x-ray in Engineering.

Q.2. Attempt any THREE.

12

- a) Write definition of unit. State any three requirement of good unit.
- b) Write definition of error. State and explain in brief three types of error.
- c) Find the percentage error in the measurement of $V = \pi r^2 h$.
if $r = 0.57 \pm 0.02$ cm and $h = 27.2 \pm 0.2$ cm.
- d) Write definition of Young's modulus, Bulk modulus and Modulus of rigidity. State the relation between them.
- e) A weight exerts a force of 40N on a steel wire of length 5m and cross sectional area 0.01 cm^2 . Find the extension produced in wire if Young's modulus for steel is $2 \times 10^{11} \text{ N/m}^2$.



Q.3. Attempt any THREE.

12

- a) Write definition of the following.
 - i) Surface tension
 - ii) capillarity
 - iii) Angle of contact
 - iv) molecular range.
- b) Water rises to a height of 2.5 cm in capillary tube of diameter 1mm. Find the surface tension if the density of water is 1000 Kg/m^3
- c) State Newton's law of viscosity. Obtain expression for coefficient of viscosity. Write definition of coefficient of viscosity.
- d) A spherical ball of radius 2.2 mm and density $8 \times 10^3 \text{ Kg/m}^3$ falls through a liquid of density $1.3 \times 10^3 \text{ Kg/m}^3$. Find the terminal velocity if $\eta = 0.45 \text{ Ns/m}^2$.
- e) Write any four points of distinction between transverse wave and longitudinal wave.

Q.4. Attempt any THREE.

12

- a) Write definition of the following.
 - i) amplitude
 - ii) frequency
 - iii) wavelength
 - iv) periodic time.
- b) A tuning fork of 480 Hz resonates with an air column of length 14.4 cm. The end correction is 6 mm. Calculate the velocity of sound in air.
- c) State and explain any four factors to be consider which affect acoustical planning of building.
- d) The inside and outside temperature of glass window pane 3mm thick are 25°C and 20°C respectively, Find its area if 40 Kcal of heat escape in a minute.
Given $K = 0.0002 \text{ Kcal/m}^0\text{C sec}$.
- e) Write definition of coefficient of linear expansion, coefficient of surface expansion, coefficient of volume expansion and state relation between them.

Q.5. Attempt any TWO.

12

- a) i) State prism formula with meanings of symbols. (02)
 - ii) The angle of minimum deviation for a prism of refraction angle 60° is 42° . Find the refractive index of the prism. (04)
- b) i) Write definitions of fringe width and wavefront. (02)
 - ii) State any four conditions for obtaining steady interference pattern. (04)
- c) i) State two conditions each for constructive and destructive interference of light. (02)
 - ii) In Young's experiment the distance between two slits is 0.8 mm and the distance of screen from slit is 1.2 m. If the fringe width is 0.75 mm, calculate the wavelength of light. (04)

Q.6. Attempt any TWO.

12

- a) i) State ant two properties of LASER. (02)
 - ii) Define the following term pumping, population inversion, stimulated emission and spontaneous emission. (04)
- b) i) State any four applications of photo cell. (02)
 - ii) A light of wavelength 4000 \AA is incident on metal surface of work function 5ev. Will the electrons be ejected or not ? (04)
Given $h = 6.625 \times 10^{-34} \text{ JS}$, $1 \text{ ev} = 1.6 \times 10^{-19} \text{ J}$, $C = 3 \times 10^8 \text{ m/sec}$.
- c) i) State any four properties of x-ray. (02)
 - ii) Find the minimum wavelength and maximum frequency of x-ray produced by an x-ray tube working on 40KV. (04)
Given $h = 6.625 \times 10^{-34}$, $1 \text{ ev} = 1.6 \times 10^{-19}$, $C = 3 \times 10^8 \text{ m/sec}$.





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TERM END EXAMINATION
SUMMER - 2018

PROGRAMME : DIPLOMA IN CE/ME/EE/EC/CM/IF/PP ENGINEERING
COURSE CODE & ITS TITLE: CC1904 BASIC MATHS

Time Allowed : 03 Hrs

Marks: 80

Instructions:

1. Write your Identity Code Number on question paper.z
2. All questions are compulsory.
3. Illustrate your answers with neat sketches wherever necessary.
4. Use of non-programmable calculator is permissible.
5. Figures to the right indicate full marks.
6. Assume suitable additional data, - if necessary - and state the assumptions made.
7. Each sub-question in a question carries equal marks unless otherwise specified.

Marks

Q.1. Attempt any TEN.

20

- a) Evaluate ; $(32)^{\log_2 5}$
- b) Resolve into partial fraction ; $\frac{2x+12}{x^2-4x-12}$
- c) Resolve into partial fraction ; $\frac{x+1}{(2x+1)^2}$
- d) Solve ; $\begin{vmatrix} x & 2 \\ 3 & (x-1) \end{vmatrix} = 0$
- e) Solve using determinants, $x+2y=3$; $x+3y=1$
- f) Find $A^2 - 7A$; if $A = \begin{bmatrix} 2 & 1 \\ 0 & 2 \end{bmatrix}$
- g) Verify that $(A+B)^T = A^T + B^T$; if $A = \begin{bmatrix} 1 & 3 \\ 2 & 4 \end{bmatrix}$; $B = \begin{bmatrix} 2 & -1 \\ 3 & 2 \end{bmatrix}$
- h) Find Fifth Term in the expansion of $\left(x + \frac{1}{x}\right)^8$
- i) If $\theta = 45^\circ$ find the value of $\cos \theta/2$.
- j) Show that ; $\sqrt{\frac{1+\sin \theta}{1-\sin \theta}} = \sec \theta + \tan \theta$
- k) Prove that ; $\cos 2A = 1 - 2 \sin^2 A$
- l) Find the value of $\sin 15^\circ$ if $\sin 30^\circ = \frac{1}{2}$
- m) Find the unit vector parallel to the vector $2\vec{i} + \vec{j} - 4\vec{k}$
- n) Find $\cos \theta$ where θ is the angle between the vectors $\vec{i} + 2\vec{j} + 2\vec{k}$ and $\vec{i} - 2\vec{j} + 2\vec{k}$

Q.2. Attempt any THREE.

- a) Find x if $\frac{2 \log 7 \times \log x}{\log 343} = \log 9 + \log 4$
- b) Solve ; $\log_2 (x+5) + \log_2 (x-2) = 3$
- c) Resolve into partial fraction ; $\frac{8x-4}{3x^2-2x-1}$

12



d) Resolve into partial fraction, $\frac{3x^2 + 17x + 14}{x^3 - 8}$

e) The voltages in an electric circuits are related by the following equations.

$$V_1 + V_2 + V_3 = 9 ; V_1 - V_2 + V_3 = 3 ; V_1 + V_2 - V_3 = 1 \text{ Find } V_1, V_2, V_3 \text{ using Cramer's rule.}$$

Q.3. Attempt any THREE.

12

a) Show that AB is a non-singular matrix if matrices

$$A = \begin{bmatrix} -2 & 0 & 1 \\ 1 & 2 & 3 \end{bmatrix}; \quad B = \begin{bmatrix} 0 & 1 \\ 2 & 3 \\ 1 & 1 \end{bmatrix}$$

b) Prove that ; $\sin 3A - 3\sin A - 4\sin^3 A$.

c) Show that $A^2 - 4A$ is a scalar matrix if $A = \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{bmatrix}$

d) Show that $\text{Adj } B = 3 B^T$ if $B = \begin{bmatrix} -1 & -2 & -2 \\ 2 & 1 & -2 \\ 2 & -2 & 1 \end{bmatrix}$

e) Solve the equation by matrix method $2x + y = 3 ; 2y + 3z = 4, 2x + 2z = 8$

Q.4. Attempt any THREE.

12

a) Show that ; $(\sqrt{3} + 1)^4 + (\sqrt{3} - 1)^4 = 56$, using Binomial theorem.

b) Find the term independent of x in the expansion $\left(x - \frac{2}{x^2}\right)^{12}$

c) Solve ; $\begin{vmatrix} 1 & x & x^2 \\ 1 & 2 & 4 \\ 1 & 3 & 9 \end{vmatrix} = 0$

d) Prove that ; $\frac{\cos A}{1 + \sin A} + \frac{1 - \sin A}{\cos A} = 2(\sec A - \tan A)$

e) Resolve into partial fraction ; $\frac{3x + 2}{(x + 1)(x^2 - 1)}$

Q.5. Attempt any TWO.

12

a) Prove that ; $\tan^{-1}\left(\frac{3}{4}\right) + \tan^{-1}\left(\frac{3}{5}\right) - \tan^{-1}\left(\frac{8}{19}\right) = \frac{\pi}{4}$

b) Show that $\cos^2 A + \cos^2 B + \cos^2 C = 1 - 2 \cos A \cos B \cos C$ for triangle ABC.

c) Show that ; $\frac{\sin 2A + 2 \sin 4A + \sin 6A}{\sin A + 2 \sin 3A + \sin 5A} = \cos A + \sin A \cot 3A$

Q.6. Attempt any TWO.

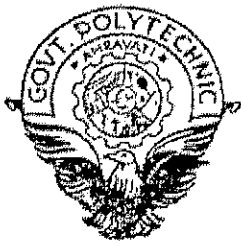
12

a) Show that the vectors $2\vec{i} - \vec{j} + \vec{k}$, $\vec{i} - 3\vec{j} - 5\vec{k}$ and $3\vec{i} - 4\vec{j} - 4\vec{k}$ form the sides of a right angled triangle. Also find remaining angles of the triangle.

b) A particle is displaced from a point whose position vector is $5\vec{i} - 5\vec{j} - 7\vec{k}$ to the point $6\vec{i} + 2\vec{j} - 2\vec{k}$ under the action of the forces $10\vec{i} - \vec{j} + 11\vec{k}$, $4\vec{i} + 5\vec{j} + 6\vec{k}$, $-2\vec{i} + \vec{j} - 9\vec{k}$. Find work done.

c) Find the moment of forces $2\vec{i} + \vec{j} + \vec{k}$, $-\vec{i} - \vec{j} - \vec{k}$ and $3\vec{i} - 2\vec{j} + 2\vec{k}$ acting at a point $(-2, 1, 2)$ About the point $(1, 1, 1)$.





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TERM END EXAMINATION
SUMMER - 2018

PROGRAMME: DIPLOMA IN CE/ME/EE/EC/CM/IF/PP ENGINEERING
COURSE CODE & ITS TITLE : CC1905 – APPLIED MATHEMATICS

Time Allowed : 03 Hrs

Marks: 80

Instructions:

1. Write your Identity Code Number on question paper.
2. All questions are compulsory.
3. Illustrate your answers with neat sketches wherever necessary.
4. Use of non-programmable calculator is permissible.
5. Figures to the right indicate full marks.
6. Assume suitable additional data, - if necessary – and state the assumptions made.
7. Each sub-question in a question carries equal marks unless otherwise specified.

Marks

Q.1. Attempt any TEN.

20

- a) Find the co-ordinates of centroid of triangle whose vertices are (2,-1), (8,-2), (8,6).
- b) Find the area of Triangle whose vertices are (-8,-2), (-4,-6), (-1,5)
- c) The equation of straight line is $3x-2y = 6$. Find its slope and y – intercept.
- d) Find the perpendicular distance between point (3,-2) and line $4x-6y = 5$.
- e) Find the angle between the two lines :
 $y = 5x + 6$ and $y = x$.
- f) If $f(x) = 16^x + \log_4 x$ find $f\left(\frac{1}{2}\right)$.
- g) Show that the function $f(x) = \log\left(x + \sqrt{x^2 + 1}\right)$ is odd function.
- h) Evaluate : $\lim_{x \rightarrow 3} \frac{x^3 - 27}{(x-3)}$
- i) Evaluate : $\lim_{\theta \rightarrow 0} \frac{\sin 3\theta}{\tan 4\theta}$
- j) Evaluate : $\lim_{x \rightarrow \infty} \left(1 + \frac{2}{x}\right)^x$
- k) Find : $\frac{dy}{dx}$ if $y = (3x + 8)^5$
- l) Differentiate w. r. t. 'x' $y = x^{\sqrt{x}}$
- m) If $x^2 - 3xy + 2y^2 = 0$ find $\frac{dy}{dx}$
- n) Differentiate w.r.t. 'x' if $y = \cos^{-1}(\sin 4x)$



Q.2. Attempt any THREE.

12

- a) Show that the points A (-1,-4), B (4,6), C(-4,10) are vertices of right angle triangle also find the area of ΔABC .
- b) Find the perpendicular distance between the lines $3x + 4y + 5 = 0$ and $6x + 8y = 25$
- c) Find the equation of straight line passing through (-4,-3) and parallel is the line $4x - y - 1 = 0$
- d) Find the equation of straight line through the point (-3,10) and the sum of whose x and y intercepts is 8.
- e) Find the slope and y - intercepts on y - axis for the line $\frac{x}{2} - \frac{y}{3} = \frac{1}{4}$.

Q.3. Attempt any THREE.

12

- a) Find the equation of circle whose diameter is the line joining the points (-3,4) and (1,-8). Also find and Radius of the circle.
- b) Find the equation of circle through the point (6,4) and concentric with the circle $x^2 + y^2 - 4x - 2y - 35 = 0$
- c) Find which of the two circle is greater $x^2 + y^2 - 3x + 4y = 0$ and $x^2 + y^2 - 6x + 8y = 0$
- d) Find the equation of tangent and normal is the circle $x^2 + y^2 + 3x - 4y = 0$ at (1,2)
- e) Show that the line $7y - x = 5$ touches the circle $x^2 + y^2 - 5 = 0$

Q.4. Attempt any THREE.

12

- a) If $f(x) = \frac{x+5}{3x-4}$ and $t = \frac{5+4x}{3x-1}$ show that $f(t) = x$
- b) Find x, if $f(x+1) = f(x+2)$ when $f(x) = x^2 + 3x - 4$.
- c) Evaluate : $\lim_{x \rightarrow 3} \left[\frac{1}{(x-3)} - \frac{3}{x(x^2 - 5x + 6)} \right]$
- d) Evaluate : $\lim_{x \rightarrow \pi/4} \frac{\sec^2 x - 2}{\tan x - 1}$
- e) Evaluate : $\lim_{x \rightarrow 0} \frac{4^x + 4^{-x} - 2}{x^2}$

Q.5. Attempt any TWO.

12

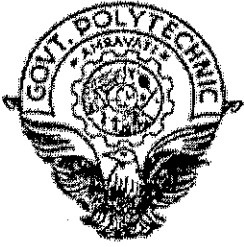
- a) i) Find $\frac{dy}{dx}$ if $y = \log [\sin \sqrt{x}]$ ii) Find $\frac{dy}{dx}$ if $y = \sin x \cdot (x^3 + x^2 + 1)$
- b) Differentiate w.r.t. 'x'
 $y = (x)^x + (x)^{\tan x}$
- c) If $x = a(1 + \cos \theta)$ and $y = a(\theta + \sin \theta)$
Find $\frac{d^2y}{dx^2}$ at $\theta = \pi/2$

Q.6. Attempt any TWO.

12

- a) Find the equation of tangent to the curve $y = x^2 - 2x - 3$ where it cuts the x axis.
- b) A particle moves under the law :
 $25 = t^3 - t^2 - t + 10$.
Find i) Its velocity at the end of 4 seconds
ii) Its acceleration and displacement when its velocity is zero.
- c) Find the maximum and minimum value of $x^3 - 9x^2 + 24x$.





GOVT. POLYTECHNIC, AMRAVATI.
(An Autonomous Institute of Govt. of Maharashtra)

Write Identity Code

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TERM END EXAMINATION

SUMMER - 2018

PROGRAMME : DIPLOMA IN CE/ME/EE/EC/CM/IF/PP ENGINEERING

COURSE CODE & ITS TITLE: CC 1908 COMMUNICATION SKILLS

Time Allowed : 03 Hrs

Marks: 80

Instructions:

1. Write your Identity Code Number on question paper.
2. All questions are compulsory.
3. Illustrate your answers with neat sketches wherever necessary.
4. Use of non-programmable calculator is permissible.
5. Figures to the right indicate full marks.
6. Assume suitable additional data, - if necessary – and state the assumptions made.
7. Each sub-question in a question carries equal marks unless otherwise specified.

Marks

Q.1. Attempt any TEN

20

- a) State the five elements of a communication cycle.
- b) Mention the different stages in the process of communication.
- c) Explain the process of encoding and decoding in brief.
- d) 'Channel selection , plays a vital role in the process of communication'. Discuss.
- e) What is the difference between oral and written communication.
- f) Define Non-Verbal communication and explain its two sub-types.
- g) What is diagonal communication. Give one example.
- h) 'Formal communication is rule bound communication.' Explain.
- i) What are the principles of effective communication?
- j) Explain psychological barrier with one example.
- k) State the stages in developing effective messages.
- l) What are the non-verbal codes of communication?
- m) State the various aspects of body language.
- n) Mention any four advantages of Graphic communication.

Q.2. Attempt any THREE.

12

- a) Explain the cycle of communication with a neat diagram.
- b) State the various types of communications in brief.
- c) Explain noise, time, distance as physical barrier of communication.
- d) 'Minimizing barrier and facilitating feedback make communication effective.' Explain.
- e) How the generation gap proves to be a barrier. Explain by giving two example.



Q.3. Attempt any THREE.

12

- a) As the principal of your college, draft a notice informing the students about Blood Donation Camp organized by your college.
- b) As the Workshop Incharge, devise a memorandum to the first year students on the following points :
Subject : Use of mobile phones during practicals.
Purpose : Warning of stern action.
- c) Write a circular for the workers of your company informing them about the new company uniform available in the store department
- d) Draft a notice, informing the members about the fourth annual meeting of the Board of Directors. The notice should contain time, date and venue of the meeting.
- e) Some workers of your company reporting late to the work and it is affecting the production. As the production manager draft a memorandum to these workers warning them about the stern action against them.

Q.4. Attempt any THREE.

12

- a) Explain the following with one example each. I) Haptics II) Vocalics.
- b) Identify the non-verbal codes in the following expressions.
 - i) Touching the feet
 - ii) Tapping the shoulder
 - iii) Maintaining distance
 - iv) Crying in pain.
- c) How does proxemics affect communication?
- d) Represent the following data in a bar graph of production of two-wheeler bikes.

Sr.No	No. of units	Years
1	350	2010
2	525	2011
3	640	2012
4	900	2013

- e) Prepare a pie chart using the following information.

Use of building material in a construction work.

Cement : 28%

Sand : 32%

Steel bars : 22%

Bricks : 18%



Q.5 a) Write a job application to Mayank Industries Pvt. Ltd. Along with a resume for the post of mechanical engineer. **06**

b) Attempt any **ONE**. **06**

i) Your production unit is not meeting the target set by the company because of various reasons. As the production manager, write a report on fall in production to the general manager. Also mention the details, causes and remedies for improvement.

ii) A first year student met an accident during performing the practicals. As the Workshop Superintendent write an accident report with suitable format.

Q.6. Attempt any **TWO**.

12

a) Describe in about 35-40 words : i) Laptop ii) Mobile phone

b) Write an order letter to Prakash Book Depot, Sadar Bazar, Barailly, ordering for various books you need.

c) Write a letter of complaint to Bharati Enterprises, Mumbai-400 00, for the goods received in damaged form.

