

UNIVERSITY OF KERALA
SCHOOL OF DISTANCE EDUCATION
B.Sc MATHEMATICS (III Semester)

**TOPICS FOR ASSIGNMENT AND CASE ANALYSIS:
ENGLISH COURSES FOR BA/BSc/BCom STUDENTS**

SEMESTER - 3
WRITING AND PRESENTATION SKILLS
EN 1311.1 Language Course VI (BA/ BSc English IV)

ASSIGNMENT (eight to ten pages)

1. Write an essay on the Mechanics of Writing.

or

2. The process of writing from creating an outline to preparing a final draft.

(10 marks)

CASE ANALYSIS (five pages)

1. What are the features of a paragraph?

or

2. Create the content for a 15 to 20 slides on water conservation.

(10 marks)

അഡീഷണൽ ലാംഗ്വേജ്- മലയാളം

അസൈൻമെന്റ്

കഥകളിയുടെ ചരിത്രവും വികാസവും.

അല്ലെങ്കിൽ

തുള്ളൽ പ്രസ്ഥാനം.

പ്രശ്നാപഗ്രഥനം (Case Analysis)

മലയാളനാടക പ്രസ്ഥാനം - ചരിത്രാവലോകനം.

അല്ലെങ്കിൽ

ചലച്ചിത്രനിർമ്മിതിയിൽ തിരക്കഥയ്ക്കുള്ള പ്രാധാന്യം.

TOPICS FOR ASSIGNMENT AND CASE ANALYSIS

BA/B Sc Additional Language HINDI

Third Semester HN 1311.1

Fiction, Creative Writing and Communication Skills

ASSIGNMENT TOPICS

किन्हीं चार पर आलोचना कीजिए : (10 marks)

1. काल कोठरी – स्वदेश दीपक
2. लक्ष्मी का स्वागत –उपेन्द्र नाथ अशक
3. रीड की हड्डी - जगदीश चन्द्र माथुर
4. बहुत बड़ा सवाल – मोहन राकेश
5. नाटक और एकांकी

Case Analysis

किन्हीं चार पर आलोचना कीजिए | (10 marks)

1. अनुवाद की परिभाषा
2. अच्छे अनुवादक के गुण
3. काव्यानुवाद की समस्याएं
4. पारिभाषिक शब्द की विशेषताएं
5. समकालीन सन्दर्भ में अनुवाद की आवश्यकता और उपयोगिता

Core III- Algebra & Calculus –I (MM 1341)

Assignment Questions

- 1) Find the order of $[3]$ in $\mathbb{Z}/7\mathbb{Z}$
- 2) Find the exponent g_0 of G and verify $a^{g_0} = 1$ for all a in G
- 1) U_7 the group of units in $\mathbb{Z}/7\mathbb{Z}$
- 3) Show that there are 12 pairs of numbers (a_1, a_2) with $0 \leq a_2 < 6$ so that

$$x \equiv a_1 \pmod{6}$$

- 4) Consider the parallelepiped with adjacent edges

$$\bar{u} = 3i + 2j + k;$$

$$\bar{v} = i + j + k;$$

$$\bar{w} = 3i + 3j + 3k;$$

a) Find the volume

- b) Find the area of the face determined by \bar{u} and \bar{v}
- c) Find the angle between \bar{u} and the plane counting the face determined by \bar{w} and \bar{v}
- d) Find two vectors that are parallel to the yz plane and are orthogonal to the vector $3i - j + 2k$

5) Convert $\left(5, 2\pi/3, 5\pi/6\right)$ from spherical to cylindrical

- 6) Find the arc length parametrization of the cycloid

$$x = at - asint, y = a - acost, 0 \leq t \leq 2\pi$$

- 7) Suppose that a particle moves through 3-space so that this position vector at time t is

$$\gamma(t) = ti + t^2j + t^3k$$

- a) Find the scalar tangential and normal component of acceleration at time $t=1$
- b) Find the scalar tangential and normal component of acceleration at time t
- c) Find the vector tangential and normal component of acceleration at time $t=1$
- d) Find the curvature of the path at the point where the particle is located at time $t=1$
- 8) Find the curvature and radius of curvature for

$$\bar{\gamma}(t) = 3\cos t i + 4\sin t j + tk \quad \text{at } t = \pi/2$$

Complementary V- Cost Accounting (CO1331)

1) The following is a summary of the receipts and issues of materials in a factory during the month of April

Date	Particulars	Quantity	Rate/unit
	Opening Balance	200	5
1/6/18	Received	300	5
5/6/18	Received	20	6
8/6/18	Issued	150	
10/6/18	Received	20	7
12/6/18	Issued	100	
23/6/18	Received	30	6
30/06/18	Issued	20	

Prepare FIFO, LIFO, Simple Average method.

2) Explain about ABC and VED Analysis

3) Discuss cost sheet. Prepare a cost sheet using imaginary figures

Complementary VI-

Probability Distribution and Theory of Estimation (ST 1331.1)

1) What is the probability of getting three heads when an unbiased coin is tossed 3 times

2) For a $N(\mu, \sigma^2)$ evaluate the following probabilities

i) $p\left\{\mu - \frac{2}{3}\sigma < x < \mu + \frac{2}{3}\sigma\right\}$

ii) $p\{\mu - \sigma < x < \mu + 2\sigma\}$

iii) $p\{\mu - 2\sigma < x < \mu + 3\sigma\}$

3) For a $N(\mu, \sigma^2)$ with $\sigma^2=4$ construct 95% confidence interval for $2\mu + 3$ if a random sample size of 25 gives a sample mean of 20

4) Suppose that the time taken by a certain particle to move from one fixed point is distributed as $N(\mu, \sigma^2)$. A random sample of 9 readings has mean 50. Test the hypothesis that (1) $H_0: \mu = 52$ against $H_0: \mu < 52$ (2) $H_0: \mu = 52, H_0: \mu \neq 52$ at 95% level

5) The yield of corn in 80 experimental plots is given in the following table. The mean and standard deviations, before the observations are classified, are 35 & 2 respectively. Test the goodness of fit

Yield	30 or less	31-32	33-34	35-36	37-38	39 or more
frequency	8	12	15	20	15	10

6) A random sample of 9 experimental animals, under a certain diet give the following increase in weights. $\sum x_i = 45, \sum x_i^2 = 279$, where x_i denote the increase in weight. Assuming x is normally distributed $N(\mu, \sigma^2)$ test the following 1) $H_0: \mu = 6; H_0: \mu < 6$;

2) $H_0: \mu = 4; H_0: \mu > 4$;

3) $H_0: \mu = 1; H_0: \mu \neq 1$