

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY**

School of General Education
Session: 2021-22(Winter Semester)
B. Voc. Program, 1st Semester
2nd In-Sem. Examination

Course Code: GEN1101
Course Name: English Language and Comprehension

Time: 1 Hour
Max. Marks: 20

Section-A**(1*5=5)**

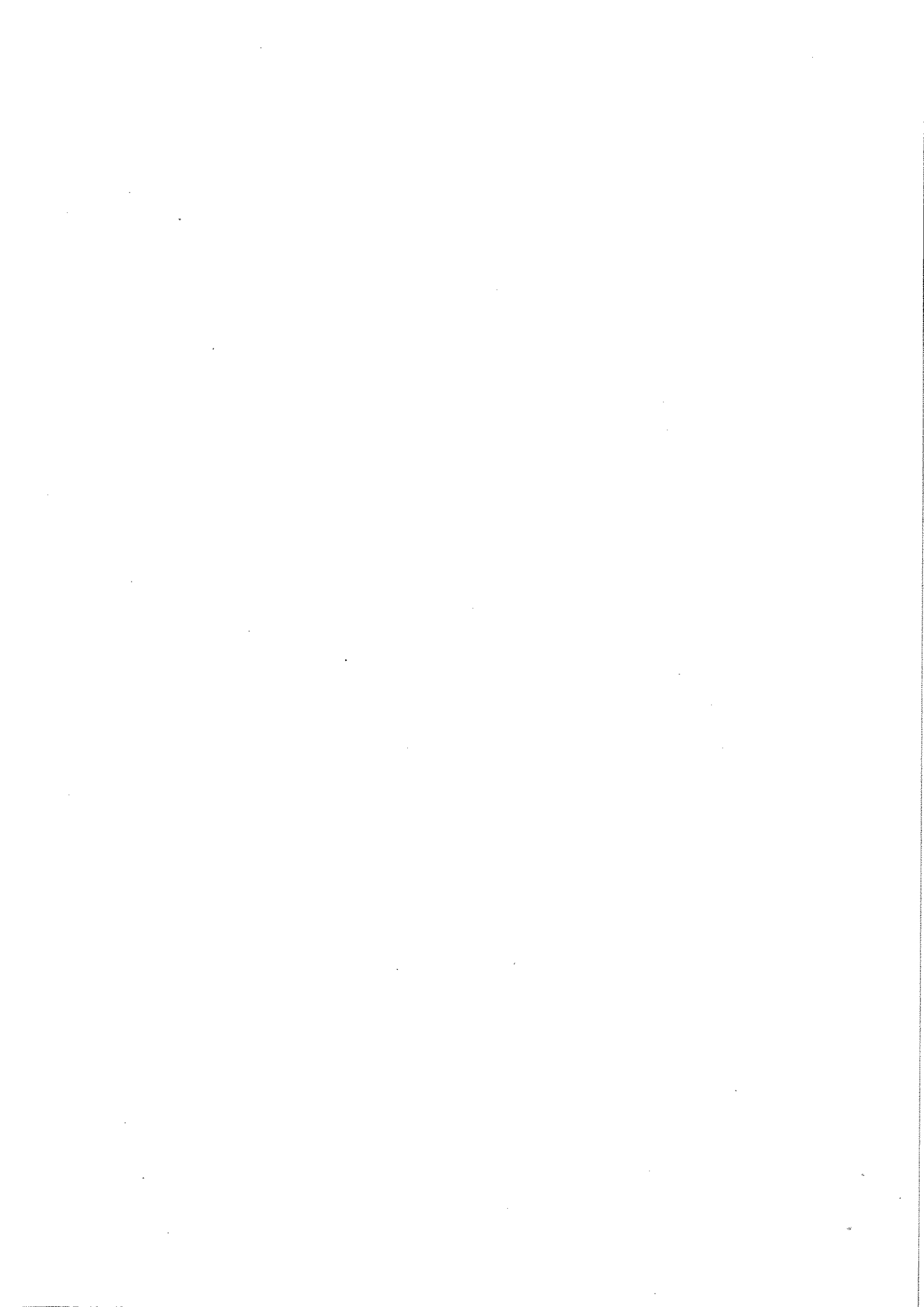
- Q1.** Fill in the blank with correct option:
Where will _____ go from here? (us/you)
- Q2.** State whether the following sentence is True or False:
Miss Sullivan was strict but kind. (True)
- Q3.** Fill in the blank with the appropriate degree of comparison.:
This summer isthan the previous summer. (hot/hotter)
- Q4.** Arrange the following jumbled words to make a sensible sentence:
was /not / pleasant /he/ kind/ or
- Q5.** State the superlative degrees of the following words:
a) Beautiful
b) Good

Section-B**(2*3=6)**

- Q6.** Describe Helen Keller as a child?
- Q7.** Explain the lines with reference to the context:
Stop crying, Rip. The old man won't hurt you.
- Q8.** State the comparative and superlative degrees of the following words:
(a) Big (b) Difficult

Section-C**(3*3=9)**

- Q9.** Write the summary of the story, Rip Van Winkle.
- Q10.** Arrange the following jumbled words to make sensible sentences:
(a) was/ a /velu/ fisherman
(b) till/you/come back/wait/here/shall/i
(c) friends/books/our/best/are
- Q11.** Complete the following sentences using suitable pronouns:
(a) Her house is situated opposite to _____. (me/mine)
(b) I have five flowers. _____all are pink. (they/them)
(c) I like people _____ speak the truth. (whom/who)
(d) The house in _____we live is very old. (which/who)
(e) What is _____? (this/these)
(f) The old man often talks to _____. (himself/yourself)



**BHARTIYA SKILL DEVELOPMENT UNIVERSITY**

School of General Education
Session: 2020-21 (Winter Semester)
B. Voc. Program, 1st Semester
2nd In-Sem. Examination

Course Code: GEN1101

Time: 1 Hour

Course Name: English Language and Comprehension

Max. Marks: 20

Instructions:

1. All questions are compulsory.
2. The question paper comprises three sections A, B & C. Marks allotted are mentioned against each section.

Section-A**(1*5=5)****Q1.** Fill in the blank with correct option:

Where will _____ go from here? (us/you)

Q2. State whether the following sentence is True or False:Miss Sullivan was strict but kind. (**True**)**Q3.** Fill in the blank with the appropriate degree of comparison.:This summer isthan the previous summer. (hot/**hotter**)**Q4.** Arrange the following jumbled words to make a sensible sentence:

was /not / pleasant /he/ kind/ or

He was not pleasant or kind.**Q5.** State the superlative degrees of the following words: -a) Beautiful- **Most beautiful**b) Good - **Best****Section-B****(2*3=6)****Q6.** Describe Helen Keller as a child?**Ans.** She would not let anyone comb her hair. Her clothes were always dirty. She was often angry. Sometimes, she even lay on the floor and kicked her feet.**Q7.** Explain the lines with reference to the context.*Stop crying, Rip. The old man won't hurt you.***Ans.** The above statement has been taken from the story, Rip Van Winkle. The young woman said this to her child because he started crying looking at the old man.**Q8.** State the comparative and superlative degrees of the following words:(a) Big- **Bigger Biggest**(b) Difficult- **More difficult Most difficult****Section-C****(3*3=9)**

Q9. Write the summary of the story, Rip Van Winkle.

Ans. Rip Van Winkle was a simple, kind hearted man who lived in a small village in North America. He told good stories and so the children loved him. Rip's only problem was that he was lazy and spent his time shooting, fishing and dreaming.

One day, Rip went to the Catskill Mountains. He saw a strangely dressed man who was trying to lift a big barrel. Rip kindly lifted the barrel and went up the mountain. When they came to a level field, Rip saw seven men playing a game. They gave him something to drink. After drinking, Rip fell asleep.

When Rip woke up everything had changed. He went to his village and could not recognize anything. He also had become an old man. He saw a young woman with a baby. She told him that her father's name was Rip. Rip was very happy to see his daughter. He went and lived in her house very happily.

Q10. Arrange the following jumbled words to make sensible sentences:

- (a) was/ a /velu/ fisherman **Velu was a fisherman.**
- (b) till/you/come back/wait/here/shall/i **I shall wait here till you come back.**
- (c) friends/books/our/best/are **Books are our best friends.**

Q11. Complete the following sentences using suitable pronouns:

- (a) Her house is situated opposite to _____. (me/mine)
- (b) I have five flowers. _____ all are pink. (they/them)
- (c) I like people _____ speak the truth. (whom/who)
- (d) The house in _____ we live is very old. (which/who)
- (e) What is _____? (this/these)
- (f) The old man often talks to _____. (himself/yourself)

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY**

School of General Education

Session: 2021-22(Winter Semester)

B. Voc. Program, 1st Semester,2nd In-Sem. Examination

Course Code: GEN 1103

Time: 1 Hour

Course Name: Applied Mathematics

Max. Marks: 20

Instruction:

1. All questions are compulsory.
2. Missing data if any can be suitably assumed.
3. Calculator is not permitted.

Section – A

05×01 = 05 Marks

Q1. $\lim_{x \rightarrow 0} 2x^4 + 5x + 14 =$

- (a) 21 (c) 7
(b) 14 (d) 0

Q2. $\lim_{x \rightarrow 1} 6x^3 (x^5 + 1) =$

- (a) 36 (c) 12
(b) 6 (d) 8

Q3. If $f(x) = x^2 + 2x + 3$, then what is $f(2)$?

- (a) 3 (c) 2
(b) 6 (d) 11

Q4. Which of the following is the derivate of $y = abx^2 + 9x$:

- (a) $\frac{dy}{dx} = ab + 9$ (c) $\frac{dy}{dx} = 2abx^2 + 9$
(b) $\frac{dy}{dx} = 2abx + 9$ (d) $\frac{dy}{dx} = x^2 + 9$

Q5. Given $y = 5e^x$, then $\frac{dy}{dx}$ is

- (a) e^x (c) $5e^x$
(b) 5 (d) $5xe^{x-1}$

Section – B

03×02 = 06 Marks

Q6. Evaluate: $\lim_{x \rightarrow 2} \frac{x^2 - 4}{x - 2}$.

Q7. Evaluate: $\lim_{x \rightarrow 0} \frac{\sqrt{1+x} - \sqrt{1-x}}{x}$.

Q8. If $y = \frac{\sin x}{x^2}$, find dy/dx .

Section – C

03 × 03 = 09 Marks

Q9. Evaluate: $\lim_{x \rightarrow 1} \frac{x-1}{2x^2 - 7x + 5}$.

Q10. If $y = \frac{e^x + 1}{e^x - 1}$, find dy/dx .

Q11. If $y = (x^3 - 4x^2 + 1)(x^2 + 3)^5$, find dy/dx .

Answer Key

Applied Mathematics (VIEN 1103)

2nd Trm. Sem. Examination

Q1 (b) Q2 (c) Q3 (d) Q4 (b) Q5 (c)

Q6 $\lim_{x \rightarrow 2} \frac{(x-2)(x+2)}{(x-2)} = 4$

Q7 $\lim_{x \rightarrow 0} \frac{\sqrt{1+x} - \sqrt{1-x}}{x} \times \frac{\sqrt{1+x} + \sqrt{1-x}}{\sqrt{1+x} + \sqrt{1-x}}$
 $= \lim_{x \rightarrow 0} \frac{(1+x) - (1-x)}{x[\sqrt{1+x} + \sqrt{1-x}]} = \lim_{x \rightarrow 0} \frac{2x}{x[\sqrt{1+x} + \sqrt{1-x}]}$
 $= \frac{2}{1+1} = 1$

Q8 $y = \frac{\sin x}{x^2}$
 $\frac{dy}{dx} = \frac{x^2 \frac{d}{dx} \sin x - \sin x \frac{d}{dx} x^2}{x^4} = \frac{x^2 \cos x - 2x \sin x}{x^4}$

Q9 $\lim_{x \rightarrow 1} \frac{x-1}{2x^2 - 5x - 2x + 5} = \lim_{x \rightarrow 1} \frac{x-1}{x(2x-5) - 1(2x-5)}$
 $= \lim_{x \rightarrow 1} \frac{x-1}{(x-1)(2x-5)} = \frac{1}{2-5} = -\frac{1}{3}$

Q10 $y = \frac{e^{x+1}}{e^x - 1}$, $\frac{dy}{dx} = \frac{(e^x - 1) \frac{d}{dx} (e^{x+1}) - (e^{x+1}) \frac{d}{dx} (e^x - 1)}{(e^x - 1)^2}$
 $= \frac{(e^x - 1)(e^x) - (e^{x+1})(e^x)}{(e^x - 1)^2}$

$$\underline{\text{Q11}} \quad y = (x^3 - 4x^2 + 1)(x^2 + 5)^5$$

$$\frac{dy}{dx} = (x^3 - 4x^2 + 1) \frac{d}{dx} (x^2 + 5)^5 + (x^2 + 5)^5 \frac{d}{dx} (x^3 - 4x^2 + 1)$$

$$\frac{dy}{dx} = (x^3 - 4x^2 + 1) [5(x^2 + 5)^4 \cdot 2x] + (x^2 + 5)^5 (3x^2 - 8x)$$