

ASSIGNMENT-1

B.A./B.Com./B.Sc./B.B.A./B.H.M./B.B.M. DEGREE EXAMINATION, JUNE-2022.

First Year

ENGLISH PAPER – I
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

Analysis Skills

1. (a) Read the following passage and answer the questions :

Do you ever worry about your memory? Perhaps you go into a room and forget what you came for, or may be something on the tip of your tongue, but you can't get it off. Don't worry. You are perfectly normal. It is the nature of the mind to forget – and the nature of man to worry about forgetfulness.

Human beings have a prodigious memory. In a few cubic centimeters the brain stores more information that can be stored in a large computer. Today neurologists, psychologists and biologists are studying the different aspects of memory.

There are two types of memory. Short-term memory lasts only for seconds you look up a telephone number and remember it long enough to dial. Long-term memory is stored probably for life.

- (i) Give two instances of forgetfulness
- (ii) How much information can the brain store?
- (iii) What are the two types of memory?
- (iv) Give an instance of short-term memory.
- (v) Human beings have a ————— memory.

- (b) Read the passage and answer by choosing the right answer :

The students were asked to offer an explanation about why they had been absent. One said that he had an attack of headache and therefore could not come to school. He was asked to bring a medical certificate. The second one said that some-one had told him that there was no school, so he had gone back home. The head master replied that if he was going to listen to every loafer who said there would be no school, he deserved to be flogged. The punishment was pronounced-ten days attendance cancelled, two rupees fine, and the whole day to be spent on the desk.

- (i) What were the students being questioned about?
 - (1) to explain
 - (2) for being absent
 - (3) for attendance
 - (4) about fine.

- (ii) The first student was asked to bring —————.
- (1) two rupees
 - (2) medical certificate
 - (3) attendance
 - (4) desk
- (iii) The second student deserved to be flogged because he listened to
- (1) all students
 - (2) every loafer
 - (3) headmaster
 - (4) teacher
- (iv) What punishment was given to the student?
- (1) ten days attendance cancelled
 - (2) two rupees fine
 - (3) whole day on the desk
 - (4) all the above
- (v) The author wants to show that
- (1) students often fall ill
 - (2) students make up all sorts of excuses to explain their absence from school
 - (3) students are punished by teachers, unnecessarily
 - (4) students play in the ground.

2. (a) Correct the following sentences :

- (i) Each boy and each girl get a turn.
- (ii) One should mind his tongue.
- (iii) Justice as well as compassion allow it.
- (iv) The furniture are new in this house.
- (v) The economics is a difficult subject.

(b) Rewrite as directed :

- (i) I will convince him. (change the voice)
- (ii) Whoever is honest is respected. (change into a simple sentence)
- (iii) Madras is one of the biggest cities in India. (change to positive degree)
- (iv) He said to me 'I am happy to be married'. (change into Indirect speech)
- (v) My father was an engineer. (Add a question tag)

(c) Change into direct speech :

- (i) He told me that the earth is round.
- (ii) He asked me how my father was.

- (d) Fill in the blanks with correct forms of the verbs in the brackets :
- (i) One of my teachers ————— (belong) to my village.
 - (ii) These scissors ————— (be) not sharp.
 - (iii) His uncle and aunt ————— (have) a house in the town.
 - (iv) They shall ————— (do) the job.
 - (v) The director ————— (live) in a large bungalow.
- (e) Fill in the blanks with suitable words given at the end :
- (i) The girl ————— with perfect truthfulness.
 - (ii) I ————— Milton to my great benefit.
 - (iii) Marlowe was a ————— of great promise.
 - (iv) She ————— me with a smile.
 - (v) She ————— reading a book.
- (replied, enjoys, writer, greeted, read)
- (f) Rewrite the following set of jumbled sentences to a coherent passage :
- (i) One day it was very thirsty and was searching for water.
 - (ii) At last it found a pot and water in it.
 - (iii) There was a crow living in a tall and shady tree.
 - (iv) It had sufficient food to eat and water to drink.
 - (v) But rains failed and it was difficult to find water.
- (g) Write three exchanges between a customer and a sales girl showing garments of different varieties.
- (h) Write a paragraph using the following hints :
- Science affects lives – applications varied – influences opinions – dispels superstitions – leads to control on nature – develops logical unbiased thinking.
- (i) Write in about 100 words :
- (i) Internet – boon or bane
 - (ii) Environment pollution
 - (iii) Physical activity in present day world.

ASSIGNMENT-2

B.A./B.Com./B.Sc./B.B.A./B.H.M./B.B.M. DEGREE EXAMINATION, **JUNE-2022.**

First Year

ENGLISH PAPER – I
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS
(Descriptive Skills)

1. Write an essay:
 - (a) Narrate in brief the 'neighbours' reactions to the news about the cobra in 'A Snake in the Grass'.
 - (b) Give a character sketch of Dorothy clandon.
 - (c) What advice does Bronowski give to the layman about Science?

 2. Write short notes:
 - (a) Who according to John Milton leads him to his destiny?
 - (b) What is Edmund Waller's opinion about women?
 - (c) How does the train symbolise the progress of mankind in 'The Express'.
 - (d) How, according to John Masefield, can the world be made better in 'Laugh and Be Merry'?
 - (e) Why is it difficult to kill a tree according to Gieve Patel?

 3. Write an essay:
 - (a) Describe the life of refugees as described by Pearl Buck.
 - (b) Why did Mrs. Sappleton keep the window open in 'The Open Window'?
 - (c) Bring out the irony in 'The Fortune - Teller'.

 4. (a) Explain:
 - (i) "I'll buy you another gold watch".
 - (ii) "I take up my task in buoyancy and hope".
 - (iii) 'You are well enough I hope now and will be quite fit soon'.(b) Explain:
 - (i) How small a part of time they share.
 - (ii) Laugh till the game is played : and be you merry, my friends.
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(DTEL1)

ASSIGNMENT-1

B.A./B.Com./B.Sc./B.H.M./B.B.A./B.B.M. DEGREE EXAMINATION, JUNE-2022

First Year

TELUGU PAPER – I
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. ఈ క్రింది పద్యాలకు ప్రతిపదార్థ తాత్పర్యము వ్రాయుము:

- (a) నుతజల పూరితంబులగు నూతులు నూరిటికంటె నూనలిత
వ్రత యె కబా విమేలు మరిబావులు నూరిటికంటె నొక్కస
త్రు తువది మేలు తత్రుత శతంబున కంటెసుతండుమేలుత
త్తుతు శతకంబు కంటె నొక్కసూనుతవాక్యముమేలుచూడగన్
- (b) కందక గాజు వారకవికాసము దప్పక మందహా స ని
వ్యందము చెక్కు టద్దముల జారకనెమ్మదినిద్రవోవున
ట్లందము నొందెధాత్రి సిరియాళ కుమారుని వక్తచంద్రుడా
నందమునొందె నప్పడెలనాగమనంబును భర్తచిత్తమున్

2. ఈ క్రింది వానికి సందర్భ సహిత వ్యాఖ్యలు వ్రాయుము.

అ - భాగం

- (a) వట్టి సాధ్యులకును బుట్టినయిండ్లను పెద్దకాలమునికి తద్దదగదు
(b) హరుని వాక్యము గాన నది యేల తప్పు
(c) పోటున కిచ్చగింతరొకొ పోదురోకానల నుండ నచ్యుతా
(d) ఓగిరముగ సుతుని చంపు టుచితమె మీకున్

ఆ - భాగం

- (a) వెనకపడితె వెనకే నోయ్
(b) కవితకు పెండ్లి పందిళ్ళు కప్పించునాడు
(c) సిరియె భోగోవ లబ్ధిని జీవగణ్ణ
(d) ప్రపంచమునకు బోజనము పెట్టువానికి భుత్తిలేదు

3. ఈ క్రింది వానికి వ్యాసరూప సమాధానము వ్రాయుము.

అ - భాగం

(a) తిక్కన రచనలోని పరిదీపనం వివరించండి.

(b) శివపార్వతులు చిరుతొండనంబి దంపతులను పరీక్షించిన విధమును వివరింపుము.

ఆ - భాగం

(a) బెజ్జమహాదేవి హృదయాన్ని పాల్కురికి చిత్రించిన విధమును వివరింపుము.

(b) శ్రీకృష్ణుని బాల్య క్రీడలను వివరింపుము.

(DTEL1)

ASSIGNMENT-2

B.A./B.Com./B.Sc./B.H.M./B.B.A./B.B.M. DEGREE EXAMINATION, JUNE-2022

First Year

TELUGU PAPER – I
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. ఈ క్రింది వానికి సమాధానము వ్రాయుము.

అ - భాగం

(a) గురజాడ అప్పారావు గారికి కల దేశ భక్తిని వివరింపుము.

(b) కృషీవలను జీవిత స్వభావాలను వివరింపుము.

ఆ - భాగం

(a) కిన్నెరసాని భర్తపై ప్రకటించిన ప్రేమభావాలను వర్ణించండి.

(b) గబ్బిలంలో జాషువా గారు పేర్కొన్న అరుంధతి సుతుని వృత్తాంతాన్ని వివరించండి.

2. ఈ క్రింది వానికి సమాధానము వ్రాయుము.

(a) కృష్ణమూర్తి పాత్ర క్రమ పరిణామమును వివరింపుము.

(b) కాలాతీత వ్యక్తులు నవల ద్వారా రచయిత్రీ సమాజానికి ఇచ్చిన సందేశమేమి?

(c) కాలాతీత వ్యక్తులు కథలోని తాత్విక దృష్టిని వివరింపుము.

(d) కాలాతీత వ్యక్తులు నామసార్థక్యమును వివరింపుము.

3. ఈ క్రింది వానిని విడదీసి సంధి కార్యములను వివరింపుము.

(a) గుణాలయుడు

(b) ధర్మేతరుడు

(c) అత్యంతము

(d) తపోధనులు

(e) ఇక్కుమారుడు

(f) తన్మయత

(g) కమలాంతరంగ

(h) పరమేశుడు

(i) అన్నాతి

(j) పోతపారగ

4. ఈ క్రింది వానికి విగ్రహ వాక్యములు వ్రాసి సమాసములను వివరింపుము.

- (a) నీకొడుకు
 - (b) పాలమీగడలు
 - (c) పెద్దబాసలు
 - (d) పుణ్యచారుడు
 - (e) మూడుకన్నులు
 - (f) కఱకంఠుడు
 - (g) మామిడిపండు
 - (h) జనపతి
 - (i) సరసిజనాభుడు
 - (j) మంచిచెడ్డలు
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ASSIGNMENT-1

B.A./B.Com./B.Sc./B.H.M./B.B.A./B.B.M. DEGREE EXAMINATION, JUNE-2022.

First Year

SANSKRIT PAPER – I (NR)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. (a) Explain in brief the Glory of Kavya of Valmiki.
वाल्मीकेः काव्यसुषमां संक्षेपेण लिखत।
(b) Explain the qualities of scholars as prescribed in ViduraNeeti not exceeding 300 words.
विदुरनीतौ प्रतिपादितरीत्या पण्डितलक्षणानि 300 मितेषु पदेषु विवृणुत?
2. (a) Describe the words of companion of Parvathi with celebrity.
पार्वत्याः सखी जटिलं प्रति किमुवाच वर्णयत्।
(b) Write the story of मृतोज्जीवनम्।
मृतोज्जीवनं नमोपाख्यानं लिखत।
3. (a) Describe the six seasons as prescribed in the Text.
पाठ्यभागमनुसृत्य षहत्त्न् वर्णयत।
(b) Write the story of Wise Rabbit.
चतुरः शशकः इति कथां लिखत।
4. Answer the following with reference to context.
ससन्दर्भं व्याख्यात।
 - (a) दानाध्ययनशीलाश्च संयताश्च प्रतिग्रहे।
 - (b) मित्रम् द्वेष्टि हिनस्ति च।
 - (c) मनीषिभिः साप्तपदीनमुच्यते।
 - (d) द्विषत्ति मन्दाश्चरितं महात्मनाम्।
 - (e) सचिव, नैषोऽमुष्य मृत्युसमयः।
 - (f) क्षणिकमिति समस्तं विद्धि संसारवृत्तम्।
 - (g) रिक्तपाणिर्तपश्येतु तथा नैमित्तिकं नृपम्।
 - (h) दूतामुखा हि राजतः सर्व एव।

ASSIGNMENT-2

B.A./B.Com./B.Sc./B.H.M./B.B.A./B.B.M. DEGREE EXAMINATION, JUNE-2022.

First Year

SANSKRIT PAPER – I (NR)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. Translate into English or Telugu.

आन्ध्रभाषायां वा आङ्गलभाषायां वा अनुवादत।

(a) यस्य कृत्यं न जानन्ति मन्त्रं वा मन्त्रितं, परे।

कृतमेवास्य जानन्ति स वै पण्डित उच्यते॥

(b) तत्वज्ञः सर्वभूतानां योगज्ञः सर्वकर्मणाम्।

उपायज्ञो मनुष्याणां नरः पण्डित उच्यते॥

(c) अकामान् कामयति यः कामयानान् परित्यजेत्।

बलवन्तं च यो द्वेष्टि तमाहुर् मूढचेतसम्॥

(d) अमित्रं कुरुते मित्रं मित्रं द्वेष्टि हितस्ति च।

कर्म चारभते दुष्टं तमाहुर्मूढचेतसाम्॥

2. (a) Write the forms in the other numbers of given persons :

तत्त्वकारेषु धातु रूपाणि लिखत।

(i) भवतु (ii) गच्छेत्

(iii) स्थास्यति (iv) अपश्यत्

(v) अलभत(vi) मोदिष्यते

(vii) रमते (viii) वन्दै

(b) Decline as per the case ending.

तत्तद्विभक्तिषु शब्दरूपाणि लिखत।

(i) देवै (ii) भानुना

(iii) पित्रे (iv) नदीम्

(v) फलस्य (vi) वारि

(vii) गवा (viii) कवौ।

(c) Combine SANDHI'S.

सन्धत्त।

- | | |
|------------------|------------------|
| (i) राम + अतुज : | (ii) महा + ईशः |
| (iii) इति + आहः | (iv) पौ + अकः |
| (v) तत् + टीका | (vi) षट् + मुखः |
| (vii) कः + चित् | (viii) तत् + लयः |

(d) Dissolve.

विग्रहवाक्यानि लिखत।

- | | |
|------------------|-------------------|
| (i) समक्षम् | (ii) ग्रामगतः |
| (iii) यूपदारू | (iv) पापभयम् |
| (v) सीतापतिः | (vi) अज्ञानम् |
| (vii) नीलोत्पलम् | (viii) त्रिभुवनम् |
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(DHIN 1(NR))

ASSIGNMENT-1

B.A./B.Com./B.Sc./B.H.M./B.B.A./B.B.M. DEGREE EXAMINATION, JUNE-2022

.First Year

HINDI PAPER – I (NR)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. सन्दर्भ सहित व्याख्या कीजिए।

- (a) साहित्य की दुनिया में रहस्यवादी जीव यदि कोई हैं तो वे निश्चय ही एक तरह के आलोचक हैं।
- (b) ईर्ष्या की बड़ी बेटी का नाम निन्दा हैं। जो व्यक्ति ईर्ष्यालु होता हैं, वही व्यक्ति बुरे किस्म का निन्दक भी होता हैं।
- (c) कवि का सबसे बड़ा गुण नई-नई बातों का सूझना हैं। उसके लिए कल्पना की बड़ी जरूरत हैं।
- (d) कुछ लेने का मतलब था शेष सब-कुछ को छोड़ देना। पर मैं कुछ भी नहीं छोड़ना चाहता था।
- (e) कालिदास और भवभूति का सम्पूर्ण प्रदेय भारतीय वस्तु हैं, वह किसी प्रदेश का उत्तराधिकारी नहीं।

2. पाठ का सारांश विशेषताओं सहित लिखिए।

- (a) अतिथि।
- (b) लज्जा और ग्लानि।

3. पाठ का सारांश विशेषताओं सहित लिखिए।

- (a) आपने मेरी रचना पढ़ी?
- (b) सोना हिरनी।

4. कहानी का सारांश विशेषताओं सहित लिखिए।

- (a) उसने कहा था।
- (b) पुरस्कार।

5. (a) अनुवादक की नौकरी के लिए प्रबन्धक के नाम पर पत्र लिखिए।

- (b) आपके मुहल्ले की गंदगी के विषय में नगरपालिका के अधिकारी को पत्र लिखिए।

(DHIN 1(NR))

ASSIGNMENT-2

B.A./B.Com./B.Sc./B.H.M./B.B.A./B.B.M. DEGREE EXAMINATION, JUNE-2022

.First Year

HINDI PAPER – I (NR)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. प्रश्नों का जवाब दस पंक्तियों में लिखिए।
 - (a) “लहनासिंह” का चरित्र चित्रण कीजिए
 - (b) “ठाकुर का कुआँ” कहानी का क्या उद्देश्य है।
 - (c) “रोज” कहानी का सीर्षक की सार्थकता पर प्रकाश डालिए।
 - (d) “शामनाथ” का चरित्र चित्रण कीजिए।
2. सब प्रश्नों का उत्तर लिखना अनिवार्य है।
 - (a) कवि कविता लिखने हैं। (“लिंग” बदलकर लिखिए)
 - (b) लड़का शोर मचाता है। (“वचन” बदलकर लिखिए)
 - (c) उसने आम खाये। (वाच्य बदलकर लिखिए)
 - (d) नरेन्द्र पाठ पढ़ता है। (भविष्य काल में लिखिए)
 - (e) मोहन पाठ लिखता है। (तात्कालिक वर्तमानकाल में बदलिये)
 - (f) मैं नहीं चलता। (वाच्य बदलकर लिखिए)
 - (g) कमला अच्छी घी लाती है। (शुद्ध कीजिए)
 - (h) मैं घर जाता है। (शुद्ध कीजिए)
 - (i) सरला उपन्यास पढ़ेगी। (वर्तमानकाल में लिखिए।)
 - (j) (Document) इस शब्द का अर्थ हिन्दी में लिखिए।
3. शब्दों का अर्थ हिन्दी में लिखकर वाक्यों में प्रयोग कीजिए।
 - (a) हवन।
 - (b) अज्ञानांधकार।
 - (c) दुर्भिक्ष।
 - (d) पथ-प्रदर्शक।
 - (e) आद्यंत।

(DSPL 11)

ASSIGNMENT-1
B.Sc. DEGREE EXAMINATION, JUNE 2022.
First Year
Computer Science
PROGRAMMING USING C LANGUAGE (IT)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. What are conditional statements? Explain with examples.
2. How many storage classes does the C-language support?
3. Explain different types of input and output statements in C-language.
4. Give an examples for different types of constants in C-language.
5. Write a program to generate fibbanocci series.

(DSPL 11)

ASSIGNMENT-2
B.Sc. DEGREE EXAMINATION, JUNE 2022.
First Year
Computer Science
PROGRAMMING USING C LANGUAGE (IT)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. What are the differences between call by value and call by reference?
 2. Define structure. Write rules for declaring and accessing the structure elements.
 3. Explain about file handling functions.
 4. How will you pass a pointer to a functions with an example?
 5. Write a function to reverse a string and write a program to check the given string is a palindrome or not.
-

(DSCO11)

ASSIGNMENT-1
B.Sc. DEGREE EXAMINATION, JUNE 2022.
First Year
COMPUTER ORGANIZATION (IT)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. What is gate? Draw the graphic symbol and truth table for all gates.

Gate అనగానేమి? అన్ని gate ల యొక్క గ్రాఫిక్ symbol లను గీచి మరియు truth table లను వివరించండి.

2. Explain the following :

ఈ క్రింది వాటిని వివరించండి.

(a) Binary counters

Binary counter లు

(b) Shift registers.

Shift రిజిస్టరులు

3. What are the various types of Data representation?

వివిధ రకములైన డేటా రిప్రజెంటేషన్లు ఏవి?

4. (a) What is micro operation?

Micro operation అనగానేమి?

(b) Explain about instruction cycle.

ఇన్స్ట్రక్షన్ cycle గురించి వివరించండి.

5. What are basic computer instructions?

ప్రాథమిక కంప్యూటర్ instruction లు ఏవి?

(DSCO11)

ASSIGNMENT-2
B.Sc. DEGREE EXAMINATION, JUNE 2022.
First Year
COMPUTER ORGANIZATION (IT)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. What is parallel processing?

Parallel ప్రాసెసింగ్ అనగానేమి?

2. Give an examples for floating point arithmetic operations.

Floating point అర్థమెటిక్ ఆపరేషన్ల కొరకు ఉదాహరణలను ఇవ్వండి.

3. What is memory hierarchy? Explain each one.

మెమోరి hierarchy అనగానేమి? ప్రతి ఒక్క దానిని వివరించండి.

4. List and explain peripheral devices.

పెరిఫరల్ పరికములను తెలిపి మరియు వివరించండి.

5. Describe about multi processor system organization.

మల్టీప్రోసెసరు సిస్టము ఆర్గనైజేషన్‌ను గురించి వివరించండి.

(DSDS 11)

ASSIGNMENT-1
B.Sc. DEGREE EXAMINATION, JUNE 2022.
First Year
DATA STRUCTURES (IT)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. Define Abstract Data Types. Also explain the use of Abstract Data Types.
2. List out four major operations of Data Structures. Also explain of them fully.
3. What is Storing Strings? Explain the basic three types fully.
4. What is Binary Search? Enumerate the limitations of Binary search Algorithm.
5. What is a Linked List? How to represent Linked List in memory?

(DSDS 11)

ASSIGNMENT-2
B.Sc. DEGREE EXAMINATION, JUNE 2022.
First Year
DATA STRUCTURES (IT)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. What is Queues? How to represent Queues?
 2. What is Binary Trees? How to represent Binary Trees in Memory?
 3. What is Selection Sort? Write a note on Complexities of the Selection Sort Algorithm.
 4. Explain about Quick Sort in detail with suitable example.
 5. Define Stack. Explain the operation of stack and implementation using array.
-

ASSIGNMENT-1
B.Sc. DEGREE EXAMINATION, JUNE 2022.
First Year
DISCRETE MATHEMATICS (IT)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

1. (a) (i) If A and B are finite sets, then $A \cup B$ and $A \cap B$ are finite and $n(A \cup B) = n(A) + n(B) - n(A \cap B)$.
- (ii) Prove the Absorption laws
- (1) $A \cup (A \cap B) = A$
- (2) $A \cap (A \cup B) = A$
- (b) (i) Consider a set $A = \{a, b, c\}$ the relation R on A defined by $R = \{(a, a), (a, b), (b, c), (c, c)\}$ Find
- (1) Reflexive(R)
- (2) Symmetric(R)
- (3) Transitive (R)
- (ii) Let R be the relation from $A = \{1, 2, 3, 4, 5\}$ to $B = \{1, 3, 5\}$ which is defined by “ x is less than y ” write R as a set of ordered pairs. And also write the domain and range of R .
2. (a) Explain universal and existential quantifier with examples.
- (b) Prove that the following argument is valid $p \rightarrow \neg q, r \rightarrow q, r \vdash \neg p$

3. (a) Prove that $c(n, r) = \frac{p(n, r)}{r!} = \frac{n!}{r!(n-r)!}$.

- (b) In how many ways can 14 people be partitioned into six committees where two of the committees contain three members and the others two.
4. (a) Prove that the following are equivalent for a graph G .
- (i) G is 2- colorable
- (ii) G is bipartite
- (iii) Every cycle of G has even length
- (b) Show that a connected graph G with ' n ' vertices must have at least $(n-1)$ edges.

ASSIGNMENT-2
B.Sc. DEGREE EXAMINATION, JUNE 2022.
First Year
DISCRETE MATHEMATICS (IT)
MAXIMUM MARKS :30
ANSWER ALL QUESTIONS

- 1.(a) Draw all possible non similar trees T where
- T is a binary tree with three nodes.
 - T is a 2-tree with four external nodes.
- (b) Suppose the following list of letters is inserted into an empty binary search tree.
- $J, R, D, G, W, E, M, H, P, A, F, Q$
- Describe the tree T after
- Find the final tree T
 - Find the order transversal of T .
- 2.(a) Explain the Huffman's Algorithm with example.
- (b) Consider the algebraic Expression $E = (2x + y)(5a - b)^3$
- Draw the tree T which corresponds to the expression E .
 - Find the scope and sub tree roots at the exponential operator.
 - Find the preorder of T .
- 3.(a) (i) The following are equivalent in a Boolean algebra.
- $a + b = b$
 - $a * b = 0$
 - $a' + b = 1$
 - $a * b' = 0$
- (ii) Let $E = XY' + XYZ' + X'YZ'$ prove that
- the prime implicants of E
 - a minimal sum for E
- (b) Draw the logic circuit L with inputs A, B, C and output Y which corresponds to each Boolean expression
- $Y = AB'C + AC' + B'C$
 - $Y = A'BC + A'BC' + ABC'$