Registration No.: .....

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of General Education

Session: 2018-19 (Winter Semester)

B. Voc. Program, 3rd Semester (2018-19)

End-Sem. Examination

Course Code: GEN 1301 **Time: 3 Hours**

Course Name: Spoken English **Max. Marks: 100**

Instructions: The question paper comprises three sections A, B & C. Marks allotted are mentioned against each section.

Section A: Attempt *all* questions.

Section B: Attempt any six questions

Section C: Attempt all questions.

Section-A **(2*10=20)**

Q1. **(i)** There are ---------- diphthongs in the sound system of English language.

(a) 08
(b) 10
(c) 12
(d) 14

(ii) Transcribe the given word – ***that***

Q2. **(i)** Which among the given words has the speech sound- / a: /

(a) cat
(b) fast
(c) soil
(d) hot

(ii) Transcribe the word- ***here***

Q3. **(i)** ---------- are also known as pure vowel sounds:

(a) Monophthongs
(b) Consonants
(c) Short vowel sounds
(d) Diphthongs

(ii) ---------- is the study of speech sounds.

(a) Substances
(b) Phonology
(c) Phonetics
(d) Semantics

Q4. **(i)** Fill in the blank with appropriate modal verb:

When my father was young, he _____ climb trees.

(a) can

(b) could
(c) should
(d) might

(ii) Fill in the blank with the correct modal auxiliaries given below.
I forgot to bring my mobile phone today. _____ I use your phone to make an urgent Call.

(a) may
(b) can
(c) may
(d) should

Q5. **(i)** The word ***Frank*** is the opposite of:
(a) Funny
(b) Secretive
(c) Happy
(d) Emotional

(ii) The poem ***Virtue*** _____ was written by:
(a) W. H. Davis
(b) George Herbert
(c) R.K. Narayan
(d) Robert Frost

Q6. **(i)** Fill in the blank with the correct modal verb from the given options:
You have got wet in the rain. You _____ be feeling uneasy.
(a) should **(b)** can **(c)** may **(d)** must

(ii) Complete the lines with the right word as given in the poem:
Thy ..... is ever in its grave,
(a) Root
(b) Stem
(c) Flowers
(d) Fruits

Q 7. **(i)** The word ***Daring*** means:
(a) Boring
(b) Courageous
(c) Humourous
(d) Matchless

(ii) The term ***Woods*** in the poem ***Leisure*** means:
(a) Forest
(b) Stream
(c) Sky
(d) Sunlight

Q8. **(i)** Complete the sentence with the right word as given in the poem:

No time to stand beneath the ----------,
And stare as long as sheep or cows.

(a) table
(b) trees
(c) boughs
(d) buildings

(ii) The title of the poem ***Virtue*** means:

(a) behavior showing disgust
(b) behavior showing hatred for other
(c) behavior showing high moral standard
(d) behavior showing low moral standard

Q9. **(i)** One-third sized summary of a passage is known as ----------:

(a) Paragraph
(b) Precis
(c) Essay
(d) Novel

(ii) _____ is the name of the servant in the family in the story ***The Snake in the Grass***:

(a) Dasa
(b) Sada
(c) Shanmugham
(d) Murugan

Q10. **(i)** In the short story ***Snake in the Grass***, the Snake belonged to the_____ family:

(a) Rat snake
(b) Cobra
(c) Python
(d) Viper

(ii) Write the homophone of the word -***Son***

Section B **(5*6=30)**

Attempt any 06 questions (11-18):

Q11. Explain the lines with reference to the context:

Sweet day, so cool, so calm, so bright,
The bridal of the earth and sky;
The dew shall weep thy fall tonight,
For thou must die.

Q12. Write the central idea of the poem ***Leisure***.

Q13. Explain the line with reference to its context:

I have been asking for a grass-cutter for months.

Q14. Change the following sentences from active to passive voice.

(a) We do not allow cameras.

(b) He can win a prize.

(c) She is writing a book.

(d) Finish this work.

(e) Dr. Vyas teaches us Maths.

Q15. Convert the given sentences in reported speech:

(a) They said, "We were celebrating Christmas yesterday"

(b) He will say, "My Mother will help her".

(c) Mohan said, "He has been waiting for his friend for two hours".

(d) I said, "Bhawna is driving the car".

(e) They said, "We watched the movie".

Q16. Construct sentences using each of the following modal verbs (one sentence with each modal verb):

(a) could **(b)** might **(c)** would **(d)** used to **(e)** should

Q17. Describe your favourite cricketer in about 8-10 lines using **describing words** and also underline the describing words.

Q18. Explain the following lines with reference to their context:

Only a sweet and virtuous soul
Like seasonal timber, never,
But though the whole world turn to coal,
Then chiefly lives.

Section C (10*5=50)

Q19. Transcribe the given words: -

(a) pat

(b) soil

(c) sure

(d) neat

(e) fat

Q20. Explain the short story ***Snake in the Grass*** in your own words (about 200 words.)

Q21. Draft a conversation in about 15-20 sentences between yourself and your father in a situation where you are making an apology to him for going to watch a film without taking his permission.

Q22. Write a paragraph on any one of the given topics (approximately 150 words): -

(a) Growing technology – the need of the hour

(b) My first Day in BSDU

Q23. Read the passage carefully and answer the questions given below:

There was a coffee shop in front of my house where one man in his sixties always came and spent his whole day. Out of curiosity one day I went to the shop, ordered some coffee and sat next to him. Before I could speak, he asked me about my home and family. After that he became quite nostalgic. Suddenly his eyes filled with tears as he told me that I had reminded him of his granddaughter Julie, who was in the US. I got to know his son was in the US for the last five years. He had been staying alone after his wife passed away a year ago. A retired officer with enough wealth, yet there was no one to take care of him. Speaking over the phone with his granddaughter was not enough. All he needed was love and care from his children. From that day onwards we became friends. He calls me granddaughter and loves me very much. From my meeting with him I learnt that nothing is greater than family, and that money cannot buy happiness. The key to a happy family is love and care.

Choose the correct answers to the following questions:

(a) What does the old man call the girl?

(i) granddaughter

(ii) sister

(iii) stranger

(b) The man's wife.....

(i) left him away

(ii) had already died

(iii) is also in the US

(c) The man's age was ..... years.

(i) sixty

(ii) below sixty

(iii) between sixty to seventy

(d) The narrator's son lived in:

(i) USA

(ii) Uk

(iii) India

(e) Write a suitable title for the given passage

(f) Make a precis of the passage given above. **(5 Marks)**

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Registration No.....

Bhartiya Skill Development University

School of General Education

B.Voc. Program, Winter Semester

III Semester, End-Semester Examination- July-2019

Answer Key

Course Code: GEN1301 **Time: 3 Hours**

Course Name: Spoken English **Max. Marks: 100**

Instructions: The question paper comprises three sections A, B & C. Marks allotted are mentioned against each section.

Section A: Attempt *all* questions.

Section B: Attempt any six questions

Section C: Attempt all questions.

Section-A **(2*10=20)**

Q1. (i) There are ---------- diphthongs in the sound system of English language.

(a) 08
(b) 10
(c) 12
(d) 14

(ii) Transcribe the given word – ***that***

Q2. (i) Which among the given words has the speech sound- / a: /

(a) cat
(b) fast
(c) soil
(d) hot

(ii) Transcribe the word- ***here***

(i) **Q3.** ---------- are also known as pure vowel sounds:

(a) Monophthongs
(b) Consonants
(c) Short vowel sounds
(d) Diphthongs

(ii) ---------- is the study of speech sounds?

(a) Substances
(b) Phonology
(c) Phonetics
(d) Semantics

Q4. (i) Fill in the blank with appropriate modal verb:
When my father was young, he _____ climb trees.
(a) can
(b) could
(c) should
(d) might

(ii) Fill in the blank with the correct modal auxiliaries given below
I forgot to bring my mobile phone today. _____ I use your phone to make an urgent Call.
(a) might
(b) can
(c) may
(d) should

Q5. (i) The word ***Frank*** is the opposite of:

(a) Funny
(b) Secretive
(c) Happy
(d) Emotional

(iii) The poem ***Virtue*** _____ was written by:

(a) W. H. Davis
(b) George Herbert
(c) R.K. Narayan
(e) Robert Frost

Q6 (i) Fill in the blank with the correct modal verb

You have got wet in the rain. You _____ be feeling uneasy.

(a) should (b) Can (c) may (d) **must**

(ii) Complete the lines with the right word as given in the poem:

Thy ..... is ever in its grave,

(a) root
(b) stem
(c) bark
(d) fruits

Q 7. The word ***Daring*** means:

(a) Boring
(b) Courageous
(c) Humourous
(d) Matchless

(i) The term ***Woods*** in the poem ***Leisure*** means:

(a) Sky
(b) Forest
(c) Stream
(d) Wooden logs

Q8. (i) Complete the sentence with the right word as given in the poem:

No time to stand beneath the ----------,
And stare as long as sheep or cows.

(a) table
(b) trees
(c) boughs
(d) buildings

(ii) The title of the poem ***Virtue*** means:

(a) behavior showing disgust
(b) behavior showing hatred for other
(c) behavior showing high moral standard
(d) behavior showing low, moral standard

Q9. (i) One-third sized summary of a passage is known as ----------:

(a) paragraph
(b) precis
(c) essay
(d) novel

(ii) _____ is the name of the servant in the family in the story ***The Snake in the grass***:

(a) Dasa
(b) Sada
(c) Shanmugham
(d) Murugan

Q10. (i) In the short story ***Snake in the Grass***, the Snake belonged to the_____ family:

(a) Rat snake
(b) Cobra
(c) Python
(d) Viper

(ii) Write the homophone of the word –***Son- Sun***

Section B **(5*6=30)**

Q11. Explain the lines with reference to the context:

Sweet day, so cool, so calm, so bright,
The bridal of the earth and sky;
The dew shall weep thy fall tonight,
For thou must die.

The above lines are the opening stanza of the poem Virtue by George Herbert At first the poet is attracted by the beauty and charm of such a day. But soon he remembers that the day with all its beauty, brightness and splendour would come, to an end as soon as darkness would set in. The day will be followed by night, light would be replaced by darkness and tears would be shed in the form of dew-drops to mourn the passing away of day. This realization makes the poet sad. The poet's sense of beauty is over shadowed by his knowledge of the transitory (Short lived) nature of all beautiful things. These lines are remarkable because they give us an insight into the metaphysical way of Herbert's thought.

Q12. Write the central idea of the poem ***Leisure***.

The poet wants human beings to start enjoying the beauty of the nature. He advises us to put an end to the stress that we associate with life. People unfortunately feel that a serious life style makes it worth. He wants us to shed the cares we have put up on our simple lives. We should find time to see the beauties of nature. We should pause under trees and look up to catch sight of the birds and butterflies that silently flit from branch to branch. We should be like sheep and cows that endlessly look at something as if they are lost in a dream.

Q13. Explain the lines with reference to their context:

I have been asking for a grass-cutter for months.

Dasa , the servant in the short story speaks these lines in response to the neighbours'comments about him to keep the lawns clean and tidy during a hustle bustle created when a snake enters the protagonist's house.

Q14. Change the following sentences from active to passive voice.

(a) We do not allow cameras.

Ans: Cameras are not allowed

(b) He can win a prize.

Ans: A prize can be won by him

(c) She is writing a book.

Ans: A book is being written by her

(d) Finish this work.

Ans: Let the work be finished

(e) Dr. Vyas teaches us Maths

Ans: We are taught Mats by Dr. Vyas

Q15. Convert the given sentences in reported speech:

(a) They said, "We were celebrating Christmas yesterday"

They said that they had been celebrating Christmas the previous day

(b) He will say, "My Mother will help her".

He will say that his mother will help her.

(c) Mohan said, "He has been waiting for his friend for two hours".

Mohan said that he had been waiting for his friend for two hours.

(d)I said, "Bhawna is driving the car".

I said that Bhawna was driving the car.

(e)They Said, "We watched the movie".

They said that they had watched the movie.

Q16. Construct sentences using each of the following modal verbs (one sentence with each Modal verb):

(a) Could (b) might (c) would (d) used to (e) should

Q17. Describe your favourite cricketer in about 8-10 lines using **describing words** and also underline the describing words.

Ans: Handsome, tall, fast, enthusiastic, sharp, vigilant, energetic, disciplined etc.

Q18. Explain the following lines with reference to their context:

Only a sweet and virtuous soul

Like seasonal timber, never,

But though the whole world turn to coal,

Then chiefly lives.

These lines are taken from the last stanza which presents images of an **eternal soul**. Through a metaphoric explanation the poet says that A seasoned timber cannot be burnt and changed into coal and therefore it never surrenders to corrosion. Similarly, the virtuous soul remains unchanged in spite of the passing of time. The phrase 'turn to coal' means totally destroyed. It implies that the whole World will be destructed with the passing of time. By 'chiefly lives' the poet means that the soul will remain alive when the world will remain no more. As such, the entire poem, which all

along warned of death, shows the way in which Herbert believes that he and his readers may achieve eternal life:

Section C (10*5=50)

Q19. Transcribe the given words: -

(a) pat

(b) soil

(c) sure

(d) neat

(e) fat

Q20. Explain the short story ***Snake in the Grass*** in your own words (about 200 words.)

A Snake in the Grass" by R.K. Narayan depicts a family with a problem. Living in southern India, the Indian people fear and honor the King Cobra. Its bite is deadly. The family in the story has a cobra somewhere in their yard. Someone saw it come into the yard, but it has not been found. Narayan finds some humor in this situation which is characteristic of his writingThe family consists of the mother and her four sons. They have an old servant Dasa who spends most of his time sleeping. After finding him asleep while everyone is looking for the snake, Dasa is reprimanded for not being more alert. There is a lot of commotion in trying to spot the snake. Ultimately, Dasa comes with a pot covered declaring to have caught the snake and goes out to leave it out. Just then the real snake is spotted in the garden proving Dasa to be actual Snake in the grass.

Q21. Draft a conversation in about 15-20 sentences between yourself and your father in a situation where you are making an apology to him forgoing to watch a film without taking his permission.

Exchanging wishes, expressing apology, father scolding for bad behavior, Son assuring that hell not repeat. Father warns and make him understand the importance of discipline and truthfulness in life.

Q22. Write a paragraph on any one of the given topics: -

(a) Growing technology – the need of the hour

The world controlled by technology, without technology, it will come to a standstill, millions are employed, improved lifestyle and exploration of new advancements through innovation etc.

(b) My first Day in BSDU

It was a great experience, met new friends and teachers, went around the university, had good lunch at mess, felt slightly tired due to long travel but enjoyed the unforgettable day.

Q23. Read the passage carefully and answer the questions given below:

There was a coffee shop in front of my house where one man in his sixties always came and spent his whole day. Out of curiosity one day I went to the shop, ordered some coffee and sat next to him. Before I could speak, he asked me about my home and family. After that he became quite nostalgic. Suddenly his eyes filled with tears as he told me that I had reminded him of his granddaughter Julie, who was in the US. I got to know his son was in the US for the last five years. He had been staying alone after his wife passed away a year ago. A retired officer with enough wealth, yet there was no one to take care of him. Speaking over the phone with his granddaughter was not enough. All he needed was love and care from his children. From that day onwards we became friends. He calls me granddaughter and loves me very much. From my meeting with him I learnt that nothing is greater than family, and that money cannot buy happiness. The key to a happy family is love and care. (191words)

B. Choose the correct answers to complete the following sentences: 1*5=5

(a) What does the old man call the girl?

(i) granddaughter
(ii) sister
(iii) stranger

(b)The man's wife.....

(i) left him away
(ii) had already died
(iii) is also in the US

(c) The man's age was ..... years.
(i) sixty
(ii) below sixty
(iii) between sixty to seventy

(d) In spite of enough wealth, the man was .....
(i) cheerless
(ii) family-less
(iii) happy

(d)The narrator's son lived in :
(ii) USA
(iii)Uk
(iv)India

(e) Write a suitable title for the given passage

(f) Make a precis of the passage given above. (5)

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Session: 2018-19 (Winter Semester)

B. Voc. Program, 3rd Semester,

End-Sem. Examination

Course Code: GEN1302 Time: 3 Hours

Course Name: Computer Aided Drawing Max. Marks: 100

Instruction:

1. Attempt all questions.
2. Use of Calculators is Prohibited.
3. Section A contains 20 Questions. Each question carries 1 Marks.
4. Section B contains 06 Questions. Each question carries 5 Marks.
5. Section C contains 05 Questions. Each question carries 10 Marks.

Section – A 20X1= 20 Marks

1. Which of the following instrument is used for scribbling purpose?
   a) compass
   b) ruler
   c) set square
   d) pencil
2. A line which is oriented at 07:30 (local time) will give an angle of_____ from horizontal?
   a) -135 degrees
   b) 270 degrees
   c) -225 degrees
   d) None of the above
3. What is the difference between the Scale command and the command Zoom:
   a) Scale for single object, while the Zoom whole plan
   b) No difference
   c) Scale can grow / shrink a shape up 10 times, while the Zoom has no limits
   d) Scale changes the size of objects, while the Zoom changes the visibility of the project
4. Which of the following is the correct full form of GD&T?
   a) Geometric dimensioning and tolerancing
   b) General dimensioning and tolerancing
   c) Geometric designing and tolerancing
   d) Geometric dimensioning and teleforming
5. What is meant by roughness?
   a) Minute succession of hills of different height
   b) Minute succession of valleys and hills of different height and varied spacing
   c) Minute succession of valleys and hills of same height and same gap
   d) Minute succession of valleys of different depth

6. The angle which we can't make using a single Set-square is _____

   a) 45°

   b) 60°

   c) 30°

   d) 75°

7. Which is not the use of divider?

   a) To divide curved or straight lines into the desired number of equal parts

   b) To draw circles

   c) To transfer dimensions from one part of the drawing to another part

   d) To set-off given distances from the scale to the drawing

8. _____ is used to draw curves which are not circular.

   a) Compass

   b) Protractor

   c) French curves

   d) Pro circle

9. The untrimmed size for _____ sheet is 240 mm x 330 mm.

   a) A1

   b) A3

   c) A4

   d) A5

10. Which of the following is reducing scale?

   a) 10:1

   b) 10:2

   c) 1:2

   d) 2:1

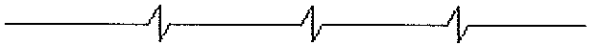
11. The line given below is used for

   a) Long-break line

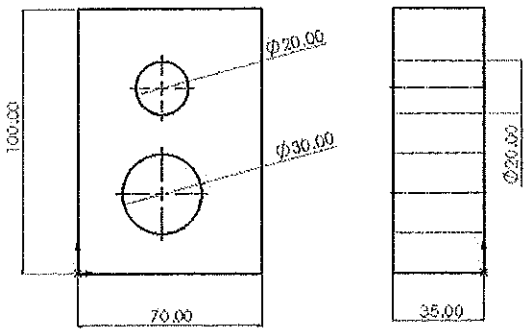
   b) Cutting planes

   c) Centroidal lines

   d) Out lines of adjacent parts

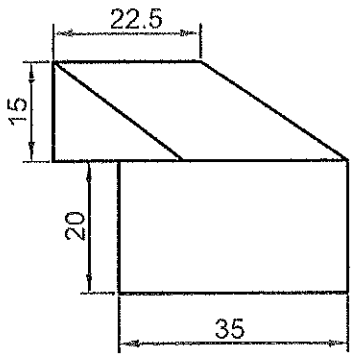


12. From the following figure, which is the repetitive dimension?



a) 30
b) 70
c) 10
d) 20

13. Which of the following dimension is incorrect?



a) 22.5
b) 15
c) 20
d) 35

14. How a blind drilled hole of 15mm diameter and 15mm deep is dimensioned?

a) M15, DEEP 15
b) Ø15, DEEP 15
c) Ø15
d) Ø15 x 15

15. While representing the diameter in dimensioning it is represented as _____

a) D
b) Ø
c) Dia
d) d

16. What is the representative factor of a line, whose length is 24cm on the drawing sheet, representing an actual length of 6m?

a) 1:50
b) 1:25
c) 1:24
d) 1:60

17. Which of the following is not a valid representative factor?

a) 1:2
b) 1:3
c) 1:5
d) 0:4

18. The hidden details inside or back side of object while represented in orthographic projection are represented by which line?

a) Continuous thick line

b) Continuous thin line

c) Dashed thin line

d) Long-break line

19. Which of the following is the correct sequence for first angle of projection?

a) observer, plane of projection and object

b) observer, object and plane of projection

c) both of these

d) None of these

20. In which of the following corners title block is drawn in a layout of engineering drawing?

a) bottom left

b) top right

c) bottom right

d) top left

Section- B 06X5= 30 Marks

(attempt any six question)

21. Define tolerances and its types on the basis of applicability and zero line?

22. Show difference between broken section view and half section view with diagram?

23. Define what is isometric projection?

24. Define fits with proper diagram

25. Write down the name any 2-drawing instrument with their diagram and 2 uses each?

26. Differentiate between engineering drawing and artistic drawing?

27. Define layout of engineering drawing with its components?

28. Define nominal, basic and measured sizes with example each?

Section- C 05X10= 50 Marks

29. Write down five different types of lines used in engineering drawing with their uses (2 each) and diagram?

30. What information should be available on an engineering drawing?

31. What is sectioning; state different types of section views with diagram each?

32. Define projection and component of projection with proper diagram. Also differentiate parallel and perspective projections?

33. Calculate the following for Ø22H7:

a) Upper deviation

b) Minimum size

c) Nominal size

d) Fundamental deviation

e) Upper limit

f) Lower deviation

g) basic size

h) Tolerance zone

i) IT grade

j) Tolerance class

ISO Tolerances for Holes (ISO 286-2)

Nominal hole sizes (mm)																				
over	3	6	10	18	30	40	50	65	80	100	120	140	160	180	200	225	250	280	315	355
inc.	6	10	18	30	40	50	65	80	100	120	140	160	180	200	225	250	280	315	355	400
micrometres																				
E6	+28 +20	+34 +25	+43 +32	+53 +40	+66 +50		+79 +60		+94 +72		+110 +85			+129 +100			+142 +110		+161 +125	
E7	+32 +20	+40 +25	+50 +32	+61 +40	+75 +50		+90 +60		+107 +72		+125 +85			+146 +100			+162 +110		+185 +125	
E11	+95 +20	+115 +25	+142 +32	+170 +40	+210 +50		+250 +60		+292 +72		+335 +85			+390 +100			+430 +110		+485 +125	
E12	+140 +20	+175 +25	+212 +32	+250 +40	+300 +50		+360 +60		+422 +72		+485 +85			+560 +100			+630 +110		+695 +125	
E13	+200 +20	+245 +25	+302 +32	+370 +40	+440 +50		+520 +60		+612 +72		+715 +85			+820 +100			+920 +110		+1 015 +125	
F6	+18 +10	+22 +13	+27 +16	+33 +20	+41 +2		+49 +30		+58 +36		+68 43			+79 +50			+88 +56		+98 +62	
F7	+22 +10	+28 +13	+34 +16	+41 +20	+50 +25		+60 +30		+71 +36		+83 43			+96 +50			+108 +56		+119 +62	
F8	+28 +10	+35 +13	+43 +16	+53 +20	+64 +25		+76 +30		+90 +36		+106 43			+122 +50			+137 +56		+151 +62	
G6	+12 +4	+14 +5	+17 +6	+20 +7	+25 +9		+29 +10		+34 +12		+39 +14			+44 +15			+49 +17		+54 +18	
G7	+16 +4	+20 +5	+24 +6	+28 +7	+34 +9		+40 +10		+47 +12		+54 +14			+61 +15			+69 +17		+75 +18	
G8	+22 +4	+27 +5	+33 +6	+40 +7	+48 +9		+56 +10		+66 +12		+77 +14			+87 +15			+98 +17		+107 +18	
H6	+8 0	+9 0	+11 0	+13 0	+16 0		+19 0		+22 0		+25 0			+29 0			+32 0		+36 0	
H7	+12 0	+15 0	+18 0	+21 0	+25 0		+30 0		+35 0		+40 0			+46 0			+52 0		+57 0	
H8	+18 0	+22 0	+27 0	+33 0	+39 0		+46 0		+54 0		+63 0			+72 0			+81 0		+89 0	
H9	+30 0	+36 0	+43 0	+52 0	+62 0		+74 0		+87 0		+100 0			+115 0			+130 0		+140 0	

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Answer Key

School of Manufacturing

Session: 2018-19 (Winter Semester)

B. Voc. Program, 3rd Semester,

End-Sem. Examination

Course Code: GEN1302 Time: 60 Min.

Course Name: Computer Aided Drawing Max. Marks: 100 Marks

1. Which of the following instruments is used for scribbling purpose? 1 Mark

   d) pencil

2. A line which is oriented in the direction 07:30 (local time) will make an angle of-------from horizontal? 1 Mark

   a) -135

3. What is the difference between the Scale command and the Zoom command: 1 Mark

   d) Scale changes the size of objects, while the Zoom changes the visibility of the project

4. Which of the following is the correct full form of GD&T? 1 Mark

   a) Geometric dimensioning and tolerancing

5. What is meant by roughness? 1 Mark

   b) Minute succession of valleys and hills of different height and varied spacing

6. The angle which we can't make using a single Set-square is _____ 1 Mark

   d) 75°

7. Which is not the use of divider? 1 Mark

   b) to draw circle

8. _____ is used to draw curves which are not circular. 1 Mark

   c) French curves

9. The untrimmed size for _____ sheet is 240 mm x 330 mm. 1 Mark

   c) A4

10. Which of the following is reducing scale? 1 Mark

    c) 1:2

11. The line given below is used for 1 Mark

    a) long break line

12. From the following figure, which is the repetitive dimension? 1 Mark

    c) 10

13. Which of the following dimension is incorrect? 1 Mark

    c) 20

14. How is a blind drilled hole of 15mm diameter and 15mm deep dimensioned? 1 Mark

    b) Ø15, DEEP 15

15. While representing the diameter in dimensioning it is represented as _____ 1 Mark

b) Ø

16. What is the representative factor of a line, whose length is 24cm on the drawing sheet, representing an actual length of 6m? 1 Mark

b) 1:25

17. Which of the following is not a valid representative factor? 1 Mark

d) 0:4

18. The hidden parts inside or back side of object while represented in orthographic projection are represented by which line? 1 Mark

c) dashed thin line

19. Which of the following is the correct sequence for first angle of projection

b) Observer, object and plane of projection 1 Mark

20. In which of the following corners title block is drawn in a layout of engineering drawing?

c) Bottom right 1 Mark

Section- B

21. Define Tolerances and its types on the basis of applicability and zero line?

- Tolerances are the max. permissible deviation within a specified limit 5 Marks

On the basis of application

a) Standard tolerance

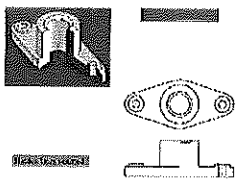
b) User defined

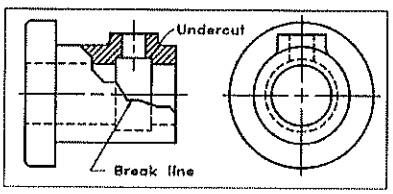
On the basis of zero line

a) Unilateral tolerance

b) Bilateral tolerance

22. Show difference between broken section view and half section view with diagram? 5 marks





23. Define what is isometric projection? 5 Marks

- Isometric projection is a method for visually representing three-dimensional objects in two dimensions in technical and engineering drawings. It is an axonometric projection in which the three coordinate axes appear equally foreshortened and the angle between any two of them is 120 degrees.

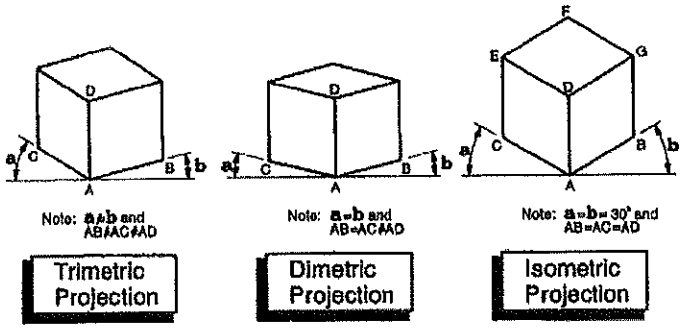


Figure 2.4 *The three types of axonometric projections*

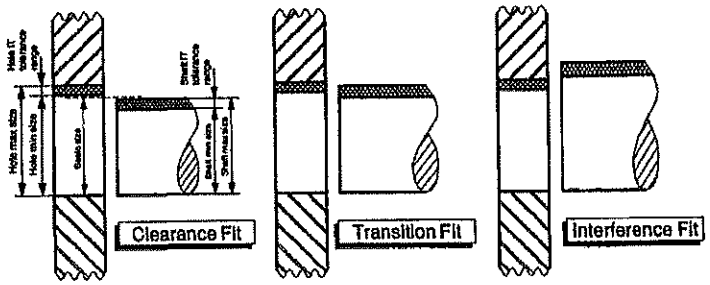
24. Define fits with proper diagram? 5 Marks

Fits is defined as the degree of tightness and looseness between two mating parts it is divided into three categories:

a) Transition fit

b) Clearance fit

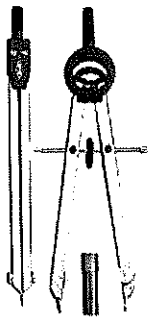
c) Interference fit



25. Write down the name any 2-drawing instrument with their diagram and 2 uses each?

5 Marks

1. Divider
   a) It is used in indirect dimensioning
   b) It is used for scribing purpose
2. Compass
   a) Used to create arcs and circles
   b) Used to divide arc and circles into equal parts



26. Differentiate between engineering drawing and artistic drawing? 5 Marks

Engineering drawing

1) The sole purpose of engineering drawing is to manufacture parts
2) Details and dimensioning is the integral part of engineering drawing

Artistic drawing

1) We can't manufacture an artistic drawing it is used for aesthetic purpose
2) Details are not given

27. Define layout of engineering drawing with its components? 5 Marks

LAYOUT OF DRAWING SHEETS

- Any engineering drawing has to follow a standard format. The drawing sheet consist of drawing space, title block and sufficient margins.

A typical drawing sheet consist of the following:

- **Borders**
- **Filling margin**
- **Grid reference system**
- **Title box**

28. Define nominal, basic and measured sizes with example each? 5 Marks

Nominal size: the size by name which is called is known as Nominal size

Basic size: the size on which Tolerances are applied is known as basic size

Measured size: the size which we get upon measuring by an instrument is known as measured size.

Section- C

29. Write down five different types of lines used in engineering drawing with their uses (2 each) and diagram?

2x5=10 Marks

Ans.

Illustration	Application
Thick	Outlines, visible edges, surface boundaries of objects, margin lines
Continuous thin	Dimension lines, extension lines, section lines leader or pointer lines, construction lines, boarder lines
Continuous thin wavy	Short break lines or irregular boundary lines – drawn freehand
Continuous thin with zig-zag	Long break lines
Short dashes, gap 1, length 3 mm	Invisible or interior surfaces
Short dashes	Center lines, locus lines Alternate long and short dashes in a proportion of 6:1,
Long chain thick at end and thin elsewhere	Cutting plane lines

30. What information should be available in an engineering drawing? 1x10=10 Marks

Ans.

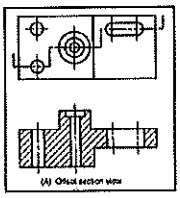
- Shape of an object
- Exact Sizes and tolerances of various parts of the object
- The finish of the product
- Machine cost
- Machining sequence
- The details of materials
- Catalogue no. of the product
- Date on which the drawing was made
- The person who made the drawing
- The company's name

31. What is sectioning; state different types of section views with a diagram each 10 Marks

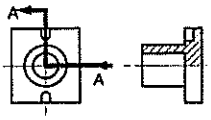
Ans. Sectioning is a technique by which the object is sliced and the cutaway view of the part is then drawn

I. Full section view

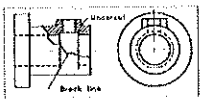
II. Offset section view



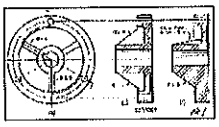
III. Half section view



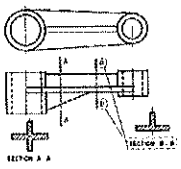
IV. Broken section view



V. Aligned or revolved section views

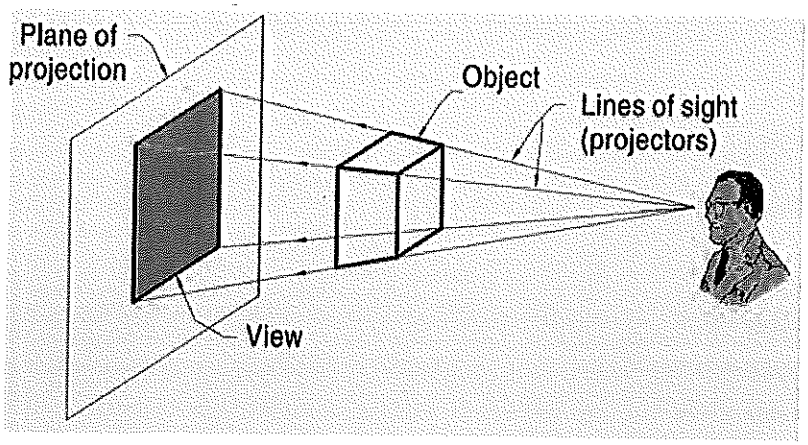


VI. Removed view



32. Define projection and component of projection with proper diagram? 10 Marks

- Projection is defined as the act of obtaining image of an object.
  Components of projection are:
  a) Observer
  b) Object
  c) Image



Parallel projection

•Distance from the observer to the object is infinite projection lines are parallel – object is positioned at infinity.

• Less realistic but easier to draw.

Perspective projection

•Distance from the observer to the object is finite and the object is viewed from a single point – projectors are not parallel.

•Perspective projections mimic what the human eyes see, however, they are difficult to draw.

33. Calculate the following for Ø22H7: 10 Marks

a) Upper deviation b) Minimum size c) Nominal size d) fundamental deviation e) Upper limit (f) Lower deviation g) basic size h) tolerance zone i) IT grade j) tolerance class

b) +0.021 mm or +21µm

c) 22 mm

d) 22 mm

e) +0 µm

f) 22.021 mm

g) +0 µm

h) 22H7 or 22^{+21}_{-0}

i) 21 µm

j) 7

k) H7

Registration No.: .....

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of General Education

Session: 2018-19 (Winter Semester)

B. Voc. Program, 3rd Semester (2018-19)

End-Sem. Examination

Course Code: GEN 1303 **Time: 3 Hours**

Course Name: Entrepreneurship development **Max. Marks: 100**

Instruction:

The question paper comprises three sections A, B & C. Marks allotted are mentioned against each section.

Section – A

20X01 = 20 Marks

Q 1. Entrepreneurship is .....process.

a) creative b) inventive c) ordinary d) innovative

Q 2. Entrepreneurship promotes ..... formation.

a) innovative b) capital c) risk d) goods

Q 3. Entrepreneurs contribute towards the development of society by reducing concentration of .....

a) Monopolistic power b) demographic dividend c) self employment d) creativity

Q 4. ..... entrepreneurs stick up to the old values, customs and traditions.

a) Drone b) Imitative c) Innovative d) Fabian

Q 5. ..... are businesses that have yet to come into existence or have yet to turn a complete revenue cycle.

a) Manufacturing b) Start-ups c) Production d) Services

Q 6. When businesses crack the local market and manage their affairs efficiently, they become.....

a) mature b) start-ups c) adult d) ventures

Q 7. The term 'entrepreneur' is derived from the French verb .....

a) entreprendier b) entreprendre c) entreprinder d) entreprenir

Q 8. Schumpeter has regarded '.....' as a main function of the entrepreneur

a) innovation b) starting c) maturity d) function

Q 9. Through research the ..... in the market should be identified

a) demand b) capital c) investment d) goods

Q 10. .....entrepreneurs take great precaution and are of suspicious mind in experimenting any change in their enterprises

a) Fabian b) Drone c) Imitative d) Innovative

Q 11. If the ..... are not an optimal level the organization would fall.

a) Initial capital b) market supply c) lending d) single window scheme

Q 12. Selection of ..... is an important aspect for the success of business

a) business b) fixed capital c) investment d) working capital

Q 13. Entrepreneurs promote ..... formation.

a) Capital c) Land

b) Fixed d) Plant

Q 14. A nation that ..... into entrepreneurship strengthens its economy.

a) invests b) disinvests c) disintegrate d) fragment

Q 15. Entrepreneurs act as ..... agent for change which results in chain reaction.

a) catalytic b) exciting d) fancy d) freelancer

Q 16. Generally, businesses pass through ..... stages before reaching the final stage of decline

a) one b) two c) three d) four

State True or False

Q 17. The term 'entrepreneur' and 'entrepreneurship' are same

Q 18. Entrepreneurship consists in doing things that are generally done in the ordinary course of business routine.

Q 19. An intrapreneur is dependent on employer

Q 20. If the promotion policy, channel of destitution, transportation is not good the enterprise would fall.

Section – B **06X05 = 30 Marks**

Attempt any 06 questions:

Q 21. State the difference between an entrepreneur and an intrapreneur.

Q 22. Write short notes on Imitative and First Generation entrepreneurs.

Q 23. Explain any four characteristics of entrepreneurship.

Q 24. Entrepreneurs are called global thinkers. Why?

Q 25. Discuss in detail the causes of failure of entrepreneur.

Q 26. What are the sources of business ideas of an entrepreneur?

Q 27. Why visit of trade fairs important for entrepreneurs?

Q 28. What is Project Report. Explain

Section – C

05X10 = 50 Marks

Q 29. Describe qualities of Successful Entrepreneurs.

Q 30. Explain the difference between Entrepreneurship and Self Employment

Q 31. Explain the steps in Project Identification.

Q 32. Write notes on Sole Proprietorship and Partnership.

Q 33. How does entrepreneurship help in the development of Indian economy?

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Registration No.: .....

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Answer Key

GEN 1303

1. creative
2. capital
3.monopolistic power
4. Drone
5. Start-ups
6. Mature
7.entreprendre
8.innovation
9. demand
10.Fabian
11. Initial capital
12. business
13. capital
14.invests
15.cataylist
16. four
17. False
18. False
19.True
20.True

21. Difference between an entrepreneur and an intrapreneur.

An entrepreneur takes a substantial risk in being the owner and operator of a business with expectations of financial profit and other rewards that the business may generate. On the contrary, an intrapreneur is an individual employed by an organization for remuneration, which is based on the financial success of the unit he is responsible for.

22. Write short notes on Imitative and First Generation entrepreneurs

Imitative Entrepreneurs: They do not innovate but imitate the products and policies of innovative entrepreneurs functioning in developed country.

First generation Entrepreneurs : These entrepreneurs have no entrepreneurial background. They do not inherit entrepreneurship from their earlier generation

23. Characteristics of entrepreneurship

1. Innovation : Entrepreneurship is innovative process

2. Risk bearing : Business is full of risks and uncertainties. The entrepreneur has to bear a number of risks in forming and running the enterprise.

3. Decision-making : Entrepreneurship involves decision-making. Entrepreneurs have to take decisions on selection of product, site, raw material, labour, technology etc

4. Dynamic process : Entrepreneurship is a dynamic process. In the course of time, enterprises grow, unsuccessful enterprise die and new enterprises are established.

5. Organizing process : Entrepreneurship is an organizing process in the sense that the entrepreneur has to organize various factors of product, create an organization structure and define the roles and responsibilities of personnel and manage the enterprise.

6. Accepting challenges: Entrepreneurship gives importance to accepting challenges by the entrepreneurs. In any business, there are tremendous challenges, and the entrepreneurs cannot avoid them. The task of seeking opportunities and exploiting them itself is challenging.

7. Management : It is the effective management, which helps entrepreneur to achieve the goals, maintain and improve the market share, fulfill the needs of customers and earn sufficient profit.

24. Entrepreneurs are Global thinkers

Entrepreneurs are Global thinkers. They see their business in larger scale than the self-employed. An entrepreneur's mind thinks of how to build a business that can sustain itself and be valuable enough to sell to others whereas the mind of a self-employed person thinks of how to create work so as to pay bills.

An entrepreneur understands that there is money to be generated and more advantages to be had when you serve others on the larger scale. He/she thinks globally and identifies the needs and frustrations to serve people and continually furthers his/her market reach so that his/she is always seen in the international market more than a self-employed person.

25.Causes of failure of entrepreneur:

1. Selection of business: It is an important aspect. That means an entrepreneur has to determine what type business he is going to start. Form various points of view the feasibility of the business should be tested.
2. Proper planning: Proper planning me is also important. For planning, planning premises like political, economic, social premised should be considered first. The steps of planning should be followed properly.
3. Initial capital: if the initial capitals are not an optimal level the organization would fall. So whether the enterprise is big or small the initial capital should be sufficient enough.
4. Determination o0f market demand: Through research the demand in the market should be identified. Both for long term and short term it should be considered.
5. Marketing of product: If the promotion policy, channel of destitution, transportation is not good the enterprise would fall.
6. Education and experience: One of the important tasks of the entrepreneurs is to select right person for the right post because the success of an enterprise depends on the right selection of employees.
7. Joint initiative: One may have much money and another may have more merit. Through joint initiative it can be balanced. But sometime for joint initiative misunderstanding arise, or sometimes corruption occur which may result in fall of enterprise.

8 Employment: Recruitment and appointment should be properly done. Those who have specialized skill should be appointed to that specialized job. Inefficient, corrupted employees may be responsible for fall of business.

9. Location of business: Site selection is an important factor. While starting a new business, an entrepreneur should think about the location of the business. In this case, many factors should be considered such as availability of raw materials, proper communication system, availability of labor, marketing facilities and so on.

10. Qualities of management: The management must have a minimum quality to success otherwise it would fall.

26. What are the sources of business ideas of an entrepreneur

Project ideas could originate from the various sources viz.,

- ➢➢ Success story of a friend/relatives
- ➢➢ Experience of others in manufacture/sale of product
- ➢➢ Examining the inputs and outputs of industries
- ➢➢ Plan outlays and government guidelines
- ➢➢ Suggestions of financial institutions and developmental agencies
- ➢➢ Investigation of local materials and resources
- ➢➢ Economic and social trend of the economy
- ➢➢ New technological developments
- ➢➢ Industrial potential surveys
- ➢➢ Visits to trade fairs
- ➢➢ Unfulfilled psychological needs
- ➢➢ Possibility of reviving sick units

27. Why visit of trade fairs important for entrepreneurs.

Attending the National and International trade fairs provides an excellent opportunity to know about new products and new development. The above said sources of project ideas may be generated by the Government agencies, credit institutions, non governmental organisations and also by public.

28. What is Project Report

A project at the outset must bear a logical appearance. Project report is a document, which clearly narrates the various aspects of project in a prescribed form. Project report preparation is a post investment decision exercise. It involves the preparation of detailed specifications and designs for the project premises, detailed design of the process or other equipment and time schedules for the implementation of the project.

29. Qualities of Successful Entrepreneurs

1. Ambition
2. Creativity
3. Self-confidence
4. Foresight
5. Hard work
6. Emotional balance
7. Decision-making ability
8. Courtesy
9. Communication skill

10. Good character
11. Motivational ability
12. Opportunist
13. Patience

30. Difference between Entrepreneurship and Self Employment

1. Being self-employed, you have people who are working FOR YOU but being an entrepreneur, you have people who are working WITH YOU and not just under you.

2. Self-employed people have to go to work all the time regardless of the number of employees they have. This is not so for an entrepreneur.

3. Entrepreneurs are Global thinkers. They see their business in larger scale than the self-employed.

4. A self-employed person does not want to go beyond his/her vicinity or do a new thing because she/he fears taking risks. Entrepreneurs are risk-takers, they know how to manage and control risks.

5. Entrepreneurship is believed to be a key determinant of the economic success of a nation. Self-employment may be seen as selfish at times when most of what a person thinks about is just their own personal wealth.

6. A self-employed person tries to do everything themselves An entrepreneur on the other hand knows that they can't do everything, so they delegate responsibilities to people they trust.

31. Steps in Project Identification

A. Conceptual stage - where project ideas are generated
B. Screening stage - at which unviable ideas are eliminated
C. Identification stage - at which viable projects are selected
D. Pre-feasibility state - at which pre-feasibility studies are taking up

32. Sole Proprietorship and Partnership.

Sole Proprietorship is the simplest and oldest form of ownership organisation. It is a business owned and controlled by one person.

Partnership is relationship between person who have agreed to share the profits of a business carried on by all or anyone of them acting for all.

33. How does entrepreneurship help in the development of Indian economy.

1. Facilitates Overall Development - Entrepreneurs act as catalytic agent for change which results in chain reaction. Once an enterprise is established, the process of industrialisation is set in motion.

2. Promotes Country's Export Trade - Entrepreneurs earn valuable foreign exchange through increased exports.

3. Wealth Creation and Distribution - It stimulates impartial redistribution of wealth and income in the interest of the country to more people and geographic areas, thus giving benefit to larger sections of the society.

4. Improvement in the Standard of Living - Entrepreneurs adopt latest innovations in the production of wide variety of goods and services in large scale that too at a lower cost.

5. Increasing GDP and Per Capita Income - Entrepreneurs are always looking out for opportunities. They encourage effective resource mobilisation of capital and skill, bring in new products and services and develops markets for growth of the economy.

6. Balanced Regional Development - Entrepreneurs promote development of industries. They help to remove regional disparities by industrializing rural and backward areas.

7. Reduces Concentration of Economic Power - Industrial development normally leads to concentration of economic power in the hands of a few individuals which results in the growth of monopolies. Entrepreneurs contribute towards the development of society by reducing concentration of economic power.

8. Promotes Capital Formation - Entrepreneurs promote capital formation by mobilizing the idle savings of our citizens.

9. Employment Generation - Entrepreneurs provide instant large-scale employment to the unemployed which is an unending problem of India.

Registration No.: .....

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of General Education

Session: 2018-19 (Winter Semester)

B. Voc. Program, 3rd Semester (2018-19)

End-Sem. Examination

Course Code: GEN 1304 **Time: 3 Hours**

Course Name: Personality Development **Max. Marks: 100**

Instruction:

The question paper comprises three sections A, B & C. Marks allotted are mentioned against each section.

Section-A **(2*10=20)**

Q1.

(i) Match 'T' in the term SWOT with the correct option.

- **(a)** Trust
- **(b)** Threat
- **(c)** Time bound
- **(d)** Technique

(ii) Match 'T' in the term SMART with the correct option.

- **(a)** Task Bound
- **(b)** Troublesome
- **(c)** Time Bound
- **(d)** Trustworthy

Q 2.

(i) Identify the term which was introduced by Edward De Bono:

- **(a)** Theory of Motivation
- **(b)** Lateral Thinking
- **(c)** Etiquette
- **(d)** Email

(ii) Fill in the blanks with the given suitable options:

Motivation is derived from the _____word "movere" which means "to move" or "to energize" or "to activate".

- **(a)** French
- **(b)** Sanskrit
- **(c)** Latin
- **(d)** German

Q 3.

(i) Identify the full form of 'bcc' in an E-mail format from the given options.

- **(a)** Best casual copy
- **(b)** Blunt colourful copy
- **(a)** Blind column copy
- **(b)** Blind carbon copy

(ii) State the internal components in SWOT Analysis:

- **(a)** Summary & Work
- **(b)** Strong & Wretched
- **(c)** Opportunity & Time
- **(d)** Strength & Weakness

Q 4.

(i) Participating in Singing Competition because you want to win awards is an example of _____.

- **(a)** Extrinsic motivation
- **(b)** Time management
- **(c)** Intrinsic motivation
- **(d)** Out of box thinking

(ii) Making an online game because you find the activity enjoyable is an example of_____.

- **(a)** Time management
- **(b)** Intrinsic motivation
- **(c)** Extrinsic motivation
- **(d)** SWOT analysis

Q.5

(i) Select the suitable match for 'W' in the term SWOT Analysis:

- **(a)** Winner
- **(b)** Workstyle
- **(c)** Weakness
- **(d)** Worry

(ii) Identify the full form of 'cc' in an E-mail format from the given options.

- **(a)** carbon copy
- **(b)** clear copy
- **(c)** column copy
- **(d)** constant copy

Q6.

(i) Match 'M' in the term SMART with the correct option.

- **(a)** Measurable
- **(b)** Magical
- **(c)** Manageable
- **(d)** Meaningful

(ii) Match 'R' in the term SMART with the correct option.

- **(a)** Reversible
- **(b)** Rigid
- **(c)** Relevant
- **(d)** Repairable

Q 7.

(i) Solving problems through an indirect and creative approach is called:

- **(a)** Motivation Theory
- **(b)** Stress Management
- **(c)** Lateral Thinking
- **(d)** Negative Attitude

(ii) SWOT Analysis:

- **(a)** helps in achieving our goals
- **(b)** destroys our dreams
- **(c)** focuses on extrinsic motivation
- **(d)** None of the above

Q 8.

(i) Excessive rewards may be problematic, but when used appropriately, extrinsic motivators can be a useful tool.

(a) True
(b) False

(ii) SWOT Analysis is a useful technique for understanding your capabilities.

(a) True
(b) False

Q 9.

(i) Identify the most suitable option for 'S' in the term SWOT analysis:

(a) Strong
(b) Sweet
(c) Strength
(d) Support

(ii) Goals that have an outcome but have a time limit are known as _____

(a) Fixed goals
(b) Realistic goals
(c) Flexible goals
(d) Smart goals

Q.10

(i) Cite which of the following is not a part of an E-mail.

(a) Date
(b) Signature
(c) Subject
(d) Greetings

(ii) Goals that take a short time to achieve are known as:

(a) Complex goals
(b) Passive goals
(c) Short term goals
(d) Long term goals

Section B (5*6=30)

Attempt any 06 questions (11-18):

Q11. Explain how "Extrinsic motivation is a source of change in behavior."

Q12. Write a short note on the importance of Time Management.

Q13. How does attitude help in one's career building?

Q14. How can an individual lead a stress-free life?

Q15. Explain any three advantages of setting goals.

Q16 How do Intrinsic Motivation and Extrinsic Motivation influence learning?

Q17. Explain the meaning and application of 'S' and 'O' and their connection in SWOT analysis.

Q18. State the reasons which stop people from setting goals.

Section C (10*5=50)

Q19. Make a detailed blue-print of your long term goals with the help of a diagram.

Q20. Define Motivation and discuss in detail the types of motivation.

Q 21. Write a detailed note on the techniques of lateral thinking for problem solving.

Q22. Which type of Motivation is advantageous for any individual, Intrinsic Motivation or Extrinsic Motivation? Give reasons for your choice.

Q23. Explain the importance of SWOT analysis and how it helps the students to achieve their goals.

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Registration No.....

Bhartiya Skill Development University

School of General Education

End-Semester Examination- July, 2019

Winter Semester, Sem III, B.Voc. Program

Answer Key

Course Code: GEN1304 **Time: 3 Hours**

Course Name: Personality Development **Max. Marks: 100**

Instructions: The question paper comprises three sections A, B & C. Marks allotted are mentioned against each section.

Section A: Attempt *all* questions.

Section B: Attempt any six questions

Section C: Attempt all questions.

Section-A **(2*10=20)**

Q1.

(i) Match 'T' in the term SWOT with the correct option.

a) Trust
b) Threat
c) Time bound
d) Technique

(ii) Match 'T' in the term SMART with the correct option.

a) **Task Bound**
b) Troublesome
c) Time Bound
d) Trustworthy

Q 2.

(i) Identify the term which was introduced by Edward De Bono:

a) Theory of Motivation
b) Lateral Thinking
c) Etiquette
d) Email

(ii) Fill in the blanks with the given suitable options:

Motivation is derived from the _____word "movere" which means "to move" or "to energize" or "to activate".

a) French
b) Sanskrit
c) Latin
d) German

Q 3.

(i) Identify the full form of 'bcc' in an E-mail format from the given options.

a) Best casual copy
b) Blunt colourful copy
c) Blind column copy
d) Blind carbon copy

(ii) State the internal components in SWOT Analysis:

a) Summary & Work
b) Strong & Wretched
c) Opportunity & Time
d) Strength & Weakness

Q 4.

(i) Participating in Singing Competition because you want to win awards is an example of_____.

a) Extrinsic motivation
b) Time management
c) Intrinsic motivation
d) Out of box thinking

(ii) Making an online game because you find the activity enjoyable is an example of_____.

a) Time management
b) Intrinsic motivation
c) Extrinsic motivation
d) SWOT analysis

Q.5

(i) Select the suitable match for 'W' in the term SWOT Analysis:

a) Winner
b) Workstyle
c) **Weakness**
d) Worry

(ii) Identify the full form of 'cc' in an E-mail format from the given options.

a) carbon copy
b) clear copy
c) column copy
d) constant copy

Q6.

(i) Match 'M' in the term SMART with the correct option.

a) Measurable
b) Magical
c) Manageable
d) Meaningful

(ii) Match 'R' in the term SMART with the correct option.

a) Reversible
b) Rigid
c) Relevant
d) Repairable

Q 7.

(i) Solving problems through an indirect and creative approach is called:

a) Motivation Theory
b) Stress Management
c) Lateral Thinking
d) Negative Attitude

(ii) SWOT Analysis:

a) helps in achieving our goals
b) destroys our dreams
c) focuses on extrinsic motivation
d) None of the above

Q 8.

(i) Excessive rewards may be problematic, but when used appropriately, extrinsic motivators can be a useful tool.

a) True
b) False

(ii) SWOT Analysis is a useful technique for understanding your capabilities.

a) True
b) False

Q 9.

(i)Identify the most suitable option for 'S' in the term SWOT analysis:

a) Strong
b) Sweet
c) Strength
d) Support

(ii) Goals that have an outcome but have a time limit are known as _____

a) Fixed goals
b) Realistic goals
c) Flexible goals
d) Smart goals

Q.10

(i) Cite which of the following is not a part of an E-mail.

a) Date
b) Signature
c) Subject
d) Greetings

(ii) Goals that take a short time to achieve are known as:

a) Complex goals
b) Passive goals
c) **Short term goals**
d) Long term goals

Section B (5*6=30)

Q11. Extrinsic motivation refers to behavior that is driven by external rewards such as money, fame, grades, and praise. This type of motivation arises from outside the individual, as opposed to intrinsic motivation, which originates inside of the individual. When you want to get someone to do something, such as getting your kids to do their homework, what is the best way to motivate them? Many people might start by offering some type of reward like a special treat or toy. This is a great example of extrinsic motivation since the behavior is motivated by a desire to gain an external reward. Unlike intrinsic motivation, which arises from within the individual, extrinsic motivation is focused purely on outside rewards.

Q12. Time Management refers to managing time effectively so that the right time is allocated to the right activity. Effective time management allows individuals to assign specific time slots to activities as per their importance. Time Management refers to making the best use of time as time is always limited. Ask yourself which activity is more important and how much time should be allocated to the same? Know which work should be done earlier and which can be done a little later. Time Management plays a very important role not only in organizations but also in our personal lives.

Time Management includes:

I. Effective Planning
II. Setting goals and objectives
III. Setting deadlines
IV. Delegation of responsibilities
V. Prioritizing activities as per their importance
VI. Spending the right time on the right activity

Q13. A positive attitude helps you cope more easily with the daily affairs of life. It brings optimism into your life, and makes it easier to avoid worries and negative thinking. If you adopt it as a way of life, it would bring constructive changes into your life, and makes them happier, brighter and more successful. With a positive attitude you see the bright side of life, become optimistic, and expect the best to happen. It is certainly a state of mind that is well worth developing. Positive attitude manifests in the following ways:

- Positive thinking.
- Constructive thinking.
- Creative thinking.
- Optimism.
- Motivation and energy to do things and accomplish goals.
- An attitude of happiness.
- A positive frame of mind can help you in many ways, such as:

- Expecting success and not failure.
- Making you feel inspired.
- It gives you the strength not to give up, if you encounter obstacles on your way.
- It makes you look at failure and problems as blessings in disguise.
- Believing in yourself and in your abilities.>
- Enables you to show self-esteem and confidence.
- You look for solutions, instead of dwelling on problems.
- You see and recognize opportunities.

A positive attitude leads to happiness and success and can change your whole life. If you look at the bright side of life, your whole life becomes filled with light. This light affects not only you and the way you look at the world, but it also affects your environment and the people around you. If this attitude is strong enough, it becomes contagious. It's as if you radiate light around you.

Q14. Meditation, sports, yoga and positive attitude

Q15. After thinking about these you may come up with some of your own, but in the meanwhile, here are some of our thought provokers. Setting meaningful goals should bring:

1 Clearer Focus

Properly thought out and stated, goals clearly set out your intentions and desires; the things you really want to achieve.

2 Optimum Use of Resources

There are never enough resources to do everything so setting goals can help you to prioritise. Place your resources behind what you really want to do, rather than on things you are doing by default or by deflection.

3 Effective Use of Time

Of course time is a resource, but it deserves special consideration because it is so important. As Peter Drucker says: "If you want to improve how you manage time – stop doing what doesn't need to be done!"

4 Peace of Mind

Too often you can have many things on your mind. Writing down your goals can help you take all of those ideas, apply perspective and priority, then galvanize you into commitment and action

5 Clarity to Decision Making

Knowing what you are trying to do means that you can now ask: "does this activity get me closer to my goal?"

6 Easier Measurement of What You Do

Setting goals, especially SMART and SHARP goals, allows you to measure how well effectively you are moving towards achieving them.

Q16 Extrinsic and intrinsic motivation can also play a significant role in learning settings. Some experts argue that the traditional emphasis on external rewards such as grades, report cards, and gold stars undermines any existing intrinsic motivation that students might have. Others suggest that these extrinsic motivators help students feel more competent in the classroom, thus enhancing intrinsic motivation.

"A person's interest often survives when a reward is used neither to bribe nor to control but to signal a job well done, as in a "most improved player" award. If a reward boosts your feeling of competence after doing good work, your enjoyment of the task may increase. Rewards, rightly administered, can motivate high performance and creativity. And extrinsic rewards (such as scholarships, admissions, and jobs that often follow good grades) are here to stay," explains David G. Meyers in his text Psychology: Eighth Edition in Modules.

Q17. **Strengths**

- What advantages do you have that others don't have (for example, skills, certifications, education, or connections)?
- What do you do better than anyone else?
- What personal resources can you access?
- What do other people (and your boss, in particular) see as your strengths?
- Which of your achievements are you most proud of?
- What values do you believe in that others fail to exhibit?
- Are you part of a network that no one else is involved in? If so, what connections do you have with influential people?

Consider this from your own perspective, and from the point of view of the people around you. And don't be modest or shy – be as objective as you can. Knowing and using your strengths can make you happier and more fulfilled at work. See our Strengths Finder article for more help on this.
And if you still have any difficulty identifying your strengths, write down a list of your personal characteristics. Some of these will hopefully be strengths!

Tip:

Think about your strengths in relation to the people around you. **Opportunities**

- What new technology can help you? Or can you get help from others or from people via the Internet?
- Is your industry growing? If so, how can you take advantage of the current market?
- Do you have a network of strategic contacts to help you, or offer good advice?
- What trends (management or otherwise) do you see in your company, and how can you take advantage of them?
- Are any of your competitors failing to do something important? If so, can you take advantage of their mistakes?
- Is there a need in your company or industry that no one is filling?

- Do your customers or vendors complain about something in your company? If so, could you create an opportunity by offering a solution?

You might find useful opportunities in the following:

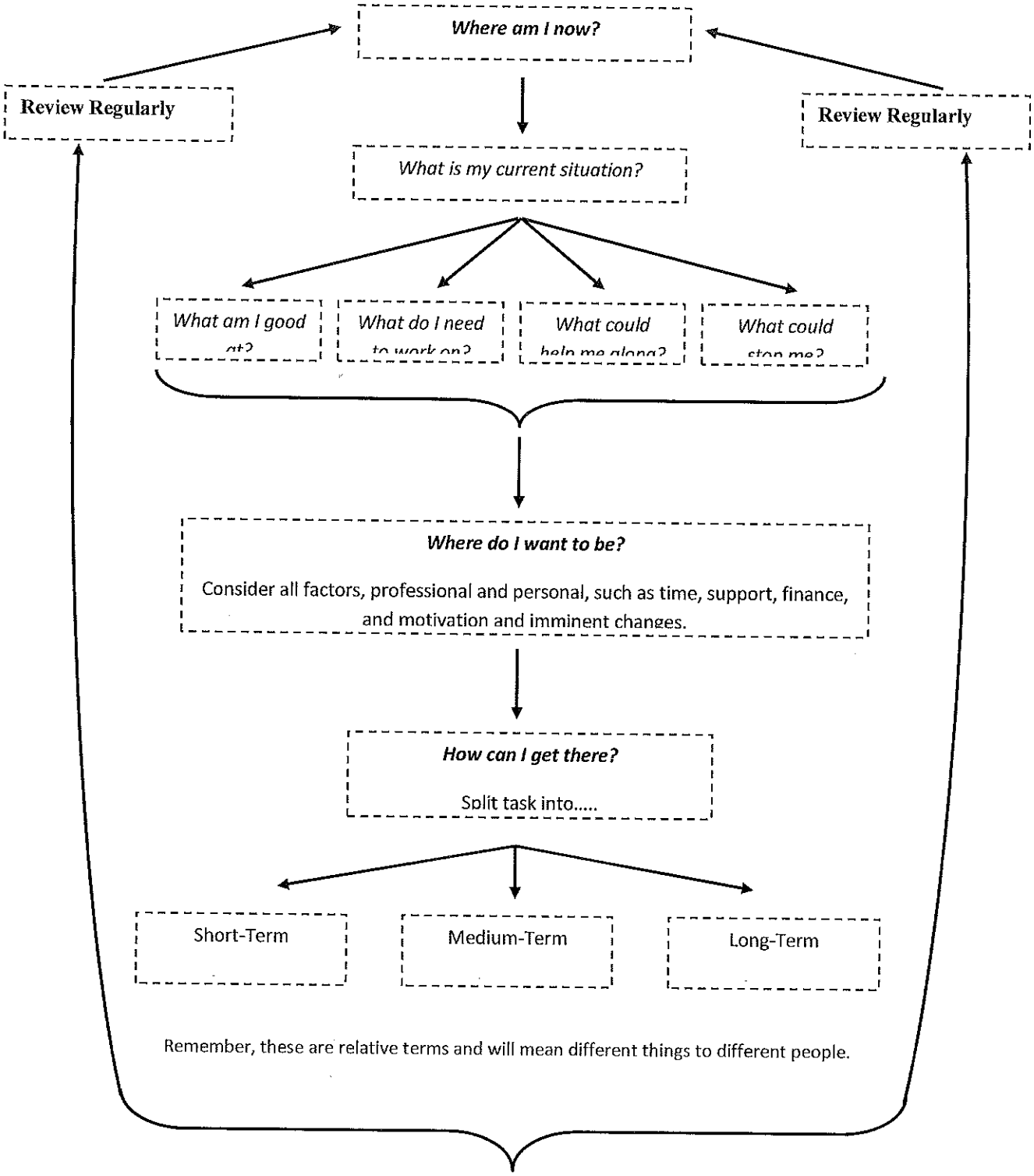
- Networking events, educational classes, or conferences.
- A colleague going on an extended leave. Could you take on some of this person's projects to gain experience?
- A new role or project that forces you to learn new skills, like public speaking or international relations.
- A company expansion or acquisition. Do you have specific skills (like a second language) that could help with the process?

Also, importantly, look at your strengths, and ask yourself whether these open up any opportunities – and look at your weaknesses, and ask yourself whether you could open up opportunities by eliminating those weaknesses.

Q18. Detailed note including the points such as negative attitude, fear of failure, escapism, laziness and comfort zone.

Section C **(10*5=50)**

Q.19 Blueprint for writing your personal individual plan for long term goals



Q20. Motivation is derived from the Latin word "movere" which means "to move" or "to energize" or "to activate". Motivation is the process of arousing the action, sustaining the activity in process and regulating the pattern of activity. - YOUNG

Extrinsic motivation occurs when we are motivated to perform a behaviour or engage in an activity to earn a reward or avoid punishment.

Examples of behaviours that are the result of extrinsic motivation include:

- Studying because you want to get a good grade
- Cleaning your room to avoid being reprimanded by your parents
- Participating in a sport to win awards
- Competing in a contest to win a scholarship

In each of these examples, the behaviour is motivated by a desire to gain a reward or avoid an adverse outcome. People are engaging in a behaviour not because they enjoy it or because they find it satisfying, but in order to get something in return or avoid something unpleasant.

Intrinsic motivation involves engaging in a behaviour because it is personally rewarding; essentially, performing an activity for its own sake rather than the desire for some external reward.

Examples of actions that are the result of intrinsic motivation include:

- Participating in a sport because you find the activity enjoyable
- Solving a word puzzle because you find the challenge fun and exciting
- Playing a game because you find it exciting

In each of these instances, the person's behaviour is motivated by an internal desire to participate in an activity for its own sake.

Essentially, the behaviour itself is its own reward.

Q 21. There are six techniques to help you get creative ideas which are useful in problem solving:

1. **Alternatives**
   This technique is about using concepts as a base for new ideas. Concepts are general theories or ways of doing things. Thinking of a number of ways to implement a concept is one way to generate ideas. Each idea can then generate new concepts. These new concepts can create a whole new way for generating more ideas.
2. **Focus**
   This technique is about learning when and how to change your focus to improve creative thinking. You can train your mind to focus on areas other people have not thought of. You may be able to make a breakthrough just because other people have not thought of it.
3. **Challenge**
   In this technique you break free from the boundaries of traditional thinking and the accepted way of doing things. It is based on the assumption that there may be a different and better way to do something even if there is no obvious problem with the current way.
4. **Random Entry**
   This technique is about using unconnected input to open up new lines of thinking. With this, you can use a randomly chosen word, picture, sound or other stimulus to open new lines of thinking.
5. **Provocation and Movement**

This technique is about generating provoking thoughts and using them to build new ideas. It enables you to think outside the box to get a list of interesting ideas to consider.

6. **Harvesting**
   This technique involves selecting specific ideas that seems practical and have the most value then reshaping them into practical solutions. It is about turning starter ideas into workable ideas. This technique is done at the end of a thinking session in order to select ideas that may prove to be valuable in the current situation or in the future. Harvesting helps you identify ideas that could be implemented right away as well as those that may need more work.

Q22. The primary difference between the two types of motivation is that extrinsic motivation arises from outside of the individual while intrinsic motivation arises from within. Researchers have also found that the two type of motivation can differ in how effective they are at driving behaviour.

Some studies have demonstrated that offering excessive external rewards for an already internally rewarding behaviour can lead to a reduction in intrinsic motivation, a phenomenon known as the overjustification effect. In one study, for example, children who were rewarded for playing with a toy they had already expressed interest in playing with became less interested in the item after being externally rewarded.

This is not to suggest that extrinsic motivation is a bad thing. Extrinsic motivation can be beneficial in some situations. It can be particularly helpful in situations where a person needs to complete a task that they find unpleasant. However:

- External rewards can induce interest and participation in something in which the individual had no initial interest.
- Extrinsic rewards can be used to motivate people to acquire new skills or knowledge. Once these early skills have been learned, people may then become more intrinsically motivated to pursue the activity.

- External rewards can also be a source of feedback, allowing people to know when their performance has achieved a standard deserving of reinforcement.

Extrinsic motivators should be avoided in situations where:

- The individual already finds the activity intrinsically rewarding
- Offering a reward might make a "play" activity seem more like "work"

Q23. A SWOT analysis for goal setting [Strengths | Weaknesses | Opportunities | Threats] is a great tool for helping you be realistic about what you can really achieve. To undertake a personal SWOT analysis for goal setting, for the life aspect you're considering, just write down everything you can think of in each category – strength | weakness | opportunity | threat – whether you think it's really relevant or not. Identify key strengths that will ultimately help you achieve your goals. Not all of your strengths will help you achieve your goals – you may be a brilliant violin player, but this probably won't help you get fit! You also need to identify which of your weaknesses are likely to get in the way of your achievements. Again, not all weaknesses will jeopardize your ability to achieve goals, but you need to identify which one's matter for you and your ability to succeed. Once you've got it all down, stand back and take a look at the result. What's missing? What are the

recurring ideas? Where are the connections between the life aspects? Are there any other life aspects that are more or less apparent after this process?

The next step is to take this 'brainstormed' information and gain some real insight from your results. Now grab a highlighter and highlight the key items. The outcome you want from the SWOT analysis for goal setting for each life aspect is a short list of:

- What opportunities are best for you to pursue
- What internal strengths you can use to enhance your pursuit of these opportunities
- What threats you need to eliminate/ minimize?
- What internal strengths you can use to overcome these threats
- What strengths you should consider making stronger to further enhance your ability to pursue your goals
- What weaknesses you need to improve on, or manage, so that they don't impede your goal setting.

From this list, you should be getting a real picture of what you can actually achieve. This is your current SWOT, and should be revisited from time to time as your situation changes, and forms a starting point for your goal setting. A SWOT analysis has many other uses - so it's a good skill to learn.

Registration No.: ....

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of Automotive Skills

3rd Semester, End Sem. Examination

B. Voc. Program, winter Semester (2018-19)

Course Code: GEN1305 **Time: 3 Hour**

Course Name: Elementary Drawing **Max. Marks: 100**

Instruction:

1. Answer all questions from section – A, each question carries one mark.
2. Answer six question from section – B, each question carries five marks.
3. Answer all questions from section – C, each question carries Ten marks.

Section – A

20x01 = 20 Marks

Q 1. What is the full form of IT?

A. Indian tolerance.
C. Inline tolerance.
B. International tolerance
D. None of the above

Q 2. What are the dimensions of A4 sheet?

A. 210*297.
C. 210*296.
B. 210*298.
D. None of the above.

Q 3. Hatching lines indicate which part in cut section?

A. Solid part.
C. Invisible part parts.
B. Spherical part.
D. Both B & C.

Q4. In first angle projection, we draw left side view on_____of the front view.

A. Left
C. Bottom
B. Right
D. Top

Q 5. A circle will appear on an isometric drawing is?

A. ellipse.
C. parabola.
B. cycloid.
D. None of the above

Q.6 Which type of line is a part of dimension line?

A. break line
C. extension line
B. phantom line
D. cutting plane lines

Q 7. Which tool can be used to draw 90-degree angle?

A. 30/60 triangle
B. protractor
C. drafting machine
D. all of the above

Q.8 Imagine a 'L' shaped face extruded into three dimension, how many faces does it contain?

A. seven
B. eight
C. ten
D. six

Q9. Which of the following is the reducing scale?

A. 1:1
B. 1:2
C. 2:1
D. 10:1

Q10. In first angle projection method, object is to be placed in?

A. First quadrant
B. Second quadrant
C. Third quadrant
D. Fourth quadrant

Q11. Hatching lines are drawn at___ degree to refrence line?

A. 30
B. 45
C. 60
D. 90

Q12. The length:width in case of an arrow head is?

A. 1:1
B. 2:1
C. 3:1
D. 4:1

Q13. A drafter helps in drawing:

A. Parallel and perpendicular lines
B. Concentric circles
C. Smooth curves
D. All above

Q14. To draw smooth curves of nature, draughting instrument used is,

A. Mini- drafter
B. French curves
C. Pair of set squares
D. All of the above

Q15. The primary unit of measurement for engineering drawing and design in the mechanical industries is the:

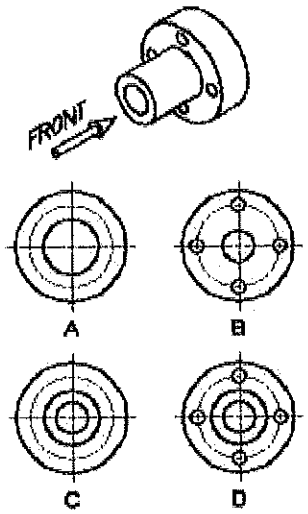
A. Millimeter
B. Centimeter
C. Kilometer
D. Meter

Q16. What type of line has precedence over all other types of lines?

A. Hidden line
B. Center line
C. Visible line
D. None of the above

Q17. What is the correct front view of the given object?

A. B
B. A
C. D
D. C



Q18. The face of the object has the most descriptive feature should be the:

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B. Front view
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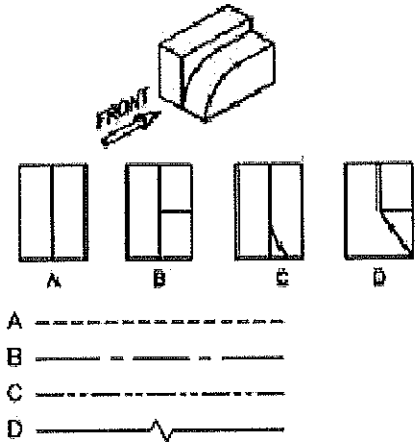
D. Top view

Q19. Which is the correct top view of the given object?



A. A
B. B
C. C
D. D

Q20.A Line composed of closely and evenly spaced short dashes in the drawing represents?

A. Visible line
B. Hidden line
C. Hatching line
D. Pitch circle of gear

Section – B

06X05 = 30 Marks

Q 21. What do you mean by directrix and focci?

Q 22. Differentiate between fits and tolerance.

Q 23. Why the engineering drawing is called the language of engineers? Explain with some suitable examples.

Q 24. Describe the use of French curve in engineering drawing with the help of industrial examples.

Q 25. Describe the types of lines in engineering drawing with their applications.

Q 26. What is meant by scale in drawing? Explain with the help of a drawing.

Q 27. Differentiate between first angle projection and third angle projection with the help of symbol.

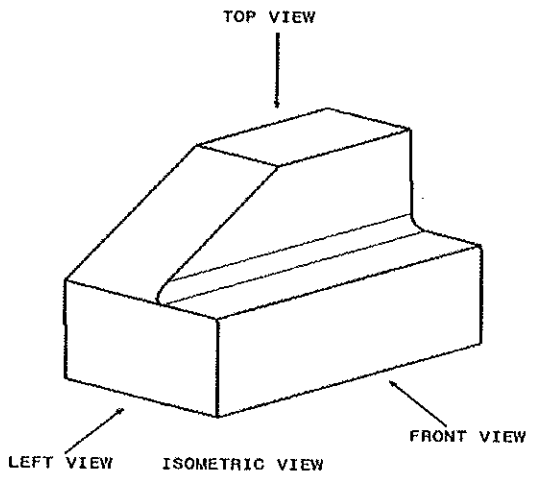
Q28. A shaft has the dimension of $80_{-0.6}^{+0.4}$, what is the value of upper deviation, lower deviation and nominal dimension?

Section – C

10X05 = 50 Marks

Q 27. Draw the alphabets A to J in drawing.

Q 28. Draw the views of this object in third angle.



Q 29. Explain clearance fit, transition fit and interference fit with suitable diagram

Q 30. Explain tolerance and classification of tolerance.

Q 31. Draw an ellipse by oblongs method whose major axis and minor axis 120 and 80 mm respectively.

Registration No.: .....

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of Automotive Skills

3rd Semester, End Sem. Examination

B. Voc. Program, summer Semester (2018-19)

Course Code: GEN1305 **Time: 3 Hour**

Course Name: Elementary Drawing **Max. Marks: 100**

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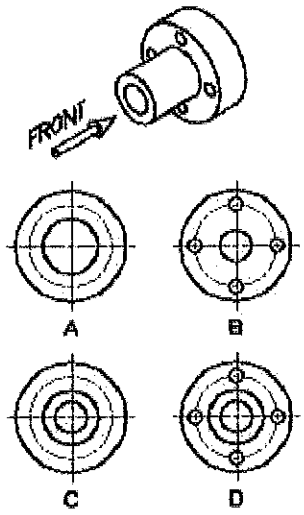

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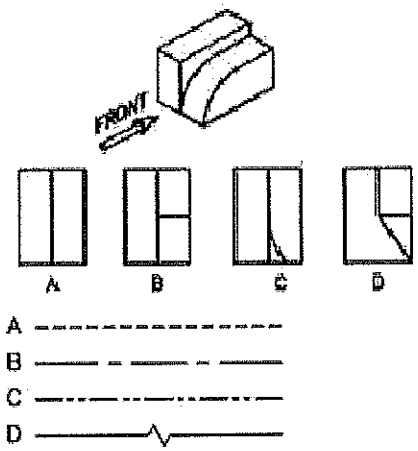

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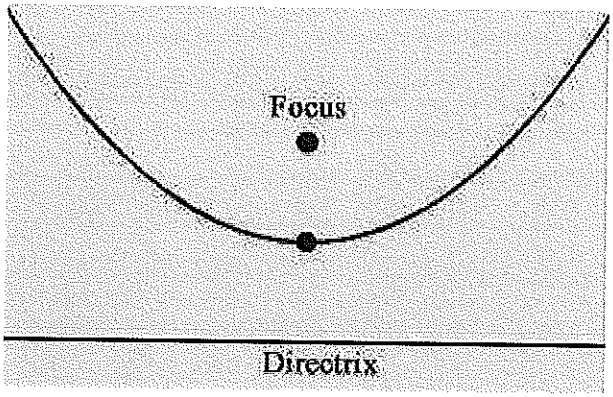
Section – B

06X05 = 30 Marks

Q 21. What do you mean by directrix and focci?

Ans. Directrix is defined as the fixed line used in describing a curve or surface.



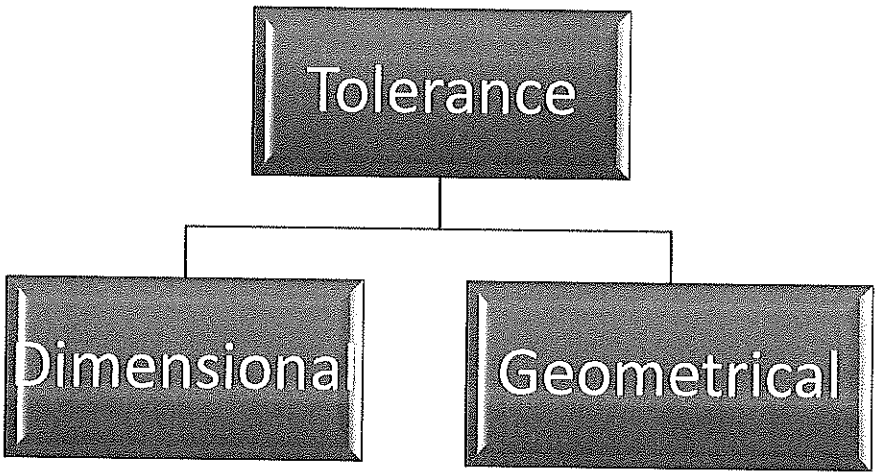
Q 22. Describe differences between fits and tolerance.

Ans. **TOLERANCE**

Tolerance can be defined as the magnitude of permissible variation of a dimension or other measured value from the specified value.

- It can also be defined as the total variation permitted in the size of a dimension, and is the algebraic difference between the upper and lower acceptable dimensions. It is an absolute value.
- The basic purpose of providing tolerances is to permit dimensional variations in the manufacture of components, adhering to the performance criterion as established by the specification and design.

CLASSIFICATION OF TOLERANCE



FITS

Manufactured parts are required to mate with one another during assembly.

- The relationship between the two mating parts that are to be assembled, that is, the hole and the shaft, with respect to the difference in their dimensions before assembly is called a fit.
- An ideal fit is required for proper functioning of the mating parts. Three basic types of fits can be identified, depending on the actual limits of the hole or shaft:

a. Clearance fit

b. Interference fit

c. Transition fit

Q 23. Why the engineering drawing is called the language of engineers? Explain with some suitable examples.

Ans. -A **drawing** drawn by an **engineer** having **engineering** knowledge for the **drawing** purposes is an **engineering drawing**. It is meant for communicating his ideas, thoughts and designs to others.

A **technical drawing** that fully and clearly defines the requirements for engineered items. It accurately and unambiguously captures all the geometric features of a product or a component. Its purpose is to convey all the required information necessary for a manufacturer to produce that component.

Q 24. Describe the use of French curve in engineering drawing with the help of industrial examples.

Ans. A **French curve** is a template usually made from metal, wood or plastic composed of many different **curves**. It is used in manual drafting and in fashion design to draw smooth **curves** of varying radii. The shapes are segments of the Euler spiral or cycloid **curve**.

Q 25. Describe the types of lines in engineering drawing with their applications.

Ans.

Illustration	Application
Thick	Outlines, visible edges, surface boundaries of objects, margin lines
Continuous thin	Dimension lines, extension lines, section lines leader or pointer lines, construction lines, boarder lines
Continuous thin wavy	Short break lines or irregular boundary lines – drawn freehand
Continuous thin with zig-zag	Long break lines
Short dashes, gap 1, length 3 mm	Invisible or interior surfaces
Short dashes	Center lines, locus lines Alternate long and short dashes in a proportion of 6:1,
Long chain thick at end and thin elsewhere	Cutting plane lines

Q 26. What is meant by scale in drawing? Explain with the help of a drawing.

Ans. A **scale** is defined as the ratio of the linear dimensions of the object as represented in a **drawing** to the actual dimensions of the same. ... It is not convenient, always, to draw **drawings** of the object to its actual size.

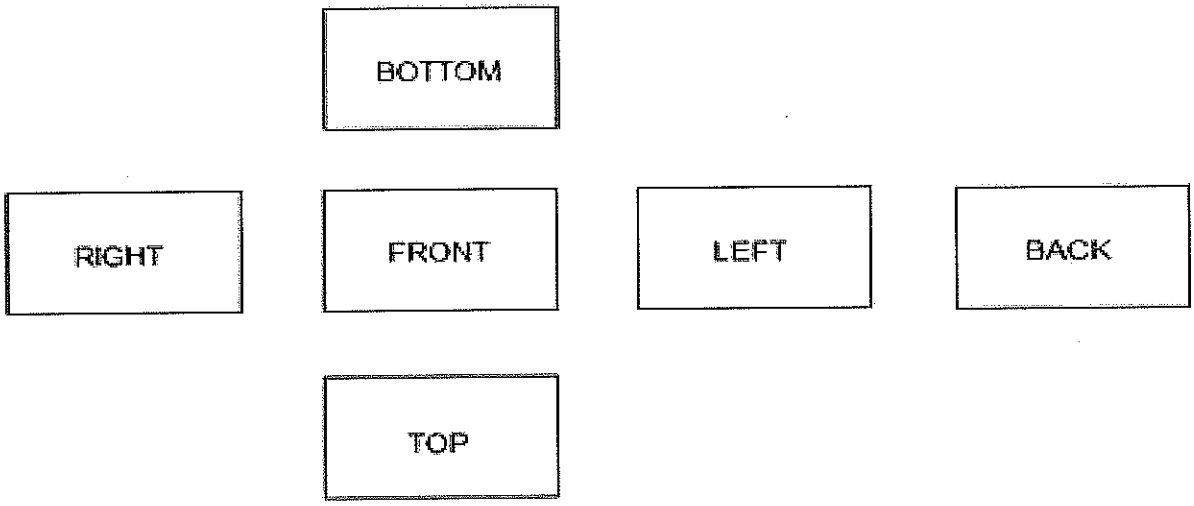
Explanation: The scale given is 2:1 (enlarging scale) that is the drawing is made 2 times of actual dimensions. So we have to divide the drawing length with 2. 20 mm / 2 =**100 mm** and 1 cm =10 mm. The actual length in cm is **10 cm**.

Q 27. Explain the difference between first angle projection and third angle projection with the help of symbol.

Ans.

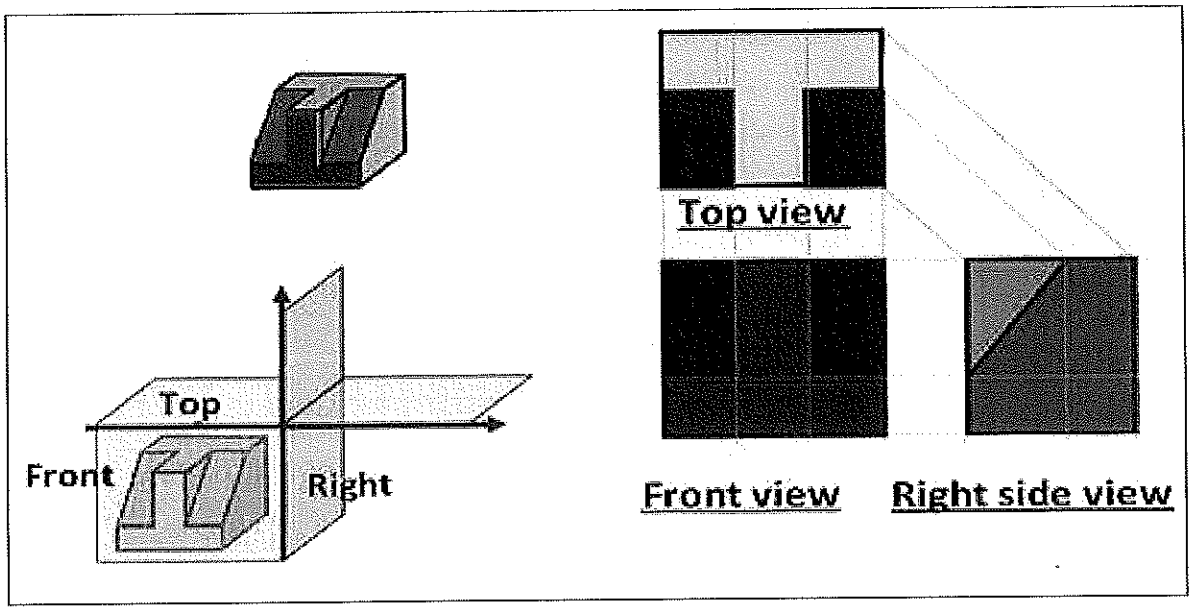
FIRST ANGLE PROJECTION

- In this the object in assumed to be positioned in the first quadrant
- The object is assumed to be positioned in between the projection planes and the observer. The views are obtained by projecting the images on the respective planes.
- Note that the right hand side view is projected on the plane placed at the left of the object.
- After projecting on to the respective planes, the bottom plane and left plane is unfolded on to the front view plane. i.e. the left plane is unfolded towards the left side to obtain the Right hand side view on the left side of the Front view and aligned with the Front view. The bottom plane is unfolded towards the bottom to obtain the Top view below the Front view and aligned with the Front View.



THIRD ANGLE PROJECTION

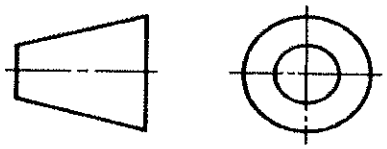
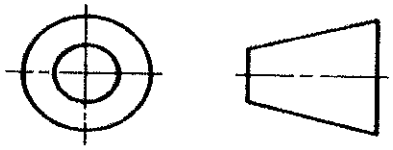
- In the third angle projection method, the object is assumed to be in the third quadrant. i.e. the object behind vertical plane and below the horizontal plane.
- In this projection technique, Placing the object in the third quadrant puts the projection planes between the viewer and the object.



DIFFERENCE BETWEEN FIRST AND THIRD ANGLE PROJECTION

First angle projection	Third-angle projection
Object is kept in the first quadrant.	Object is assumed to be kept in the third quadrant.
Object lies between observer and the plane of projection.	Plane of projection lies between the observer and the object.
The plane of projection is assumed to be non-transparent.	The plane of projection is assumed to be transparent.
Front (elevation) view is drawn above the XY line	Front (elevation) view is drawn below the XY line
Top (plan) view is drawn below the XY line	Top (plan) view is drawn above the XY line
Left view is projected on the right plane and vice versa	Left view is projected on the left plane itself.
Followed in India, European countries	Followed in USA

SYMBOL OF PROJECTION

Projection	Symbol
First angle	
Third angle	

Q28. A shaft has the dimension of $80_{-0.6}^{+0.4}$, what is the value of upper deviation, lower deviation and nominal dimension?

Ans. Upper deviation: - 80.4

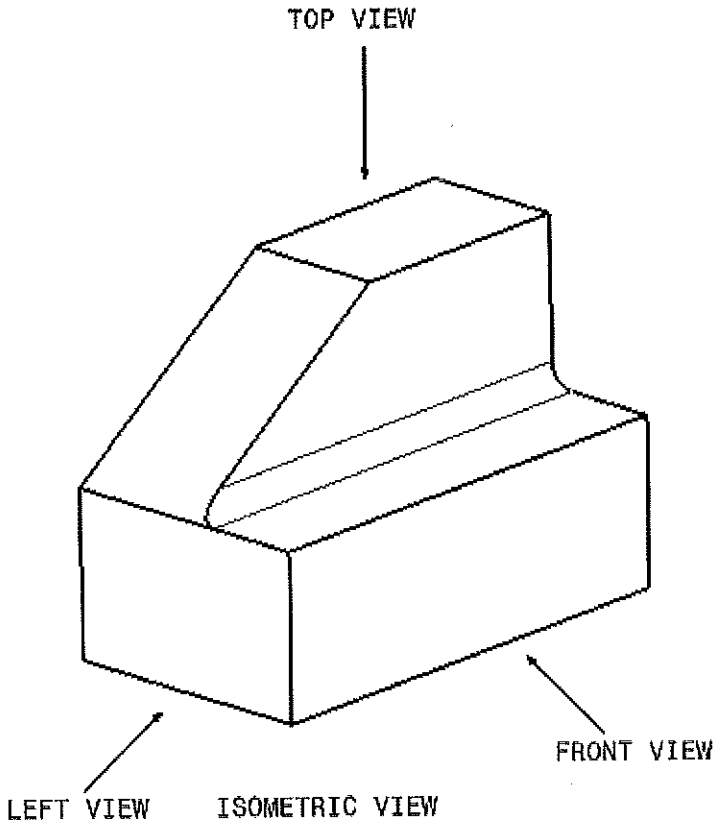
Lower deviation: -79.4

Section – C

10X05 = 50 Marks

Q 27. Draw the alphabets A to J in drawing.

Q 28. Draw the views of this object in third angle.



Q 29. Explain clearance fit, transition fit and interference fit with suitable diagram.

Ans.

FITS

Manufactured parts are required to mate with one another during assembly.

- The relationship between the two mating parts that are to be assembled, that is, the hole and the shaft, with respect to the difference in their dimensions before assembly is called a fit.
- An ideal fit is required for proper functioning of the mating parts. Three basic types of fits can be identified, depending on the actual limits of the hole or shaft:

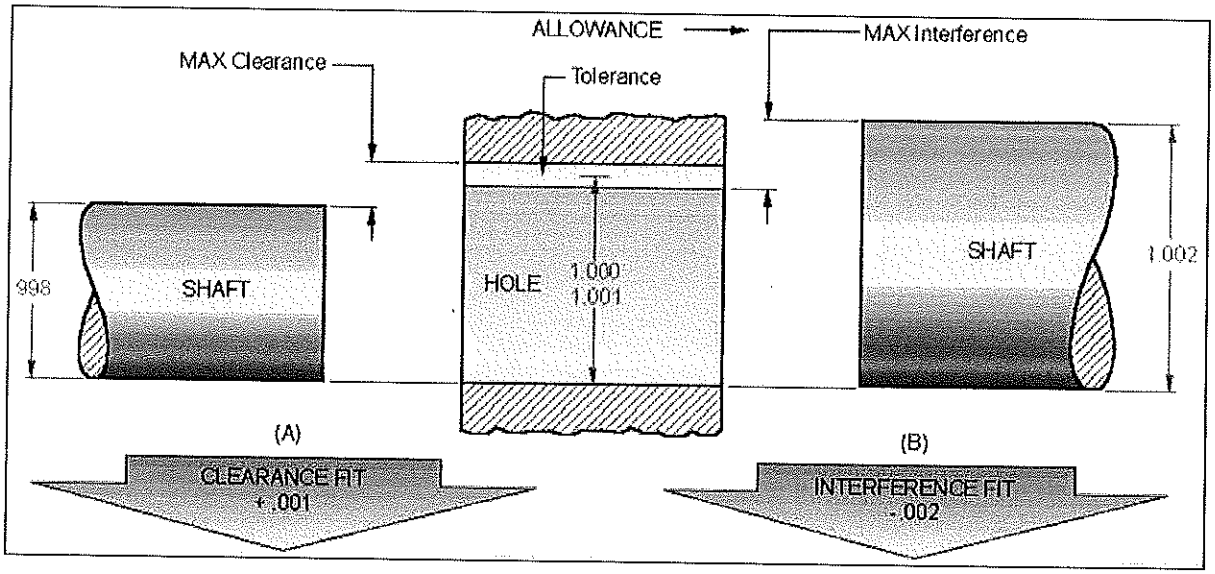
d. Clearance fit

e. Interference fit

f. Transition fit

- **Clearance fit:** The largest permissible diameter of the shaft is smaller than the diameter of the smallest hole.
- In case of clearance fit, the difference between the sizes is always positive.
- **Interference fit:** The minimum permissible diameter of the shaft exceeds the maximum allowable diameter of the hole.
- This type of fit always provides interference. Interference fit is a form of a tight fit. Tools are required for the precise assembly of two parts with an interference fit.

- In an interference fit, the difference between the sizes is always negative.
- **Transition fit:** Occurs when two tolerance mating parts are sometimes and interference fit and sometimes clearance fit when assembled.



GENERAL TERMINOLOGY IN FITS

- **Basic size:** This is the size in relation to which all limits of size are derived. Basic or nominal size is defined as the size based on which the dimensional deviations are given. This is, in general, the same for both components.
- **Limits of size:** These are the maximum and minimum permissible sizes acceptable for a specific dimension. The operator is expected to manufacture the component within these limits. The maximum limit of size is the greater of the two limits of size, whereas the minimum limit of size is the smaller of the two.
- **Tolerance:** This is the total permissible variation in the size of a dimension, that is, the difference between the maximum and minimum limits of size. It is always positive.

- **Allowance:** It is the intentional difference between the LLH and HLS. An allowance may be either positive or negative.

$$\text{Allowance} = \text{LLH} - \text{HLS}$$

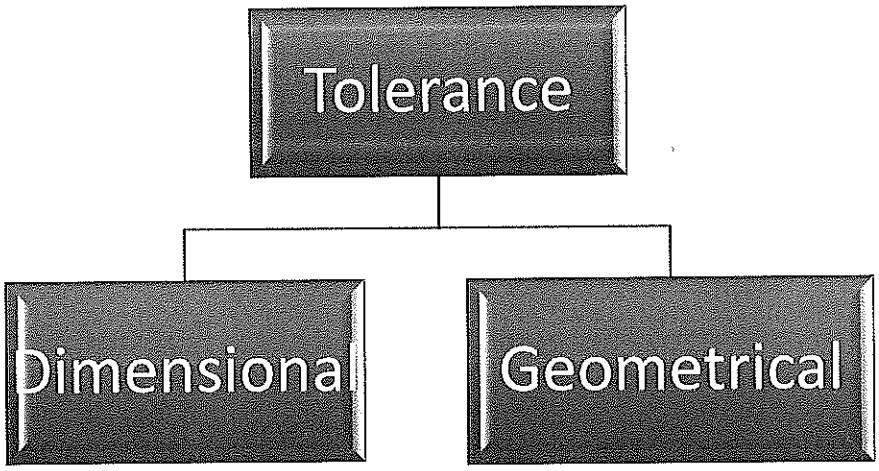
Q 30. Explain tolerance and classification of tolerance.

Ans. **TOLERANCE**

Tolerance can be defined as the magnitude of permissible variation of a dimension or other measured value from the specified value.

- It can also be defined as the total variation permitted in the size of a dimension, and is the algebraic difference between the upper and lower acceptable dimensions. It is an absolute value.
- The basic purpose of providing tolerances is to permit dimensional variations in the manufacture of components, adhering to the performance criterion as established by the specification and design.

CLASSIFICATION OF TOLERANCE



Classification of Tolerance:

Tolerance can be classified under the following categories:

A. Dimensional Tolerance

1. Unilateral tolerance

2. Bilateral tolerance

3. Compound tolerance

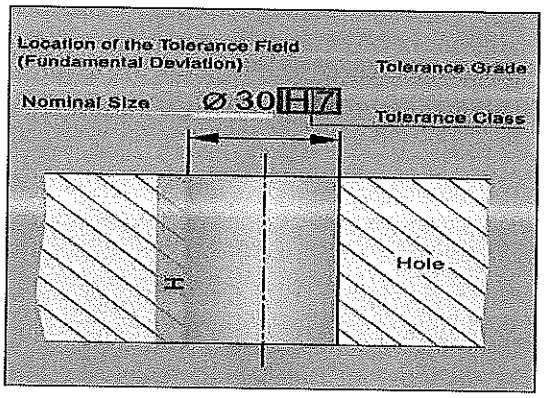
B. Geometric tolerance

CLASSIFICATION OF TOLERANCE

- **Dimensional Tolerance can be defined as:**

- **Unilateral Tolerance:** When the tolerance distribution is only on one side of the basic size, it is known as unilateral tolerance. In other words, tolerance limits lie wholly on one side of the basic size, either above or below.
- **Bilateral Tolerance:** When the tolerance distribution lies on either side of the basic size, it is known as bilateral tolerance. In other words, the dimension of the part is allowed to vary on both sides of the basic size but may not be necessarily equally disposed about it.

TOLERANCE DESIGNATION



- H= Fundamental deviation
- Diameter 30 = Nominal size
- 7 = IT Grade

CLASSIFICATION OF TOLERANCE

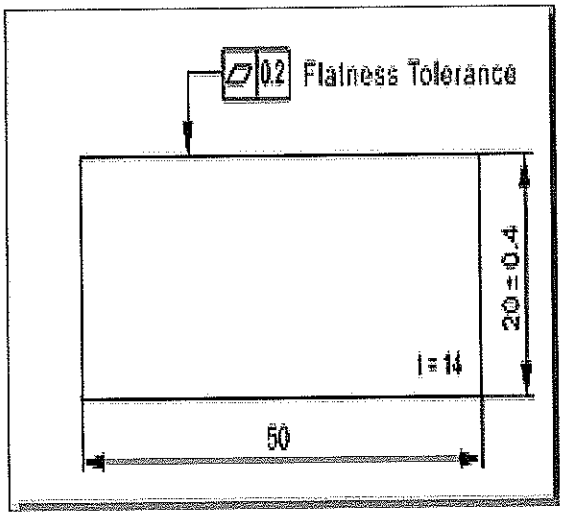
Geometric Tolerance: Geometric Dimensioning and Tolerance (GD & T) is a system for defining and communicating engineering tolerances. It uses a symbolic language on engineering drawings and computer generated three dimensional solid models that explicitly describes nominal geometry and its allowable variation.

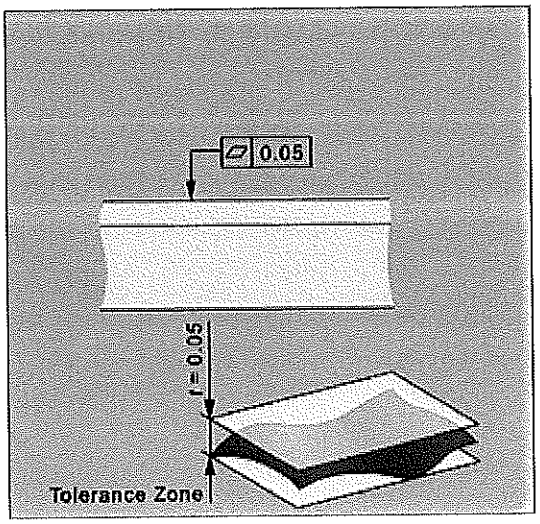
Type of control	Geometric characteristics	Symbol
Form	**Straightness**	
Form	**Flatness**	
Form	**Cylindricity**	
Form	**Circularity**	

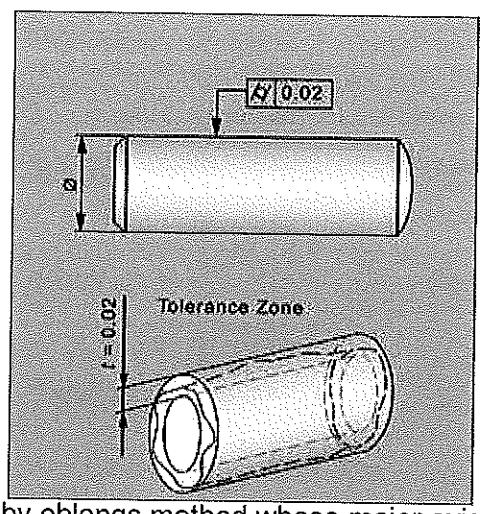
Type of control	Geometric characteristics	Symbol
Location	**Symmetry**	
Location	**Position**	
Location	**Concentricity**	
Orientation	**Perpendicularity**	

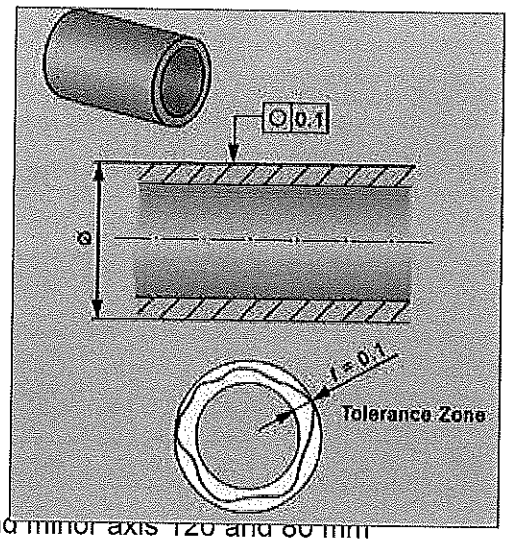
Orientation	**Parallelism**	
Orientation	**Angularity**	
Profile	**Profile of a surface**	
Profile	**Profile of a line**	

GEOMETRIC TOLERANCE









Q 31. Draw an ellipse by oblongs method whose major axis and minor axis 120 and 80 mm respectively.

Registration No.: .....

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of Carpenter Skills

3rd Semester, End-Sem. Examination

B. Voc. Program, Winter Semester (2018-19)

Course Code: GEN1305 **Time: 3 Hour**

Course Name: Elementary Drawing Skills **Max. Marks: 100**

Instructions:

1. Answer all questions from section A, each question carries one mark.
2. Answer only six questions from section B, each question carries five marks.
3. Answer all questions from section C, each question carries ten marks.

Section – A

20X01 = 05 Marks

Q.1 Which key is used to obtain properties palette in AutoCAD?

a) Control+1 b) Control+2

c) Control+3 d) Control+4

Q.2 How many units are available in AutoCAD?

a) 4 b) 5

c) 7 d) 6

Q.3 Which mode allows the user to draw 90° straight lines?

a) Osnap b) Ortho

c) Linear d) Polar tracking

Q.4 Which tool is used to obtain parallel lines, concentric circles and parallel curves?

a) Array b) Fillet

c) Copy d) Offset

Q.5 What is the default grid spacing in both X and Y directions is?

a) 10 b) 20

c) 5 d) 15

Q.6 Which command is used to divide the object into segments having predefined length?

a) Divide b) Chamfer

c) Trim d) Measure

Q.7 When drawing in 2D, what axis you do not work with?

a) X b) Y

c) Z d) WCS

Q.8 Which of the following is not a property of an object?

a) Line weight b) Line type

c) Color d) Measure

Q.9 What is the minimum allowable number of layers in a drawing?

a) 0 b) 1

c) 5 d) 2

Q.10 Which is corresponded to mouse wheels?

a) Zoom in/Zoom out b) Stretch

c) Extents d) Scale

Q.11 Which is not a unit of length measurement?

a) Yards b) Meters

c) Microns d) Grade

Q.12 How many snap points exists in an object?

a) 4 b) Depend on object

c) 5 d) 2

Q.13 How many points required to define the rectangle tool?

a) 4 b) 1

c) 5 d) 2

Q.14 The command line abbreviation for the Mirror tool is:

(a) M (b) MI

(c) Mi (d) Mo

Q.15 The command line abbreviation for the Array tool is:

(a) A (b) Ara

(c) Ar (d) Aray

Q.16 The command line abbreviation for the Layer tool is:

(a) La (b) Ly

(c) L (d) Lay

Q17. In the coordinate system of AutoCAD:

(a) Positive x figures are to the left

(b) Positive x figures are to the right

(c) Positive x figures are in the direction vertically upwards

(d) Positive x figures are in the direction vertically downwards

Q.18 What is the difference between command plot and print:

(a) Plot command prints only big plans

(b) Plot command only for CNC

(c) No difference

(d) Print command can print up to A3 pages

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Q.19 When the space key is not functions like enter key?

(a) When entering text

(b) When using the PEDIT command

(c) When selecting objects

(d) The space is always an alternative to the enter key

Q.20 When using the Rotate tool then angle of rotation is in the following direction:

(a) Clockwise

(b) Anticlockwise

(c) The direction in which the cursor is moved

(d) There is no fixed rotation direction

Section – B

06X05 = 30 Marks

Q.21 What do you understand by Computer Aided Drawing, discuss importance of AutoCAD in wood working.

Q.22 Explain five types of lines with sketch and also describe their applications.

Q.23 Write down the name of any five dimension parameters with their short key.

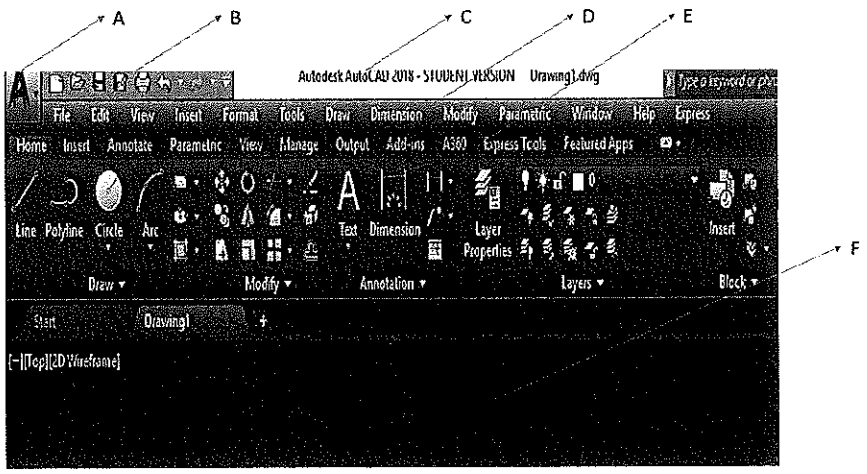
Q.24 Define layers, necessity of layers and how can you remove the empty layers from drawing?

Q.25 What do you understand by DWG and DXF file format, write down any three difference between them.

Q.26 What are the short key used for Measure & Divide. Discuss the differences between Measure & Divide with an example.

Q.27 Write down four differences between Line & Polyline with their short key and also explain conversion of a line object into polyline object.

Q.28 Describe the points from AutoCAD interface from the following figure.



Registration No.: .....

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Section – C

05X10 = 50 Marks

Q.29 Define Cartesian coordinate system in AutoCAD and explain its various types with a suitable example.

Q.30 Explain the following tools and also mention their short key being used in AutoCAD.

(a) Explode (b) Extend (c) Ellipse (d) Polygon (e) Hatch

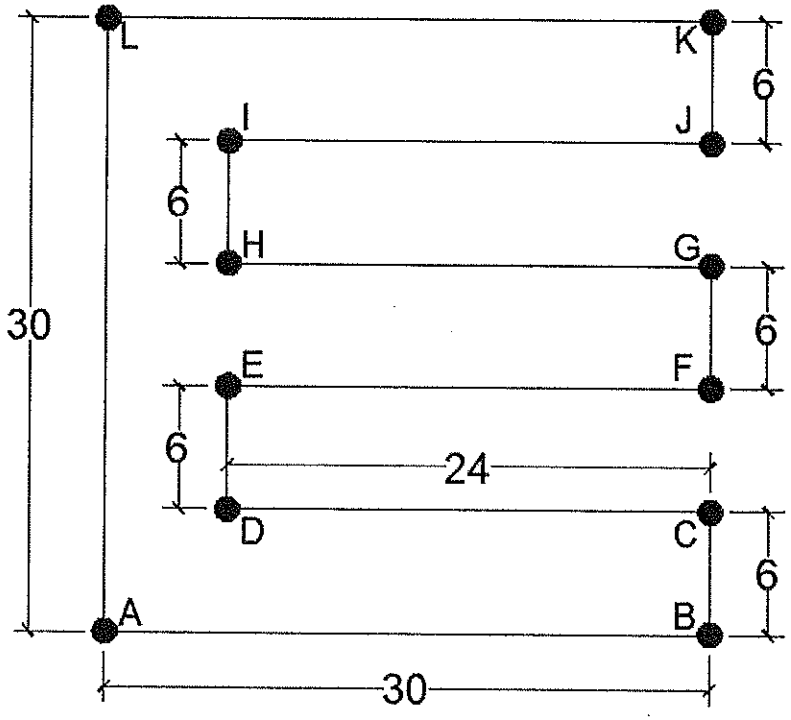
Q.31 Describe the following tools and also mention their short key being used in AutoCAD.

(a) Scale (b) Stretch (c) Offset (d) Join (e) Break

Q.32 Define various scales used in engineering drawing and also discuss Representative Fraction used for scale with suitable example.

Q.33 Define coordinates of all points by relative polar system and relative rectangular system in the following figure.

(Note : Where A is the origin)



Dr A Rana
01/7/19

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of Carpenter Skills

3rd Semester, End-Sem. Examination

B. Voc. Program, Winter Semester (2018-19)

Course Code: GEN1305 **Time: 3 Hour**

Course Name: Elementary Drawing Skills **Max. Marks: 100**

Instructions:

1. Answer all questions from section A, each question carries one mark.
2. Answer only six questions from section B, each question carries five marks.
3. Answer all questions from section C, each question carries ten marks.

Section – A

20X01 = 05 Marks

Q.1 Which key is used to obtain properties palette in AutoCAD?

a) Control+1 b) Control+2

c) Control+3 d) Control+4 (a)

Q.2 How many units are available in AutoCAD?

a) 4 b) 5

c) 7 d) 6 (b)

Q.3 Which mode allows the user to draw 90° straight lines?

a) Osnap b) Ortho

c) Linear d) Polar tracking (b)

Q.4 Which tool is used to obtain parallel lines, concentric circles and parallel curves?

a) Array b) Fillet

c) Copy d) Offset (d)

Q.5 What is the default grid spacing in both X and Y directions is?

a) 10 b) 20

c) 5 d) 15 (a)

Q.6 Which command is used to divide the object into segments having predefined length?

a) Divide b) Chamfer

c) Trim d) Measure (d)

Q.7 When drawing in 2D, what axis you do not work with?

a) X b) Y

c) Z d) WCS (c)

Q.8 Which of the following is not a property of an object?

a) Line weight b) Line type

c) Color d) Measure (d)

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Q.9 What is the minimum allowable number of layers in a drawing?

a) 0 b) 1

c) 5 d) 2 (b)

Q.10 Which is corresponded to mouse wheels?

a) Zoom in/Zoom out b) Stretch

c) Extents d) Scale (a)

Q.11 Which is not a unit of length measurement?

a) Yards b) Meters

c) Microns d) Grade (d)

Q.12 How many snap points exists in an object?

a) 4 b) Depend on object

c) 5 d) 2 (b)

Q.13 How many points required to define the rectangle tool?

a) 4 b) 1

c) 5 d) 2 (d)

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(a) M (b) Ml

(c) Mi (d) Mo (c)

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(a) A (b) Ara

(c) Ar (d) Aray (c)

Q.16 The command line abbreviation for the Layer tool is:

(a) La (b) Ly

(c) L (d) Lay (a)

Q17. In the coordinate system of AutoCAD:

(a) Positive x figures are to the left

(b) Positive x figures are to the right

(c) Positive x figures are in the direction vertically upwards

(d) Positive x figures are in the direction vertically downwards (b)

Q.18 What is the difference between command plot and print:

(a) Plot command prints only big plans

(b) Plot command only for CNC

(c) No difference

(d) Print command can print up to A3 pages (c)

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Q.19 When the space key is not functions like enter key?

(a) When entering text

(b) When using the PEDIT command

(c) When selecting objects

(d) The space is always an alternative to the enter key (a)

Q.20 When using the Rotate tool then angle of rotation is in the following direction:

(a) Clockwise

(b) Anticlockwise

(c) The direction in which the cursor is moved

(d) There is no fixed rotation direction (b)

Section – B

06X05 = 30 Marks

Q.21 What do you understand by Computer Aided Drawing, discuss importance of AutoCAD in wood working.

Ans. Auto CAD is a computer aided design and drafting software used in architecture, construction and manufacturing to prepare the engineering drawings in terms of 2D and 3D by electronic method.

This CAD drawing offers time saving process to drawing. As per high technology we can draft a drawing with help of different predefined library. From this library we can use a lots of shapes, material, accessories of joinery etc. We can also set a template file in which we can fix our all drawing settings as well as some materialistic objects. Saved file we can transfer easily where we want by electronic method. It is also easy in PDF file which they can open to view and print.

Q.22 Explain five types of lines with sketch and also describe their applications.

Ans.

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CONVENTIONS FOR VARIOUS LINES [ACCORDING TO B.I.S. S.P : 46 - 1988]

LINE	DESCRIPTION	GENERAL APPLICATION
A ———	CONTINUOUS THICK	A1 VISIBLE OUTLINE A2 VISIBLE EDGES
B ———	CONTINUOUS THIN STRAIGHT OR CURVED	B1 IMAGINARY LINES OF INTERSECTION B2 DIMENSION LINES B3 PROJECTION LINES B4 LEADER LINES B5 HATCHING B6 OUTLINES OF REVOLVED SECTIONS IN PLACE B7 SHORT CENTRE LINE
C ~~~	CONTINUOUS THIN FREEHAND	C1 LIMITS OF PARTIAL OR INTERRUPTED VIEWS AND SECTIONS, IF THE LIMIT IS NOT A CHAIN THIN
D /\/\/\	CONTINUOUS THIN (STRAIGHT WITH ZIGZAGS	D1 LINE
E — — — —	DASHED THICK	E1 HIDDEN OUTLINES E2 HIDDEN EDGES
F — — — —	DASHED THIN	F1 HIDDEN OUTLINES F1 HIDDEN EDGES
G ——— - ———	CHAIN THIN	G1 CENTRE LINES G2 LINES OF SYMMETRY G3 TRAJECTORIES

Q.23 Write down the name of any five dimension parameters with their short key.

Ans.

S. No.	Dimension Parameter	Short keys
1	Dimension Linear	DLI + Enter
2	Dimension Angular	DAN + Enter
3	Dimension Arc Length	DAR + Enter
4	Dimension Radial	DRA + Enter
5	Dimension Diameter	DDI + Enter

Q.24 Define layers, necessity of layers and how can you remove the empty layers from drawing?

Ans. Layer is a concept that allow grouping of drawn geometry in separate categories according to similar features and a common theme. This allows control over drawing, by applying properties to the layers such as line type, line weight & colors etc.

Necessity –

- When a new AutoCAD drawing is created, everything which is drawn, is drawn on the one default layer, named 0. When creating drawings, the layer 0 shouldn't really be used.

- New layers should be set up with names corresponding to the desired properties.
- A user is entitled to create as many numbers of layers he requires in CAD software.
- Each layer can be defined to have its own line weight, line type, colour that is to be printed in the hard copy from drawing.
- Each layer created can be independently switched on and off in order to have a better visibility of the drawing and we can lock them to prevent editing.

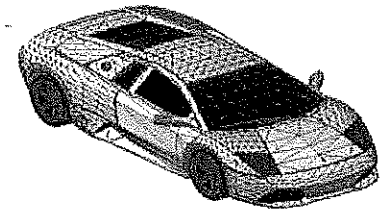
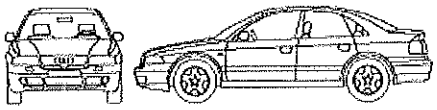
Removal of empty Layers - We can delete only unreferenced layers. Referenced layers include layers 0 and defpoints. If you are working with a layer or you have some entity in drawing with same layer, that layer will not delete by anyway. For tht you have to remove that layer from all objects and also that was not current layer, then only you can delete that layer.

Q.25 What do you understand by DWG and DXF file format, write down any three difference between them.

Ans. These both are file extension of AutoCAD file.

DWG - It should be used if your drawing will only be accessed via AutoCAD.

DXF - It should be used if you're sharing drawings between different CAD or vector based programs.

S. No.	DWG File	DXF File
1.	The acronym DWG stands for Drawing.	The acronym DXF stands for Drawing Exchange Format.
2.	It is the native file format for AutoCAD for storing 2D and 3D design data.	DXF format became the standard for data exchange between CAD programs.
3.	DWG handles 3D geometry 	DXF stores 2D vector images 

Q.26 What are the short key used for Measure & Divide. Discuss the differences between Measure & Divide with an example.

Ans.

S. No.	Measure	Divide
1	Short Key – ME + Enter	Short Key – DIV + Enter
2	A line divided by no of segment	A line divided by length of segment
3	Length is automatic fixed according to segments	Length is define by user

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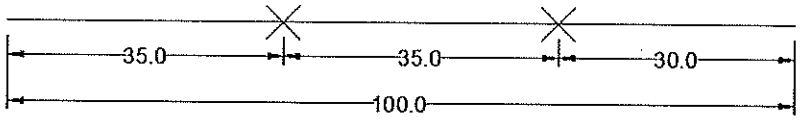
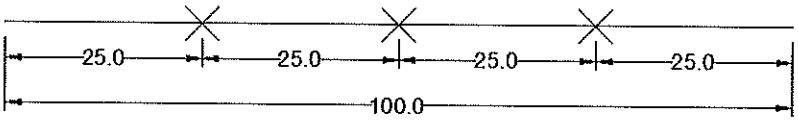
4.	Example – If you have a 100 mm length and you required segment length 35, then it will start from left with 35 mm segment and cover it until there is margin as per desired length otherwise you have remain length segment as 30 mm	Example – If you have a 100 mm length and you required segments 4, it will start from left to right to divide, then total length divided in given 4 segment and no remain segment you get.

Major



Divide



Q.27 Write down four differences between Line & Polyline with their short key and also explain conversion of a line object into polyline object.

Ans.

S. No.	line	Polyline
1	Short Key – L + Enter	Short Key – PL + Enter
2	Line object is multi selective by no. of sides.	Polyline object is single selective by one entity.
3	Line can't be editable.	polyline is editable.
4	Line can't be change into other shapes.	Polyline can be change into curved shapes.
5	Line object have equal width.	Polyline object have equal and unequal width.

Conversion - By the Polyline edit tool, select join function, then select all lines for conversion as required, press enter, and Esc, then all the sides of line object can be convert into polyline object.

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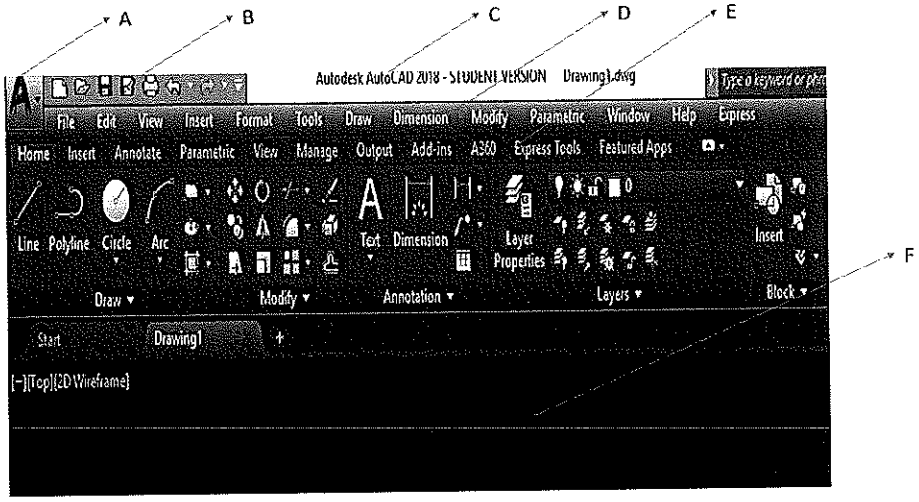
Q.28 Describe the points from AutoCAD interface from the following figure.



Ans. A = Application Bar – It also refers application menu. This is where you can access tools related to applications such as saving files with name and icons.

B = Quick Access Bar – Store commands that you frequently access in AutoCAD. By default, you can access New, open, Save, Plot, Undo, redo from this bar.

C = Drawing Title – You can find the file name with file extension on that white bar.

D = Menu Bar – All menus available in that bar for all type of tools. Each tab holds tools based on your drawing task. Just click on that menu bar tool then you can find all tool in ribbon bar related to that menu bar tool.

E = Ribbon Bar – From this bar you can access all tools and settings from menu selected tools.

F = Drawing Canvas – In that area you can draw your AutoCAD objects.

Section – C

05X10 = 50 Marks

Q.29 Define Cartesian coordinate system in AutoCAD and explain its various types with a suitable example.

Ans. A Cartesian coordinate system is a coordinate system that specifies each point in a plane by a set of numerical coordinates, which are the distances to the point from two fixed coordinate axis of the system, and the point where they meet is its origin as (0,0).

Types of Co-ordinate system

1 Absolute Coordinate system –

- In the system all points are measured from the origin (0,0).

- To enter the absolute coordinate use format (x,y), where (x,y) is distance from horizontal axis and vertical axis from origin (0,0).

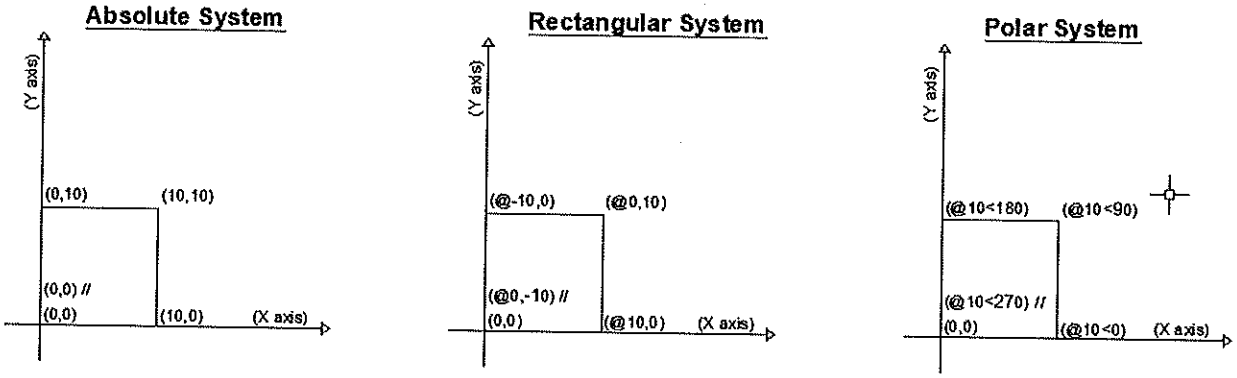
2 Relative Rectangular Coordinate system –

- In this system next point is based on last point entered.
- To enter the rectangular coordinate use format (@ x,y), where (@ x,y) is relative distance from horizontal axis and vertical axis from last point.

3 Relative Polar Coordinate system -

- In this system we used as combination of distance & angle from one point to another.
- To enter the rectangular coordinate use format (@ x<y), where (@ x<y) is relative distance & angle from horizontal axis and vertical axis from last point.
- Angles are +ve when measured counter-clockwise & -ve when measured clockwise.

e.g. –



Q.30 Explain the following tools and also mention their short key being used in AutoCAD.

(a) Explode (b) Extend (c) Ellipse (d) Polygon (e) Hatch

Ans.

(a) Explode – Explodes a compound object when you want to modify its component separately i.e. used for explode/brake a unit object to modify its component separately. Objects that can be exploded includes, polylines, blocks etc.

Short key - X + Enter

(b) Extend – Extend command allows to increase the length of an object within the limits of defined object. This can be used to extend a part of an object with respect to a boundary edge. Boundary edge can be any line, polyline, circle, arc, ellipse or any reference line.

Short key - EX + Enter

(c) Ellipse - Used to draw any oval shape by the parameter of major and minor axis. This shape formed when a cone is cut by an oblique plane which does not intersect the base.

Short key - EL + Enter

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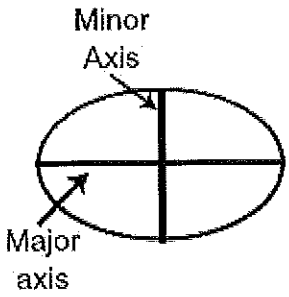


(d) Polygon – A polygon is bounded by close path with a finite sequence of straight line segments as chain. Used to draw any regular polygon (Closed chain of defined edges/sides) from 3 sides to 1024 sides.

Short key - POL + Enter

(e) Hatch – Repetitive patterns called hatching to fill regions in a drawing for various purpose. In general, used to show of object cutting view by a plane in 2D by different patterns.

Short key - H + Enter

Q.31 Describe the following tools and also mention their short key being used in AutoCAD.

(a) Scale (b) Stretch (c) Offset (d) Join (e) Break

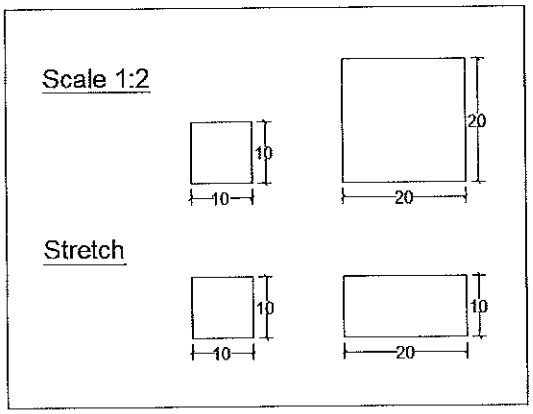
Ans.

(a) Scale - Used for either reducing or increasing the actual size of the selected object by a specified scale. A scale factor represents the ratio of two corresponding lengths in similar geometric shapes.

Short key - SC + Enter

(b) Stretch - Used to lengthen object, shorten them and to alter their shapes by a selection window. This moves only the vertices and endpoints that lie inside the crossing selection. Stretch does not modify 3D Solids.

Short key - S + Enter



(c) Offset - Used to create concentric circle, parallel lines, and parallel curves at a specified distance. You can offset an object at a specified distance or through a point. After you offset objects, you can trim and extend them as an efficient method to create drawings containing many parallel lines and curves. The OFFSET command repeats for convenience.

Short key - O + Enter

(d) Join - Used to join the end points of linear objects and curved objects. Combines a series of finite linear and open curved objects at their common endpoints to create a single 2D entity.

Short key - J + Enter

(e) Break - Used to erase the part of an object. It breaks the selected object between two points. You can create a gap between two specified points on an object, breaking it into two objects. BREAK is often used to create space for a block or text.

Short key - BR + Enter

Q.32 Define various scales used in engineering drawing and also discuss Representative Fraction used for scale with suitable example.

Ans. The proportion by which we either reduce or increase the actual size of the object on a drawing is known as drawing to scale or simply scale.

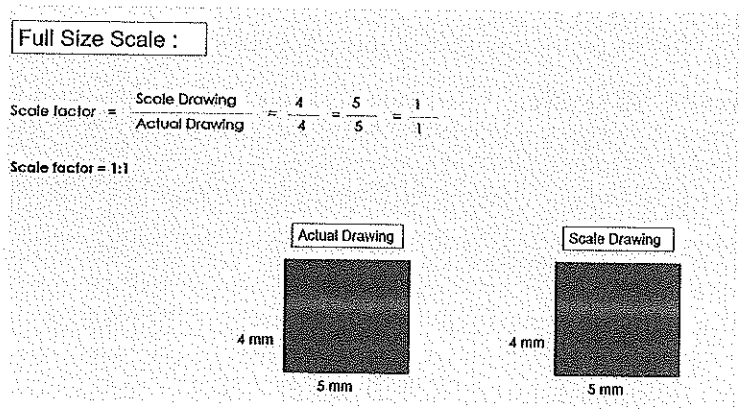
Representative Fraction - The ratio of the distance on the drawing sheet of an object to the corresponding actual distance of the object is known as scale factor. A scale factor represents the ratio of two corresponding lengths in similar geometric shapes.

$$\text{Scale Factor} = \frac{\text{Distance of the object on drawing sheet (Drawing Size)}}{\text{Corresponding actual distance of the object (Actual size)}}$$

Types of scale -

1. **Full size scale -** In this, actual measurement of the object drawn to same size on the drawing.

   It is written as - 1 :1 - Drawing made to actual size



2. **Reducing scale** – In this, actual measurement of the object reduced to some proportion on drawing.

   It is written as – 1:2 - Drawing made to one half of actual size

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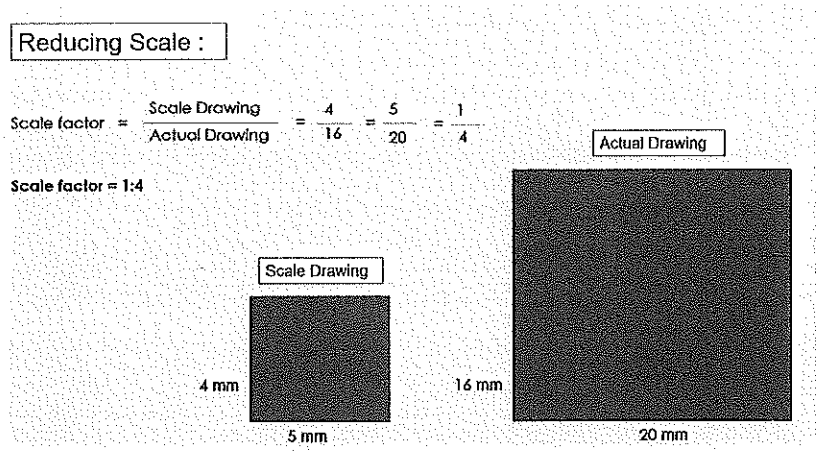
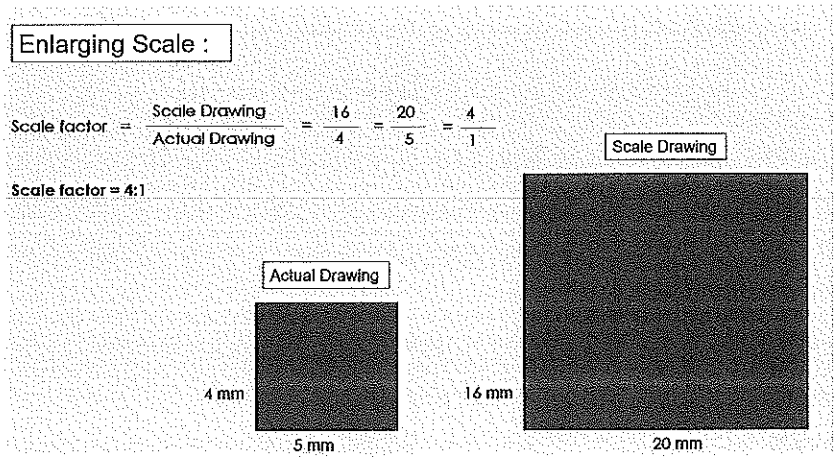


3. **Enlarging scale** – In this, actual measurement of the object increased to some proportion on drawing.

   It is written as – 2:1 - Drawing made to twice of actual size



Q.33 Define coordinates of all points by relative polar system and relative rectangular system in the following figure.

(Note : Where A is the origin)

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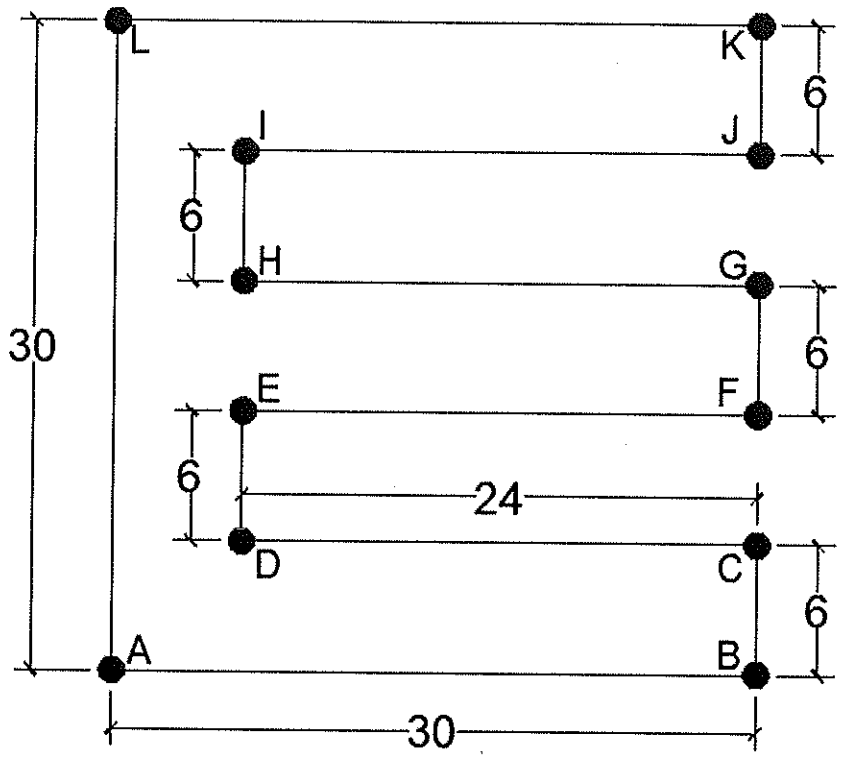

Ans. (A) Relative Polar System –

A = 0,0
C = @6<90
E = @6<90
G = @6<90
I = @6<90
K = @6<90
A = @30<270

B = @30<0
D = @24<180
F = @24<0
H = @24<180
J = @24<0
L = @30<180

(B) Relative Rectangular System –

A = 0,0
C = @0,6
E = @0,6
G = @0,6
I = @0,6
K = @0,6
A = @0,-30

B = @30,0
D = @-24,0
F = @24,0
H = @-24,0
J = @24,0
L = @-30,0