

Malla Reddy Engineering College (Autonomous)

B.Tech– I Sem (MR 15) Ist Mid Examination Subjective Question Bank

Subject: Automation in Manufacturing
Name of the faculty: Dr. Zaheer Ahamed T

Branch /Specialization: ME/Mechanical

Instructions:

1. All the questions carry equal marks
2. Solve all the questions

| Question No | Questions (Module 1) | Blooms Taxonomy Level | CO |
|-------------|--|-----------------------|----|
| 1 | What are types of automation? Discuss them briefly. | Evaluate | 1 |
| OR | | | |
| 2 | Discuss the important components used in automated systems. | Analyze | 1 |
| OR | | | |
| 3 | Draw the general structure of a hydraulic circuit and explain important components involved in it. | Understand | 1 |
| OR | | | |
| 4 | Draw the general structure of a pneumatic circuit and explain important components involved in it. | Understand | 1 |
| OR | | | |
| 5 | Explain all the strategies of automation, | Analyze | 1 |
| OR | | | |
| 6 | Expalin the automation in machine tools. | Understand | 1 |
| OR | | | |
| 7 | Explain automated tool changer. | Understand | 1 |
| OR | | | |
| 8 | Explain machine tool control in automation. | Understand | 1 |

| Question No | Questions (Module 2) | Blooms Taxonomy Level | CO |
|--------------------|---|------------------------------|-----------|
| 1 | Discuss the efficiency of automated flow lines with storage buffer. | Evaluate | 1 |
| OR | | | |
| 2 | Explain the differences between intermittent transfer mechanism and power and free transfer mechanism. | Analyze | 1 |
| OR | | | |
| 3 | Illustrate the working of walking beam transfer system with the help of neat sketch. | Understand | 1 |
| OR | | | |
| 4 | Sketch and explain ratchet and pawl mechanism. | Understand | 1 |
| OR | | | |
| 5 | Explain briefly cam mechanism for material transfer with the help of neat sketch. | Analyze | 1 |
| OR | | | |
| 6 | Explain the use of buffer storage zones in automated flow lines. | Understand | 1 |
| OR | | | |
| 7 | Discuss the important general terminology used in the analysis of automated flow lines. | Understand | 1 |
| OR | | | |
| 8 | What are the two basic approaches used in the analysis of transfer lines without storage. Explain them briefly. | Understand | 1 |

| Question No | Questions (Module 3) | Blooms Taxonomy Level | CO |
|--------------------|-------------------------------------|------------------------------|-----------|
| 1 | Explain the flexible assembly line. | Evaluate | 1 |

| | | | |
|----|---|------------|---|
| OR | | | |
| 2 | Explain the differences between manual and automated assembly system. | Analyze | 1 |
| | | | |
| 3 | Explain the following terms related to line balancing a) station time b) cycle time c) line efficiency d) balance delay | Understand | 1 |
| OR | | | |
| 4 | What are the considerations made in assembly line design. | Understand | 1 |

Signature of the Faculty

HOD,ME

Malla Reddy Engineering College (Autonomous)

B.Tech– I Sem (MR 15) Ist Mid Examination Subjective Question Bank

Subject: Automation in Manufacturing
Name of the faculty: Dr. Zaheer Ahamed T

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Module 1

1. Hydraulic drives are used for a robot when (Understanding) []
 - a) high torque is required
 - b) high power is required
 - c) rapid motion of robot arm
 - d) all of the mentioned
2. The following type of robot is most suitable for pick and place operations []
 - a) rectangular
 - b) cylindrical
 - c) spherical
 - d) jointed arm type
3. Which device is mostly associated with automation? (Understanding) []
 - a) flexible manufacturing
 - b) robots
 - c) computer graphics workstation
 - d) NC machine
4. Choose the basic element for an automated machine tool []
 - a) logic
 - b) NC tape programming
 - c) software
 - d) workstation
5. Automation normally means: (Understanding) []
 - a) a net loss of jobs.
 - b) a net increase in jobs.
 - c) no change in jobs.
 - d) All of the above
6. Productivity is defined as: (Remembering) []
 - a) number of items manufactured per day
 - b) output per man-hour of labour
 - c) cost per day
 - d) cost per unit
7. The first industrial robot for commercial uses was installed in a Japanese plant at Toyota Automatic Loom Company, the parent company of the Toyota Automobile Group. When did this robot go into operation? (Understanding) []
 - a) June 1965
 - b) November 1966
 - c) December 1967
 - d) April 1970
8. The general type of process found in industry is: (Remembering) []
 - a) discrete parts
 - b) continuous
 - c) batch
 - d) All of the above
9. CAD/CAM is the inter-relationship between: (Understanding) []

- a) manufacturing and marketing
 - b) marketing and design
 - c) engineering and marketing
 - d) engineering and manufacturing
10. 7-Productivity increases when (Remembering) []
- a) inputs increase while outputs remain the same
 - b) inputs decrease while outputs remain the same
 - c) outputs decrease while inputs remain the same
 - d) inputs and outputs increase proportionately
11. Which item best describes a CAM technology? (Understanding) []
- a) Numerical control
 - b) Documentation
 - c) Drafting
 - d) Geometric modeling
12. Routing and Scheduling are integral part of (Remembering) []
- a) Work study
 - b) Job analysis
 - c) Quality control
 - d) Product planning
13. Which of the following is an automated machine that works on an assembly line? (Understanding) []
- a) Industrial robot
 - b) Assembly robot
 - c) Domestic robot
 - d) Android
14. Which of the following is not a use for a robot? (Remembering) []
- a) Maintenance and repair
 - b) Assembly line
 - c) Mental calculation
 - d) Exploration
15. Which of the following is the most common type of actuator? (Understanding) []
- a) Electric motor
 - b) Stepper motor
 - c) Solenoid
 - d) Hydraulic pump
16. Which of the following statements is incorrect? (Remembering) []
- a) Automation is the application of machines to tasks once performed by people
 - b) Automated control devices manage themselves once given suitable instructions
 - c) Feedback principle used in automated control is a recent development
 - d) Development of automation has become dependent on the use of computer technology
17. Where did automation start? (Understanding) []
- a) Textile industry in the eighteenth century
 - b) Electronic computer in 1943
 - c) Steam engine in 1788
 - d) Motor vehicle industry in the 1920s
18. First strategy of automation is (Remembering) []
- a) specialization of operations
 - b) combined operations
 - c) simultaneous operations
 - d) integration of operations
19. Second strategy of automation is (Understanding) []

| | | |
|---|-----------------|----------|
| a) specialization of operations | | |
| b) combined operations | | |
| c) simultaneous operations | | |
| d) integration of operations | | |
| 20. Third strategy of automation is | (Remembering) | [] |
| a) specialization of operations | | |
| b) combined operations | | |
| c) simultaneous operations | | |
| d) integration of operations | | |
| 21. Fourth strategy of automation is | (Understanding) | [] |
| a) specialization of operations | | |
| b) combined operations | | |
| c) simultaneous operations | | |
| d) integration of operations | | |
| 22. Fifth strategy of automation is | (Remembering) | [] |
| a) Increased flexibility | | |
| b) Improved material handling and storage | | |
| c) on-line inspection | | |
| d) Process control and optimization | | |
| 23. Sixth strategy of automation is | (Understanding) | [] |
| a) Increased flexibility | | |
| b) Improved material handling and storage | | |
| c) on-line inspection | | |
| d) Process control and optimization | | |
| 24. Seventh strategy of automation is | (Remembering) | [] |
| a) Increased flexibility | | |
| b) Improved material handling and storage | | |
| c) on-line inspection | | |
| d) Process control and optimization | | |
| 25. Eight strategy of automation is | (Understanding) | [] |
| a) Increased flexibility | | |
| b) Improved material handling and storage | | |
| c) On-line inspection | | |
| d) Process control and optimization | | |
| 26. Ninth strategy of automation is | (Remembering) | [] |
| a) Plant operations control | | |
| b) Computer integrated manufacturing | | |
| c) on-line inspection | | |
| d) Process control and optimization | | |
| 27. Tenth strategy of automation is | (Understanding) | [] |
| a) Plant operations control | | |
| b) Computer integrated manufacturing | | |
| c) On-line inspection | | |
| d) Process control and optimization | | |
| 28. Fluid power circuits use schematic drawings to | (Understanding) | [] |
| a) Simplify component function details | | |
| b) Make it so only trained persons can understand the functions | | |
| c) Make the drawing look impressive | | |
| d) Make untrained person to understand | | |
| 26. A pneumatic symbol is: | (Remembering) | [] |
| a) Different from a hydraulic symbol used for the same function | | |

- b) The same as a hydraulic symbol used for the same function
- c) Not to be compared to a hydraulic symbol used for the same function
- d) None of the mentioned

27. Pneumatic systems usually do not exceed (Understanding) []

- a) 1 hp
- b) 1 to 2 hp
- c) 2 to 3 hp
- d) 4 to 5 hp

28. Most hydraulic circuits: (Remembering) []

- a) Operate from a central hydraulic power unit
- b) Use air-over-oil power units
- c) Have a dedicated power unit
- d) Does not have dedicated power unit

29. Hydraulic and pneumatic circuits (Understanding) []

- a) Perform the same way for all functions
- b) Perform differently for all functions
- c) Perform the same with some exceptions
- d) Does not perform all the functions

30. The lubricator in a pneumatic circuit is the (Understanding) []

- a) First element in line
- b) Second element in line
- c) Last element in line
- d) Third element in line

31. Computer will perform the data processing functions in (Remembering) []

- a) NC
- b) CNC
- c) DNC
- d) None of the mentioned

32. The linking of computer with a communication system is called (Understanding) []

- a) networking
- b) pairing
- c) interlocking
- d) assembling

33. The product layout is more amenable to automation than process layout. (Remembering) []

- a) True
- b) False

34. For handling materials during manufacture of cement, a _____ is widely used. (Understanding) []

- a) belt conveyor
- b) bucket conveyor
- c) fork lift truck
- d) overhead crane

35. The device, fed to the control unit of NC machine tool which sends the position command signals to sideway transmission elements of the machine, is called as (Remembering) []

- a. controller
- b. tape

- c. feedback unit
- d. none of the above

36. Which of the following options is correct for the control unit and panel of NC (Numerical Control) and CNC (Computer Numerical Control) machine tools?

(Understanding) []

- a. The control unit of NC machine tool works in ON-line mode and the control unit of CNC machine tool works in batch processing mode
- b. The control unit of NC machine tool works in batch processing mode and the control unit of CNC machine tool works in ON-line mode
- c. The control units of both NC and CNC machines work in ON-line mode
- d. The control units of both NC and CNC machines work in batch processing mode

37. In CNC machine tool, the part program entered into the computer memory

(Understanding) []

- a. can be used only once
- b. can be used again and again
- c. can be used again but it has to be modified every time
- d. cannot say

38. Several machine tools can be controlled by a central computer in

(Remembering) []

- a. NC (Numerical Control) machine tool
- b. CNC (Computer Numerical Control) machine tool
- c. DNC (Direct Numerical Control) machine tool
- d. CCNC (Central-Computer Numerical Control) machine tool

39. Which machine tool reduces the number of set-ups in machining operation, time spent in setting machine tools and transportation between sections of machines?

(Understanding) []

- a. Computer Numerical Control machine tool
- b. Direct Numerical Control machine tool
- c. Adaptive Control Systems
- d. Machining centre

40. Which of the following is included in basic machine tools? (Remembering) []

- a) lathe machine
- b) production milling machine
- c) production drilling machine
- d) none of the mentioned

41. Which type of machine tool is used for mass production of essentially small parts?

(Understanding) []

- a) general purpose
- b) special purpose
- c) automatic screw cutting
- d) none of the mentioned

42. Which of the following does all the work of lathe machine?

(Remembering) []

- a) turning centre of CNC type
- b) machining centre of CNC type
- c) turning centre of CNC type and machining centre of CNC type both
- d) none of the mentioned

43. The development of machine tools (which are used for metal cutting) started from the invention of cylinder.

(Understanding) []

- a) true
- b) false

44. Machine tools can be classified as

(Remembering) []

- a) geometric shape of the work piece
 - b) number of the work piece
 - c) function of the machine
 - d) all of the mentioned
45. In machining of a workpiece, the material is removed by (Understanding) []
- a) drilling action
 - b) melting action
 - c) shearing action
 - d) using brittleness of the material
46. For CNC machining skilled part programmers are needed. (Remembering) []
- a) True
 - b) False
47. Hydraulic drives are used for a robot when (Understanding) []
- a) high torque is required
 - b) high power is required
 - c) rapid motion of robot arm
 - d) all of the mentioned
48. A robot's arm is also known as its (Remembering) []
- a) actuator
 - b) end effector
 - c) manipulator
 - d) servomechanism
49. Which device is mostly associated with automation? (Understanding) []
- a) flexible manufacturing
 - b) robots
 - c) computer graphics workstation
 - d) NC machine
50. The lubricator in a pneumatic circuit is the (Remembering) []
- a) First element in line
 - b) Second element in line
 - c) Last element in line
 - d) Third element in line

Module 2

1. Automated flow lines consists of (Understanding) []
- a) one machine
 - b) two machines
 - c) three machines
 - d) more machines
2. In automated flow lines several machines are linked to each other (Understanding) []
- a) True
 - b) False
3. Automated flow lines are used to transfer (Remembering) []
- a) workparts
 - b) humans
 - c) machines
 - d) none
4. Buffer storage is used (Understanding) []
- a) at storage location
 - b) at workstations

- c) at kitchen
d) None
5. Automated machine tools are integration of all the departments (Remembering) []
- a) True
b) False
6. In an automated flow lines, meaning of PROC (Understanding) []
- a) Procurement
b) Processing station
c) Production
d) None
7. In an automated flow lines, meaning of AUT (Remembering) []
- a) Autumn
b) Automatic
c) Auto
d) None
8. Thick arrow mark refers to (Understanding) []
- a) labor is moving
b) material handling system
c) manager is moving
d) CEO moving
9. Dotted arrow mark refers to information/data flow (Understanding) []
- a) True
b) False
10. Use of automated flow lines will reduce labor cost (Remembering) []
- a) True
b) False
11. Use of automated flow lines will reduce production rate (Understanding) []
- a) True
b) False
12. In-line automated flow line consists of (Remembering) []
- a) all machines in a line
b) all machines are in circle
c) all machines are in rectangle
d) all machines are in L shape
13. Segmented In-Line Type automated flow line consists of (Understanding) []
- a) all machines in a line
b) all machines are in circle
c) all machines are in rectangle
d) all machines are in L shape
14. Rotary automated flow line consists of (Remembering) []
- a) all machines in a line
b) all machines are in circle
c) all machines are in rectangle
d) all machines are in L shape
15. Indexing machine is used by (Understanding) []
- a) L-type
b) rotary
c) segmented
d) None
16. Work flow will be in 90° in (Remembering) []
- a) L-type
b) Rotary

- c) Segmented
d) None
17. Workparts will move at constant speed in (Understanding) []
a) Continuous transfer
b) Synchronous transfer
c) Asynchronous or power-and-free transfer
d) None
18. Workparts will move in discontinuous or intermittent motion in (Remembering) []
a) Continuous transfer
b) Synchronous transfer
c) Asynchronous or power-and-free transfer
d) None
19. Workparts will move independent of each other, in (Understanding) []
a) Continuous transfer
b) Synchronous transfer
c) Asynchronous or power-and-free transfer
d) None
20. Example of continuous transfer of workpart is beverages (Remembering) []
a) True
b) False
21. All the workparts are moved at the same time in (Understanding) []
a) Continuous transfer
b) Synchronous transfer
c) Asynchronous or power-and-free transfer
d) None
22. Asynchronous or power-and-free transfer have greater flexibility than other two (Remembering) []
a) True
b) False
23. work-parts are lifted up from their workstation locations by (Understanding) []
a) Transfer bar
b) location bar
c) tension bar
d) none
24. work-parts are lifted up from their workstation locations by which transfer mechanism (Remembering) []
a) walking beam systems
b) Powered roller conveyor system
c) Chain-drive conveyor system
d) None
25. Flat surface parts are transferred by (Understanding) []
a) Roller conveyor system
b) Chain-drive conveyor system
c) walking beam systems
d) None
26. Chain or flexible steel belt is used in (Remembering) []
a) Roller conveyor system
b) Chain-drive conveyor system
c) walking beam systems
d) None
27. Mechanism used to convert rotary motion of one element to reciprocating motion of another element (Understanding) []

- a) Rack and pinion
- b) Ratchet and pawl
- c) Geneva
- d) none

28. Prevention of motion in reverse direction is done with which mechanism
(Remembering) []

- a) Rack and pinion
- b) Ratchet and pawl
- c) Geneva
- d) none

29. The control functions used in automation is used for (Understanding) []

- a) sequence control
- b) safety monitoring
- c) quality monitoring
- d) all the above

30. To coordinate the sequence of actions of the transfer system and its workstations is done with the help of
(Remembering) []

- a) sequence control
- b) safety monitoring
- c) quality monitoring
- d) all the above

31. To ensure the safety of the transfer system and its workstations is done with the help of
(Understanding) []

- a) sequence control
- b) safety monitoring
- c) quality monitoring
- d) all the above

32. To ensure the quality monitoring of the transfer system and its workstations is done with the help of
(Remembering) []

- a) sequence control
- b) safety monitoring
- c) quality monitoring
- d) all the above

33. The control function which stops the operation of the flow line immediately when a malfunction is detected
(Understanding) []

- a) sequence control
- b) safety monitoring
- c) quality monitoring
- d) Instantaneous Control

34. The control which is designed to keep the machine operating
(Remembering) []

- a) sequence control
- b) safety monitoring
- c) quality monitoring
- d) memory control

35. Buffer storage is maintained in between stages of production area
(Understanding) []

- a) True
- b) False

36. If several operations are performed on single workstation then it is called as
(Remembering) []

- a) Single station machine

b) rotary indexing machine

c) Trunnion machine

d) none

37. To achieve higher rates of production, which machine is used

(Understanding) []

a) Single station machine

b) rotary indexing machine

c) Trunnion machine

d) none

38. _____ machines are most suitable for small workpieces

(Remembering) []

a) Single station machine

b) rotary indexing machine

c) Trunnion machine

d) none

39. In which machine, number of operations can be increased when compared to other machines

(Understanding) []

a) Single station machine

b) rotary indexing machine

c) Trunnion machine

d) Center column machine

40. The most highly automated machine is

(Remembering) []

a) Single station machine

b) rotary indexing machine

c) Trunnion machine

d) Transfer machine

41. Knowledge about the theory & principles of the particular manufacturing process used on the production line is called as

(Understanding) []

a) Process technology

b) systems technology

c) both a and b

d) None

42. Downtime of an Automated Production line is because of tool failures

(Remembering) []

a) true

b) false

43. If a station is prevented from performing its work cycle is known as

(Understanding) []

a) blocking

b) starving

c) both a and b

d) none

44. If a workstation is prevented from performing its cycle because it has no part to work on is called as

(Understanding) []

a) blocking

b) starving

c) both a and b

d) none

45. To achieve higher rates of production, which machine is used

(Remembering) []

a) Single station machine

b) rotary indexing machine

- c) Trunnion machine
d) none
46. Flat surface parts are transferred by (Understanding) []
a) Roller conveyor system
b) Chain-drive conveyor system
c) walking beam systems
d) none
47. Workparts will move at constant speed in (Remembering) []
a) Continuous transfer
b) Synchronous transfer
c) Asynchronous or power-and-free transfer
d) None
48. Example of continuous transfer of workpart is beverages (Understanding) []
a) True
b) False
49. All the workparts are moved at the same time in (Remembering) []
a) Continuous transfer
b) Synchronous transfer
c) Asynchronous or power-and-free transfer
d) None
50. In an automated flow lines, meaning of AUT (Understanding) []
a) Autumn
b) Automatic
c) Auto
d) None

Module 3

1. Arranging the individual processing and assembly tasks at the workstations is (Understanding) []
a) Line balancing
b) machine balancing
c) labor balancing
d) none
2. The time interval between parts coming off the line is known as (Understanding) []
a) Cycle time
b) machine time
c) scooter time
d) labor time
3. Listing all the elements in descending order while line balancing is (Remembering) []
a) largest candidate rule
b) Kilbridge and Wester's Method
c) Ranked Positional Weights Method
d) none
4. The procedure which selects work elements for assignment to stations according to their position in the precedence diagram (Understanding) []
a) largest candidate rule
b) Kilbridge and Wester's Method
c) Ranked Positional Weights Method
d) none

5. A feasible element is one that satisfies the precedence requirements.

(Remembering) []

a) True

b) False

6. The method which takes account of both the T_e value of the element and its position in the precedence diagram

(Understanding) []

a) largest candidate rule

b) Kilbridge and Wester's Method

c) Ranked Positional Weights Method

d) none

7. _____ have been developed based on several of the heuristic approaches for line balancing.

(Remembering) []

a) computer program

b) .NET

c) C

d) C++

8. COMSOAL stands for

(Understanding) []

a) Computer Method of Sequencing Operations for Assembly Lines

b) Counter Method of Sequencing Operations for Assembly Lines

c) Computer Monitor of Sequencing Operations for Assembly Lines

d) None

9. COMSOAL is a computer line balancing

(Remembering) []

a) True

b) False

10. _____ is suited for ideally suited to computer programming with large set of work elements.

(Understanding) []

a) COMSOAL

b) CALB

c) both a and b

d) none

11. CALB stands for

(Remembering) []

a) Computer-Aided Line Balancing

b) Computer Area Line balancing

c) both a and b

d) none

12. CALB can be used for both single-model and mixed-model lines

(Understanding) []

a) True

b) False

13. CALB is used for the applications that have included a variety of assembled products, including automobiles and trucks, electronic equipment, appliances, military hardware, and others.

(Remembering) []

a) True

b) False

14. ALPACA stands for

(Understanding) []

a) Assembly Line Planning and Control Activity

b) Assembly Language Programme and Compiling Activity

c) c) both a and b

d) none

15. _____ is described as an interactive line balancing system in which the user can transfer work from one station to another

(Remembering) []

a) COMSOAL

- b) CALB
c) ALPACA
d) None
16. The study of human work activity is known as (Understanding) []
a) Method Analysis
b) Mathematic Analysis
c) Mental Analysis
d) None
17. Flexible automatic assembly lines was pioneered by (Remembering) []
a) Volvo
b) Zomatto
c) Mc.Donald
d) Bata
18. Automated assembly systems should consider high product demand (Understanding) []
a) True
b) False
19. Based on work transfer system, how many types of automated assembly systems are there (Remembering) []
a) 4
b) 3
c) 2
d) 1
20. The base parts are indexed around a circular table or dial in (Understanding) []
a) dial type machine
b) in-line type
c) segmented in-line
d) none
21. The *in-line* configuration assembly system consists of a sequence of workstations in a more or less straight line arrangement (Remembering) []
a) True
b) False
22. Continuous, synchronous, or asynchronous transfer systems can be used with the in-line configuration. (Understanding) []
a) True
b) False
23. The flow of work can take a few 90° turns in (Remembering) []
a) dial type machine
b) in-line type
c) segmented in-line
d) none
24. Carousel assembly system represents a hybrid between the circular flow of work provided by the dial assembly machine and straight work flow of the in-line (Remembering) []
a) True
b) False
25. In the single-station assembly machine, the assembly operations are performed at a single location (stationary base part system) (Understanding) []
a) True
b) False

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

B.Tech–IV,Sem-I (MR 15-2016-17 Admitted Students)

I Mid Examination Subjective Question Bank

Subject: Air Pollution & Control

Branch /Specialization: Common to ME &

ECE

Name of the faculty: Dr.P.SARITHA

Instructions:

1. All the questions carry equal marks

2. Solve all the questions

| Q.No. | Question | Bloom's Taxonomy Level | CO |
|-------------------------|---|------------------------------|----|
| 1. | Define Air Pollution? Explain the episodes of Great London Smog and Bhopal Gas Tragedy? | Understanding | 1 |
| OR | | | |
| 2. | Briefly outline the classification of air pollutants? | Understanding | 1 |
| OR | | | |
| 3. | Explain the effects of air pollution on man, vegetation and material? | Understanding | 1 |
| OR | | | |
| 4. | Explain the sources, impact and control of Green House Effect? | Understanding | 1 |
| OR | | | |
| 5. | Enumerate the phenomenon of ozone depletion indicating the causes, effects and remedial measures? | Understanding | 1 |
| OR | | | |
| 6. | What is acid rain? Discuss the causes, effects and remedial measures? | Understanding | 1 |
| OR | | | |
| 7. | Discuss the significance and need for Air pollution control studies? | Applying | 1 |
| OR | | | |
| 8. | Write short notes on Heat islands? | Understanding | 1 |
| <u>Module II</u> | | | |

| | | | |
|--------------------------|--|---------------|---|
| 1. | Explain the thermodynamics of formation of CO? | Analysing | 2 |
| OR | | | |
| 2. | Discuss the thermodynamics of formation of SO _x ? | Analysing | 2 |
| | | | |
| 3. | Explain the thermodynamics of formation of NO _x ? | Understanding | 2 |
| OR | | | |
| 4. | Explain in detail about the thermodynamics of Combustion? | Understanding | 2 |
| | | | |
| 5. | Write short notes on the thermodynamics of Hydrocarbons? | Understanding | 2 |
| OR | | | |
| 6. | Discuss the significance and practical implications of Air-Fuel ratio? | Understanding | 2 |
| | | | |
| 7. | Briefly describe the combustion of coal? | Understanding | 2 |
| OR | | | |
| 8. | Explain the combustion of oil and gas? | Understanding | 2 |
| <u>Module III</u> | | | |
| 1. | Explain the importance of Meteorology in air pollution control? | Understanding | 3 |
| OR | | | |
| 2. | Discuss the meteorological parameters that have an impact on air pollution? | Understanding | 3 |
| | | | |
| 3. | Explain the different types of Environmental Lapse rates and their significance. | Understanding | 3 |
| OR | | | |
| 4. | Define the term wind rose. Explain the significance and application of wind rose diagrams? | Understanding | 3 |
| | | | |

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MALLAREDDY ENGINEERING COLLEGE (AUTONOMOUS)

IV B.TECH II SEM (MR15 – 2016-17 Batch)1ST MID EXAM QUESTION BANK

SUBJECT: AIR POLLUTION AND CONTROL

Branch: **Common to ME & ECE**

Name of the faculty: **Dr.P.Saritha**

OBJECTIVE QUESTIONS

- 1 Give an example of single or point source? []
 - a. Open burning
 - b. Power plants
 - c. Channel vessels
 - d. None of the above
- 2 Which gas is mainly produced due to incomplete burning of wood? []
 - a. CO
 - b. SO₂
 - c. NO₂
 - d. NO₃
- 3 Which of the following is involved in production of carboxy hemoglobin? []
 - a. CO
 - b. SO₂
 - c. NO₂
 - a. NO₃
- 4 Which of the following is a liquid form of aerosol? []
 - a. Fume
 - b. Dist
 - c. Mist
 - d. Smoke
- 5 X ray films are a source of which of the following gas? []
 - a. CO
 - b. SO₂
 - c. NO₂
 - a. NO₃
- 6 The maximum size of fly ash is-----micro meter. []
 - a. 1
 - b. 100
 - c. 1000
 - d. 10
- 7 Which of the following leads to a disease called broncho spasm? []
 - a. CO
 - b. SO₂
 - c. NO₂
 - d. NO₃
- 8 The minimum size of smoke particle is -----micron metre. []

- a. 0.2
 - b. 1
 - c. 0.8
 - d. 0.5
- 9 Which of the following is a secondary air pollutant? []
- a. SPM
 - b. PAN
 - c. So₂
 - d. No₂
- 10 The permissible concentration of PM 10 in the air is []
- a. 60µg/m³
 - b. 40 µg/m³
 - c. 50 µg/m³
 - d. 20 µg/m³
- 11 What is the primary standard level for carbon monoxide for assuring air quality? []
- a. 10ppm
 - b. 90 ppm
 - c. 1 ppm
 - d. 9 ppm
- 12 The pulmonary section of the respiratory tract consists of _____ []
- a. Nose and mouth as well as down till epiglottis and larynx
 - b. Bronchi down till the end of bronchiole
 - c. Respiratory bronchiole, alveoli and alveoli ducts
 - d. Alveoli ducts and alveoli
- 13 What is the primary function(s) of the alveoli? []
- a. Transfer of oxygen to the blood
 - b. Removal of carbon dioxide from the blood
 - c. Transfer of toxic substances to the blood
 - d. All of the mentioned
- 14 The velocity of air reduces to zero by the time it reaches the bronchi. []
- a. True
 - b. False
 - c. True or false
 - d. None of the above
- 15 Particles of what size are filtered by the nasal passage? []
- a. >10micrometre
 - b. >500 micrometre
 - c. >1 mm
 - d. >5 micrometre
- 16 What is the effect of ozone on human respiratory system? []
- a. Has higher affinity to bind with hemoglobin and does not allow binding of oxygen
 - b. Causes the disfigurement of the alveoli reducing the surface area
 - c. Damages lung tissues and aggravates asthma
 - d. All of the above
- 17 Which of the following pollutants is the major contributor to photochemical smog? []
- a. Peroxynitrates
 - b. Hydroperoxides
 - c. Nitrogen dioxide

- d. Ozone
- 18 What are the effects of sulphur dioxide on human body? []
- a. Causes the malfunction of liver and kidney
 - b. Breaks down body's immunity towards particulate matter and bacteria
 - c. Causes blood cells to dilate thereby affecting blood flow
 - d. All of the above
- 19 How does increase in temperature affect air pollution? []
- a. Reduces air pollution
 - b. Increases air pollution
 - c. No effect
 - d. None
- 20 Ocean is a source for carbon monoxide. []
- a. True
 - b. False
 - c. True or false
 - d. None
- 21 How does carbon monoxide affect the human body? []
- a. It does not allow binding of oxygen with hemoglobin
 - b. It reduces the surface area of the alveoli and disrupts gaseous transfers
 - c. It causes the liver to malfunction, increasing bile secretion
 - d. It reduces the body's tendency to absorb water thereby making us feel dehydrated
- 22 What is the Haldane equation used for? []
- a. To measure the amount of oxygen converted to ozone for a given wavelength of UV light
 - b. To measure the ratio of affinity of carbon monoxide and oxygen to bind to a hemoglobin molecule
 - c. To measure the percentage of carbon monoxide that is oxidized to carbon dioxide in various levels of oxygen
 - d. To calculate the percentage of oxygen addition and carbon dioxide removal during respiratory action
- 23 How does nitrogen affect the human body? []
- a. Increases vulnerability to pathogens
 - b. Destroys the macrophages
 - c. Injures the defense mechanism of the lungs
 - d. All of the above
- 24 Which of the following is the current major contributor to lead air pollution? []
- a. Motor vehicles
 - b. Metal processing centres
 - c. Waste incinerators
 - d. Lead acid battery manufacturing units
- 25 How does lead affect the human body? []
- a. Increases blood pressure
 - b. Damages the cerebellum, liver and kidney
 - c. Leads to reproductive disorders and osteoporosis
 - d. All of the above
- 26 Which of the following belongs to class of extremely toxic dioxin compound(s)? []
- a. Polychlorinated dibenzo-p-dioxins
 - b. Polychlorinated dibenzofurans
 - c. Polychlorinated biphenyls

- d. All of the above
- 27 Which of the following compounds was earlier produced for the utility of transformers? []
- a. PDD
 - b. PCDF
 - c. PCB
 - d. TCDD
- 28 Crocidolite, actinolite and amosite belong to which of the following category of pollutants? []
- a. Particulate matter
 - b. Asbestos
 - c. Dioxins
 - d. Cigarette smoke
- 29 Which of the following plants is extremely sensitive towards sulphur dioxide? []
- a. Onion
 - b. Potato
 - c. Corn
 - d. Tomato
- 30 TCDD is a human carcinogen. []
- a. True
 - b. False
 - c. True or false
 - d. none
- 31 Which of these is NOT a primary pollutant? []
- a. Carbon monoxide
 - b. Carbon dioxide
 - c. Ground level ozone
 - d. Oxygen
- 32 What percentage of pollutants is gaseous in nature? []
- a. 75%
 - b. 80%
 - c. 99.9%
 - d. 90%
- 33 Which of the following is an inorganic pollutant? []
- a. Carbon monoxide
 - b. Carbonyl compounds
 - c. Aromatic hydrocarbons
 - d. None
- 34 Which of these belongs to the category of criteria pollutants? []
- a. Ozone
 - b. Lead
 - c. Carbon monoxide
 - d. All of the above
- 35 Which of the following are classified as major sources to air pollution? []
- a. Fuel consumption by local citizens
 - b. Sewage treatment plants
 - c. Dry cleaning and laundries
 - d. None
- 36 Which is the most abundant hydrocarbon in the atmosphere? []
- a. Methane

- b. Carbonyl sulphide
 - c. Ethane
 - d. None
- 37 What does the abbreviation VOC stand for? []
- a. Versatile Oxygenated Compounds
 - b. Volatile Oxygenated Compounds
 - c. Volatile Organic Carbons
 - d. Volatile Organic Compounds
- 38 What is the range of vapour pressure of VOCs? []
- a. High vapour pressure
 - b. Low vapour pressure
 - c. Depends on the concentration of VOCs
 - d. Depends on the type of VOCs
- 39 Which is the largest-volume manufactured organic chemical? []
- a. Ethylene
 - b. Ethane
 - c. Formaldehyde
 - d. Carbonic acid
- 40 What does PAH stand for in terms of organic chemistry? []
- a. Polynuclear Aromatic Hydrocarbons
 - b. Polyethylene Acetic Hydride
 - c. Polycyclic Acetic Hydrocarbons
 - d. Polynuclear Aromatic Hydrides
- 41 What is the residence time (average time a particle is active in a given system) of carbon monoxide? []
- a. 11-15 years
 - b. 0.1-0.3 years
 - c. 0.5 years
 - d. Few minutes
- 42 Which of the following gases has the highest affinity for blood hemoglobin? []
- a. Carbon dioxide
 - b. Oxygen
 - c. Carbon monoxide
 - d. Nitrogen
- 43 At what concentration can the taste and smell of sulphur dioxide be detected? []
- a. 1000-2000ppm
 - b. 11-30ppm
 - c. 500-700ppm
 - d. 0.1-0.3ppm
- 44 Which is the major source for sulphur dioxide? []
- a. Volcanic eruptions
 - b. Coal and crude oil combustion
 - c. Burning of petrol
 - d. Sewage treatment process
- 45 Which is the largest source for production of nitrous oxide? []
- a. Chemical industry
 - b. Fertilizer industry
 - c. Fossil fuel combustion

- d. Bacterial action
- 46 Pesticides also contribute to air pollution along with polluting underground reservoirs. True or false? []
- a. True
 - b. False
 - c. True or false
 - d. None
- 47 Which of the following are sources to fluorine air pollution? []
- a. Coal combustion
 - b. Steel industries
 - c. Phosphate fertilizer manufacturing
 - d. All of the above
- 48 Which is/are the most significant air-borne allergen(s)? []
- a. Fungi
 - b. Pollen
 - c. Soot
 - d. All of the above
- 49 Which of the following is a source for boron air pollution? []
- a. Rockets and jets
 - b. Automobiles
 - c. Soap industries
 - d. Refrigerants
- 50 Which are the sources of arsenic pollution? []
- a. Coal and petroleum
 - b. Detergents and pesticides
 - c. Mine tailings
 - d. All of the mentioned
- 51 What does the word 'meteorology' define? []
- a. Study of meteors and asteroids
 - b. Study of measurements and instruments
 - c. Study of chemical properties of metals
 - d. Study of the weather and atmospheric changes
- 52 What is a "tetroon" in the field of meteorology? []
- a. A tool used to study wind patterns
 - b. A tool used to study pressure variations
 - c. A tool used to study temperature deviations
 - d. A tool used to study humidity
- 53 What does the Richardson number indicate in wind analysis? []
- a. Mechanical turbulence
 - b. Convective heat production
 - c. Mechanical turbulence & Convective heat production
 - d. None of the mentioned
- 54 Above which Richardson number does vertical mixing in winds disappear? []
- a. 1
 - b. 0.25
 - c. 0.5
 - d. 0.75
- 55 When Richardson number is equal to zero, what is the wind turbulence characteristic? []
- a. No vertical mixing

- b. Weak mechanical turbulence due to stratification
 - c. Convective mixing is greater than mechanical turbulence
 - d. Only mechanical turbulence
- 56 Below what Richardson number does convective mixing start dominating mechanical turbulence? []
- a. 0
 - b. -0.04
 - c. -0.03
 - d. -0.1
- 57 What is high pressure area with sinking air also known as? []
- a. Cyclone
 - b. Anti-cyclone
 - c. Eddy zone
 - d. Richardson zone
- 58 What does the term “turbidity” indicate in atmospheric quality? []
- a. Indicates density of clouds
 - b. Reduction of light due to dust particles
 - c. Indicates the humidity
 - d. Turbulence of winds
- 59 Which of the following gases vary significantly over time and place at the atmospheric boundary level? []
- a. Carbon dioxide
 - b. Ozone
 - c. Water vapor
 - d. Oxygen
- 60 How does atmospheric pressure vary with increase in altitude? []
- a. It decreases linearly
 - b. It decreases exponentially
 - c. It increases linearly
 - d. It increases till stratosphere and then starts decreasing exponentially
- 61 What does the term obliquity indicate? []
- a. Earth’s axial tilt of 23.5 degrees
 - b. Alignment of the Earth’s internal magnetic field
 - c. Analysis of ocean currents
 - d. Pressure variation over different seasons
- 62 Which are the two forces balanced by the geostrophic wind? []
- a. Coriolis effect and pressure gradient force
 - b. Coriolis force and centrifugal force
 - c. Frictional force and pressure gradient force
 - d. Pressure gradient force and centrifugal force
- 63 Which of the following has the highest albedo? []
- a. Water surface
 - b. Plateau surfaces
 - c. Vegetation
 - d. Fresh snow
- 64 The stability of the stratosphere is due to which of the following reasons? []
- a. Absorption of solar energy by ozone layer
 - b. Strong wind currents
 - c. Pressure is minimal
 - d. All of the mentioned

- 65 Which of the following is regarded as climate control factor(s)? []
a. Latitude
b. Elevation
c. Ocean currents
d. All of the mentioned
- 66 Which plant helps in detection of pollution from automobile exhaust? []
a. Neem
b. Tulsi
c. Lichen
d. Lettuce
- 67 Which of the following plants aid as an indicator to ozone pollution? []
a. Tomato
b. Tobacco
c. Watermelon
d. All of the mentioned
- 68 Greater the Air Quality Index of a region, more polluted is the air. True or false? []
a. True
b. False
c. True or false
d. None of the above
- 69 How many parameters are taken into consideration when measuring air quality, in India? []
a. 4
b. 3
c. 8
d. 9
- 70 Which of the following pollutants are considered when measuring air quality? []
a. CO, O₃, PM_{2.5}
b. NH₃, PM₁₀, Pb
c. NO₂, SO₂
d. All of the above
- 71 What range of air quality index has the most severe impact on human health? []
a. 101-200
b. 201-300
c. 301-400
d. 401-500
- 72 Hazardous pollutants are those pollutants for which air quality standards have been devised. []
a. True
b. False
c. True or false
d. None of the above
- 73 Which of the following devices is NOT used to control particulate emissions? []
a. Electrostatic precipitator
b. Bag filters
c. Catalytic converters
d. All of the mentioned
- 74 Which of the mentioned devices are used for removing vapour phase/ gaseous pollutants? []
a. Absorption towers

- b. Catalytic converters
 - c. Thermal oxidizers
 - d. All of the mentioned
- 75 At what concentration (in ppm), is nitrogen present in the atmosphere? []
 - a. 780,840
 - b. 390,420
 - c. 78,084
 - d. 900,000
- 76 In the lower layers of atmosphere, what range of wavelengths of light is predominant? []
 - a. Less than 100 nm
 - b. Greater than 300 nm
 - c. Between 100-300 nm
 - d. All wavelengths are equally present
- 77 What does the ratio of the mass of water vapour to mass of air indicate? []
 - a. Absolute humidity
 - b. Specific humidity
 - c. Relative humidity
 - d. Approximate humidity
- 78 What is the region of mild and irregular wind in the equatorial region known as? []
 - a. Trade winds
 - b. Westerlies
 - c. Doldrums
 - d. Easterlies
- 79 "Roaring forties" is the term used to describe which of the following winds? []
 - a. East-to-west air winds in the southern hemisphere
 - b. West-to east air winds in the northern hemisphere
 - c. East-to-west air winds in the northern hemisphere
 - d. West-to-east air winds in the southern hemisphere
- 80 Match the following:

| | |
|--------------------|-------------------------------------|
| A.Hurricane | 1.Indian Ocean and South Pacific |
| B.Typhoon | 2.Low level air circulation |
| C.Cyclone | 3.Northeastern Pacific and Atlantic |
| D.Tropical Cyclone | 4.Northwestern Pacific |

 []
 - a. A-1; B-3; C-2; D-4
 - b. A-3; B-4; C-1; D-2
 - c. A-2; B-3; C-4; D-1
 - d. A-3; B-2; C-1; D-4
- 81 Which of the following statements is true? []
 - a. Troposphere is equally thick across different parts of the world
 - b. Troposphere contains the ozone layer
 - c. Troposphere is thinner at the equator than at the poles
 - d. Troposphere is thicker at the equator than at the poles
- 82 Which of the following indicates the correct order of the principal layers of the earth's atmosphere from top to bottom? []
 - a. Troposphere – Stratosphere – Mesosphere – Thermosphere – Exosphere
 - b. Thermosphere – Stratosphere – Troposphere – Mesosphere – Exosphere
 - c. Exosphere – Thermosphere – Mesosphere – Stratosphere – Troposphere
 - d. Exosphere – Mesosphere – Thermosphere – Stratosphere – Troposphere
- 83 Which layer of the atmosphere is responsible for aurora formation? []

- a. Ozone layer
 - b. Stratosphere
 - c. Exosphere
 - d. Ionosphere
- 84 Which of the following mentioned layers is NOT a homosphere? []
- a. Exosphere
 - b. Troposphere
 - c. Ionosphere
 - d. Mesosphere
- 85 The planetary boundary layer belongs to which of the following atmospheric layers? []
- a. Exosphere
 - b. Ionosphere
 - c. Stratosphere
 - d. None
- 86 What is the atmospheric pressure at sea level? []
- a. 101325 Pa
 - b. 14.696 psi
 - c. 760 Torr
 - d. All of the above
- 87 By international convention, which line marks the outermost boundary of the Earth's atmosphere? []
- a. Space line
 - b. Boundary line
 - c. Karman line
 - d. Astronaut line
- 88 By how much has atmospheric carbon dioxide concentration increased ever since the Industrial Revolution? []
- a. 20%
 - b. 10%
 - c. 40%
 - d. 60%
- 89 Which is the most abundant greenhouse gas in the atmosphere? []
- a. Carbon dioxide
 - b. Water vapour
 - c. Methane
 - d. Nitrogen
- 90 What does the phrase "anthropogenic CO₂ emissions" mean? []
- a. Human made CO₂ emissions
 - b. Industrial CO₂ emissions
 - c. Natural CO₂ emissions
 - d. All of the mentioned
- 91 Which of the following is the largest sink for carbon dioxide gas? []
- a. Forests
 - b. Oceans
 - c. Ice sheets
 - d. Grasslands
- 92 Apart from Earth, which other celestial body(s) exhibits greenhouse gas effect? []
- a. Venus
 - b. Mars
 - c. Titan

- d. All of the mentioned
- 93 Which of the following bodies in the solar system has anti-greenhouse effect? []
- a. Jupiter
 - b. Mars
 - c. Titan
 - d. Venus
- 94 Which of the following radiations of the sun do greenhouse gases trap? []
- a. Visible radiations
 - b. Infrared radiations
 - c. UV radiations
 - d. All the radiations
- 95 What does “airborne fraction” with respect to greenhouse gases indicate? []
- a. Amount of greenhouse gases that are released into air due to industrial process
 - b. Proportion of greenhouse gases in air to all the other atmospheric gases
 - c. Proportion of greenhouse gas emission that remain even after a specified time
 - d. None of the mentioned
- 96 What does GWP in the context of greenhouse gases indicate? []
- a. Global Warming Parameters
 - b. Gradual Warming Pattern
 - c. Global Warming Patterns
 - d. Global Warming Potential
- 97 Below which of the following pH is rain regarded as ‘acid rain’? []
- a. 7
 - b. 7.3
 - c. 5.6
 - d. 6
- 98 Glass containers are generally not preferred for sampling rain water. Why? []
- a. Glass containers are expensive
 - b. Glass containers are not easy to maintain
 - c. Glass containers affect the pH of the rain water
 - d. All of the mentioned
- 99 Which of the following gases are main contributors to acid rain? []
- a. Carbon dioxide and carbon monoxide
 - b. Sulphur dioxide and carbon dioxide
 - c. Sulphur dioxide and nitrogen dioxide
 - d. Sulphur dioxide and nitrous oxide
- 100 What does the term “liming” mean? []
- a. Application of magnesium and calcium rich substances to soil
 - b. Erosion of calcium carbonate(lime) zones in soil
 - c. Excessive growth of lemon trees in acid rain prone regions
 - d. None of the mentioned
- 101 Which place in India receives the highest annual rainfall? []
- a. awsynram
 - b. Cherrapunji
 - c. Siju
 - d. Phyllut
- 102 Who discovered the phenomenon of acid rain? []
- a. George Brown
 - b. James T. StewartB
 - c. Robert Angus SmiDth

- d. Charles David
- 103 Which of the following is/are natural contributor(s) to sulphur dioxide in the atmosphere? []
- a. Sea sprays
 - b. All of the mentioned
 - c. Decaying vegetation
 - d. Volcanic eruption
- 104 What is the pH required for the survival of aquatic animals and plants? []
- a. 7
 - b. 7.5
 - c. 6.5
 - d. 4.8
- 105 Which of the following gases is responsible for the yellowing of the Taj Mahal? []
- a. Organic carbon
 - b. Black carbon
 - c. Brown carbon
 - d. All of the mentioned
- 106 What is the average concentration of ozone in the ozone layer of the atmosphere? []
- a. Nearly 100%
 - b. Greater than 90%
 - c. Between 10-50%
 - d. Less than 10ppm
- 107 Who discovered the ozone layer? []
- a. Henri Buisson & Charles Fabry
 - b. Carl Sagan & Charles Fabry
 - c. G.M.B Dobson
 - d. Carl Sagan & G.M.B Dobson
- 108 Which of the following devices can be used to measure ozone in the stratosphere from the ground? []
- a. Spectrometer
 - b. Photometer
 - c. Spectrophotometer
 - d. Spectro-ozonometer
- 109 The ozone layer absorbs what range of wavelengths of the sun's radiation? []
- a. 0.80 nm – 1.50 nm
 - b. 200 nm – 315 nm
 - c. 450 nm – 570 nm
 - d. 600 nm – 750 nm
- 110 Who discovered the formation of ozone from photochemical reactions? []
- a. G.M.B Dobson
 - b. Sydney Chapman
 - c. Carl Sagan
 - d. Henri Buisson
- 111 Between what altitudes, is the ozone layer found in highest concentrations? []
- a. 10-20km
 - b. 20-40km
 - c. 40-55km
 - d. 55-70km

- 112 Which of the following UV radiations is responsible for causing sun burns and skin cancer? []
- a. UV-A
 - b. UV-B
 - c. UV-C
 - d. All of the mentioned
- 113 In which season is the ozone found at its maximum level in the northern hemisphere? []
- a. Winter
 - b. Summer
 - c. Spring
 - d. Autumn
- 114 When was the ozone hole discovered? []
- a. 1974
 - b. 1964
 - c. 1994
 - d. 1984
- 115 The ozone hole is a phenomenon that has occurred in: []
- a. Arctic region
 - b. Northern temperate region
 - c. Southern temperate region
 - d. None of the mentioned
- 116 Which of the following chemicals are responsible for the depletion of the stratospheric ozone layer? []
- a. Refrigerants
 - b. Propellants
 - c. Foam-blowing agents
 - d. All of the mentioned
- 117 What does EESC stand for in context of ozone depleting compounds? []
- a. Equivalent Effective Stratospheric Chlorine
 - b. Equivalent Effective Stratospheric Chlorofluorocarbons
 - c. Equivalent Energy Saving Compounds
 - d. Energy Effective Stratospheric Compounds
- 118 The Montreal Protocol bans the production of which of the following chemical substances? []
- a. Chlorine, bromine, CFCs, freons
 - b. Carbon tetrachloride, halons, trichloroethane, CFCs
 - c. CFCs, bromine, halons, freons
 - d. CFCs, halons, freons
- 119 What is the size range of respirable suspended particulate matter? []
- a. Less than 1 micrometre
 - b. Less than 10 micrometre
 - c. Less than 100 micrometre
 - d. Less than 0.1 micrometre
- 120 Which of the following is a viable particulate? []
- a. Smoke
 - b. Mist
 - c. Dust
 - d. Moulds
- 121 Which type of particulate is condensed form of vapours? []

- a. Mist
 - b. Dust
 - c. Fumes
 - d. Smoke
- 122 What is the composition of photochemical smog? []
- a. Nitrogen oxides, ketones and ozone
 - b. VOCs and hydrocarbons
 - c. Peroxy-acetyl-nitrate, peroxy-benzoyl-nitrate, peroxy formyl-nitrate
 - d. All of the mentioned
- 123 Which of the following constituent of photochemical smog causes the bronzing of plants? []
- a. PBN
 - b. PAN
 - c. PFN
 - d. Ketones
- 124 What is the reason behind the yellow colour of smog? []
- a. Nitrogen dioxide
 - b. Sulphur dioxide
 - c. Sulphate ions
 - d. Nitrate ions
- 125 Which of the following aerosols have the best absorbing properties? []
- a. Carbon black
 - b. Soot
 - c. Elemental Carbon
 - d. All of the mentioned

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MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

IV B.TECH I1 Semester,I Mid- Examinations, January 2019.

Subject: Business communication

Branch: MECHANICAL

Subject code:50H09

Name of the Faculty: Mrs. Nasreen Begum

Question Bank

Module-I

| Q.NO | Questions | Bloom's Taxonomy Level | CO |
|------|--|------------------------|----|
| 1 | Classify the types of communication | Understanding | 1 |
| OR | | | |
| 2 | Interpret rate of speech | Understanding | 1 |
| OR | | | |
| 3 | Explain technical vocabulary | understanding | 1 |
| OR | | | |
| 4 | Summarize pitch and tone | understanding | 1 |
| OR | | | |
| 5 | Compare Oral and Written communication | Understanding | 1 |
| OR | | | |
| 6 | Do you agree to the statement lengthy oral communication disinterest the People. Extend | Understanding | 1 |
| OR | | | |
| 7 | Applying of prefix, suffix, leads to the formation of new words. Write five example words using prefix and suffix to make up a new word. | Applying | 1 |

| | | | |
|------------------|---|---------------|---|
| OR | | | |
| 8 | Identify the importance of aural skills | Applying | 1 |
| Module-II | | | |
| 1 | Relate and write informal communication you had recently in a social gathering. | understanding | 2 |
| OR | | | |
| 2 | Signs and signals, body language, space, and time are widely used in communication. extend | understanding | 2 |
| | | | |
| 3 | Explain advantages and limitation of usual signs such as pictures and diagrams in non-verbal communication. | Understanding | 2 |
| OR | | | |
| 4 | Explain paralanguage and artefacts of non-verbal communication | Understanding | 2 |
| | | | |
| 5 | Identify the common barriers to effective communication. | Applying | 2 |
| OR | | | |
| 6 | Construct formal communication in the form of dialogue in regard to give presentation with your teammates. | Applying | 2 |
| | | | |
| 7 | Explain the importance of non-verbal communication | Understanding | 2 |
| OR | | | |

| | | | |
|-------------------|--|---------------|---|
| 8 | Summarize Kinesics | Understanding | 2 |
| Module III | | | |
| 1 | Interpret Critical reading. | Understanding | 3 |
| OR | | | |
| 2 | Explain Skimming and Scanning. | Understanding | 3 |
| | | | |
| 3 | Identify the various sources of improving Reading skills? | Applying | 3 |
| OR | | | |
| 4 | Identify the different types of Reading and explain any two of them? | Applying | 3 |

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- 1 The word “communication” derived from []

commune

communis

communiqué

communicate
- 2 Para linguistic skills are also called as []

Verbal skills

Non verbal skills

Oral skills

Written skills
- 3 The most important skill to master any language is []

Writing skills

Speaking skills

reading skills

listening skills
- 4 The root word “communicate” means []

to share

to receive

to speak

to discuss
- 5 “*Lack of formality*” is one of the disadvantage of []
]

Oral communication

Non verbal communication

Verbal communication

Aural communication

- 6 The main purpose of written communication is []

Alternative method

Authoritative document

Acceptability

Permanent record

- 7 Listening to music, is an example of []

Superficial listening

focused listening

Appreciative listening

Empathetic listening

- 8 Noise pollution is _____ barrier of listening []

Psychological

Physiological

Linguistic

physical

- 9 Synonym of 'wrath' []

violence

hatred

anger

displeasing

- 10 'Mane' and 'Main' are the examples of []

homonyms

homographs

homophones

none of the above

- 11 A newly coined words/expressions are called []

Neologism

Clangs

Preservations

word salad

- 12 Antonym of 'garish' []

Tasteful

anger

scenic

contrasting

- 13 The scientific study of the origin of words is []

Entomology

Etymology

Methodology

Phonology

- 14 Astronomer : Moon starrer → is an example of []

Palindrome

Proverb

Anagrams

Figurative

- 15 Rate of speech means []

cost of speech

measuring the words spoken per minute

measuring the sentences spoken for the minute

all the above

- 16 'Wh' questions should be spoken in []

Falling tone

Rising tone

Falling rising tone

Rising falling tone

- 17 Sarcastic statements should be spoken in []

Rising tone

Falling rising tone

Falling tone

Rising falling tone

- 18 'Emoticons' in word formation is an example of []

Compounding

Blending

Clipping

Borrowing

- 19 Choice and use of words and phrases in speech is called as []

Diction

tone

pitch

rate

- 20 When we are listening, if we go beyond sympathy to seek a truer understanding, is called []

Critical listening

Empathetic listening

Attentive listening

Evaluating listening

- 21 A kind of listening to evaluate and judge is called _____ []
]

Attentive listening

Critical listening

Appreciative listening

Evaluating listening

- 22 In _____ listening, the input zero, because the listener tends to ignore the []
message

Appreciate

Focused

Superficial

Evaluative

- 23 _____ communications involves the transmission of information through []
the auditory sensory system

Oral

visual

aural

none of the above

- 24 _____ is considered as one of the reasons for poor listening []

Understanding the speaker

Pre judging in negative way

Being patient

removing distractions

- 25 Synonym of the word 'Jealous' []

obvious

atrocious

envious

ferocious

- 26 _____ are the words or phrases made by mixing up the letters of other words or phrases []
- anagram
- Analogy
- palindrome
- Phrasal verbs
- 27 Vocabulary, that is particularly belongs to a branch is called []
- Effective vocabulary
- engineering vocabulary
- Medical vocabulary
- Technical vocabulary
- 28 The words ‘staff’ and ‘slaff’ are examples of []
- Homographs
- Homonyms
- Homophones
- none of the above
- 29 ‘Speech rate’ the term refers to []
- Measuring words per minute
- Measuring sentences per minute
- Measuring alphabets per minute
- none of the above
- 30 Slow speech is regarded as less than []
- 130 words per minute
- 150 words per minute
- 110 words per minute
- 100 words per minute
- 31 Speech rate alters depending upon the speaker’s culture, emotional status, geographical location, subject matter, gender, etc. []
- no idea

yes

no

no

32 One of the exercise to develop speech rate is _____ []

reading poetry in mind

listening to good speakers and practicing

observing kids

all the above

33 _____ is the auditory attribute of sound ordered on a scale from low **to** high []

rate of speech

voice

pitch

none of the above

34 Rising tone can be marked with the symbol or sign _____ []

Downward arrow

upward arrow

[^]

[--]

35 The words 'content' - 'content' are examples of []

Homographs

homophones

homonyms

all of these

36 synonym of the word 'abandon' []

try

join

keep with

forsake

- 37 synonym of 'culinary' []
creative
distasteful
to do with cookery
invade
- 38 Antonym of the word 'entangle' []
untwist
twist
hook
impede
- 39 Antonym of the word 'erudite' []
unfamiliar
knowledgeable
illiterate
ignorant
- 40 The adjective form of the word 'author' []
authorial
auctorial
authored
none of the above
- 41 The word 'technical' refers to []
Special & practical knowledge
Undertaking
Related to computers
All the above
- 42 The word 'Techno' is borrowed from []
Latin
French

Greek

Italian

43 Technical writing must be []

Funny

Relevant

Inspirational

Precise

44 Technical Vocabulary is basically ----- []

Formal

Informal

Semi formal

All the above.

45 Technical vocabulary is used by ----- []

Everyone

Employees

The Experts in the field

People related to technology

46 Technical Vocabulary has specific meanings ----- []

In all fields

With in the field

In General English

All the above

47 The diction in Technical Vocabulary is ----- []

Simple and effective

Complex and long

Both of the above

None of the above.

- 48 ----- is an addition to the base form or stem of a word []
either beginning or at the end, in order to modify its meaning or to create a
new in the word.
- Suffixation
- Pre fixation
- Affixation
- All the above.
- 49 ----- is a process in which a word is formed by combining 2 or []
3 words together to make a new meaning
- Clipping
- Borrowing
- Compounding
- Conversion
- 50 Email is an example of ----- []
- Oral communication
- Written communication
- Aural Communication
- None of the above
- 51 _____ communication is the life blood of a healthy and successful []
organization,,
- Reports
- letters
- Smart phone
- Two way internal communication
- 52 The content of communication is called _____ []
- message
- jargon
- Media richness
- noise

53 Informal communication refers to _____ []

A friendly relaxed

Strict rules

gestures

Very formal

54 formal communication is _____ []

Does not require analytical skills

require much resources

time consuming

a&b

55 _____ is an example of non verbal communication []

Time

Bulletin board

Space

A&C

56 Any communication that conveys a message consisting of word is called _____ []

Verbal communication

Oral communication

Aural communication

Non verbal communication

57 Formal organization communication promotes team work and _____ []

Non co-operation

Low quality work

Co-ordination

Tedious and monotonous

58 The three common forms of business /official messages are _____ []

The memo, fax, email

Proposal project and guidelines

Only reports

None

59 Effective use of language such as clear writing , precision is required in []

NonVerbal communication

Verbal communication

Oral communication

Aural communication []

60 letters and memos carry messages like _____

Good news and good will messages

Sentimental messages

Logical messages

All of the above

61 Whether formal or informal , any writer is expected to be _____ []

Courteous

Impolite

Honest

Unfaithful []

62 The _____ is recipient – centered

We attitude

You attitude

I attitude

All of the above []

63 _____ ensures unity of language

Coherence

Compatibility

Open ideas

Close ideas []

- 64 _____ messages are written at the instance of serious problems of health. []
- Sympathetic
- Condolence
- Appreciative
- complimentary
- 65 _____ practices misinform and they cause miscommunication []
- Ethical practices
- Un ethical practices
- Negative practices
- None
- 66 _____ are widely used in business transactions as part of written communication []
- Visual signs
- Unusual signs
- Gestures
- Body language
- 67 When detailed and specific communication has to be presented _____ may be used []
- Tree diagrams
- Tables
- Visual signs
- Pictures
- 68 _____ are symbols or numbers used to show data []
- Photographs
- Pictograms
- The Gantt
- Tables
- 69 Modern business communication makes use of _____ in brochures []

Diagrams

photographs

maps

Posters

- 70 _____ are used to show quantum of anything concentrated in a geographic area []

Tables

Pillar

Maps

Bar graphs

- 71 _____ are often preferred for routine internal communication []

Notices

Projects

Circulars

letters

- 72 There are _____ of formality and in formality in different forms of communication []

Distance

Closeness

All of the above

degrees

- 73 The performance of men and women students over the last five years may be represented by a _____ []

Surface charts

Line charts

Pie charts

Line and surface charts

- 74 _____ charts are used to depict progression of processes []

Flow chart

gant chart

pie chart

pillar chart

75 _____ substantially contributes to nonverbal communication []

Only facial expression

body language

only personal appearance

only lips

76 Looking straight in the eye is a mark of _____ in the west []

Uncultured

irrational

dishonesty

refinement

77 Movements of limbs and holding of the body in different positions is also form of []

Communication

signals

body language

mis communication

78 Leaning forward, while sitting in a chair at an interview is generally _____ []

Accepted

unethical

unfair

not recommended

79 A wave of hand often conveys the meaning of a _____ in the west []

Formal greeting

informal greeting

conventional meeting

none of these

- 80 Ambiguity caused by confused syntax or word order is called as _____ []
barrier
- Linguistic barrier
- cultural barrier
- psychological barrier
- cultural barrier
- 81 Anything that distorts the senders intention or message is called _____ []
- Noise
- sound
- gesture
- visual signs
- 82 Faulty encoding of the message by the recipient may be considered as result of _____ []
- Sound
- gestures
- noise
- disturbed mind
- 83 Unethical factors such as _____ often block true communication []
- Greed
- true
- planned
- cultural barriers
- 84 Oral communication becomes ineffective because of _____ []
- Poor listening
- effective listening
- loud listening
- voice fluctuations
- 85 Telephone conversations end up in jamming receivers because they irritate due to lack of _____ []

Courtesy

impolite tone

non use of courtesy markers

attitude

86 B.C stands for _____ []

Business communication

business co-ordination

business co-operation

business comprehension

87 The _____ is the common form of external communication. []

Letter

memo

circular

journal

88 The _____ is often described as work horse of business communication []

Memo

report

none of above

email

89 A _____ in business correspondence is an official document written by an individual []

News

report

Project

official proposals

90 _____ in written communication alone can help maintain focus on the purpose of business communication []

Honesty

Ideas

analytical reasoning

Brevity

91 Written messages are preferred when _____ is necessary []

Feedback

record

Documents

email

92 The messages should be _____ []

Sincere

Insincere

sentimental

Impolite

93 Speaking to the customer care executive is an example of _____ []

Formal communication

informal communication

business communication

conventional communication

94 Speaking to a friend on telephone is an example of _____ []

Business communication

informal communication

formal communication

none of these

95 _____ is a quick form of official communication []

Fax

letter

Newspaper

A &b

96 one of the etiquette of formal telephone communication is _____ []

Attentive listening

relaxed posture

ignoring

poor listening habits

97 _____are important forms of communication []

Verbal and nonverbal

only verbal

only nonverbal

all of these

98 Communication is not a _____ []

one way process

two way process

silent process

all of these

99 The best expression for the word “look in” _____ []

look back

a quick glance

difference

study deep

100 All gestures in formal communication should _____ with your speech []

not coordinate

coordinate

lead to mis communication

not comprehend

101 _____ is precedes writing and speaking. []

listening

reading

both a&b

none of the above

102 most of the what you write and speak is born out how and what you []

Read

Write

listen

Speak

103 There was a widepread belief that reading would take a backseat because of []

print media

electronic media

visual media

none of the above

104 the reading skill which requires identifying main and sub points is referred []
to as_____

critical reading

study reading

analytical reading

exploratory reading

105 _____ Skills is occasionally applied to make a critical evaluation of matter. []

idea reading

scanning reading

skimming reading

critical reading

106 _____ is usually short explanation of theories []

scanning reading

analytical reading

exploratory reading

idea reading

- 107 While reading long articles people go with the details like who wrote, in which []
context etc. this kind of reading is called _____

exploratory reading

analytical reading

idea reading

none of the above

- 108 _____ is particularly useful in handling correspondence in business, []
where there may be a lot of unimportant material

idea reading

analytical reading

exploratory reading

scanning reading

- 109 _____ is the fastest type of reading. []

scanning reading

skimming reading

idea reading

analytical reading

- 110 When you find a book, you _____ to see whether it fits your requirement or not. []

skim

analyze

scan

none of the above

- 111 Continuous _____ improves vocabulary. []

reading

speaking

writing

all the above

112 Research related reading is a good example of _____ []

analytical reading

scanning reading

critical reading

none of the above

113 _____ type reading is used to locate, what we are looking for []

Skimming

Scanning

Analytical

All of the above

114 Text material, which requires _____ is seldom long. []

Critical reading

Analytical reading

Study reading

Exploratory reading

115 Reading speed can vary from _____ words per minute, which would cover almost all types of reading. []

120-150

150-200

150-600

100-150

116 Every type of text requires a specific type of reading skill. []

yes

no idea

no

don't know

117 _____ will help you develop techniques of style, word usage and organization. []

writing

reading

both a & b

none of the above

118 Reading is a rich resource of _____ []

learning

imitating

repeating

all the above

119 A _____ test provides a different interpretation every time you read it. []

literary

technical

both a & b

none of the above

120 _____ is permanent and can be referred back to as and when required, and it is an authentic as it can be checked and debated upon. []

spoken word

the written test

both a & b

none of the above

121 _____ Reading involves learners reading in detail with specific learning aims and tasks. []

extensive reading

intensive reading

both a & b

no idea

122 _____ Reading involves learners reading tasks for enjoyment. []

extensive reading

intensive reading

both a & b

none of the above

123 What sort of reading is skimming

[]

quick reading

slow reading

both a&b

None of the above

124 Key words and numbers can help with

[]

skimming

scanning

extensive reading

Intensive reading

125 If you look at all the headlines in a paper, what are you doing?

[]

Extensive reading

Intensive reading

skimming

scanning

Signature of the faculty

HoD,ME

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)
(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)
Maisammaguda, Dhulapally, (Post via Kompally), Secunderabad-500 100.

IV B.TECH II SEMESTER

SUBJECT: ENTREPRENEURSHIP SKILLS

(BRANCH :Common to CSE,ECE,EEE,ME,CE,Mining)

Name of the faculty : **P.RAJITHA,B.KIRAN KUMAR REDDY,ABHINAV SWAROOP,DR.G.PRAVEEN KUMAR(MBA DEPARTMENT)**

| MODULE-I | | | |
|------------------|---|-------------------------------|-----------|
| Q.No | Question | Bloom's Taxonomy Level | CO |
| 1. | Define entrepreneurship? What are the new trends you have noticed in entrepreneurship during 21 st century? | Remembering | 1 |
| OR | | | |
| 2. | Entrepreneurs can fail even if they are committed and have the characteristics needed to be successful. Why do you think this can happen? | Understanding | 1 |
| 3. | Explain the evolution of entrepreneurship with suitable examples | Understanding | 1 |
| OR | | | |
| 4. | How can an organizational development be aided by having a good entrepreneurial mind set? | Remembering | 1 |
| 5 | Do you feel the service sector creates more job opportunities than the manufacturing sector — if yes, give reasons? | Creating | 1 |
| OR | | | |
| 6 | List out the various barriers to entrepreneurship. Write some overcoming measures for such barriers. | Remembering | 1 |
| 7 | Discuss the various steps for setting up an enterprise. | Understanding | 1 |
| OR | | | |
| 8 | Distinguish between entrepreneur and entrepreneurship? | Understanding | 1 |
| MODULE-II | | | |
| 1. | What are the problems faced by Indian Women Entrepreneurs and what government support can they avail of? | Remembering | 2 |
| OR | | | |
| 2. | As a potential entrepreneur, how would you construct a business plan to satisfy your banker? | Remembering | 2 |

| | | | |
|-----------|---|---------------|---|
| 3. | Why do entrepreneurs need a strategy for success? Discuss an integrated corporate entrepreneurial strategy? | Remembering | 2 |
| OR | | | |
| 4. | “Entrepreneurs are made not born”. Comment and give reason for your views. | Understanding | 2 |

Signature of Faculty

Signature of HOD

Subject: Entrepreneurship Skills**Common: CSE,CE,ECE,EEE,Mech,Mining****Name of the faculty : P.RAJITHA,B.KIRAN KUMAR REDDY,ABHINAV
SWAROOP,DR.G.PRAVEEN KUMAR(MBA DEPARTMENT)**

1. SBIR stands for []
 - a) Small business intelligent research
 - b) Small business inventory research
 - c) Small business innovation research
 - d) Small business inventory research
2. Which statement is not true of entrepreneurs? []
 - a) They take risks
 - b) They apply innovative ideas.
 - c) They change the way businesses convert inputs into outputs
 - d) They generally stick to the processes already in use
3. The idea and actions that explain how a firm will make its profits refers to []
 - a) Mission
 - b) Goal
 - c) Objective
 - d) Strategy
4. Entrepreneurial success has been significant because of the culture and political and economic system in _____ []
 - a) European countries
 - b) Asian countries
 - c) Middle east
 - d) Transition economies
5. A set of reasons for engaging in particular behaviour, especially human behaviour is known as []
 - a) Values
 - b) Vision
 - c) Mission
 - d) Motivation
6. Which of the following is not the characteristic that is helpful for an entrepreneur to have? []
 - a) Self esteem
 - b) Optimism
 - c) Drive
 - d) Caution
7. Locus of control is
 - a) A feeling
 - b) Attitude
 - c) Attribute
 - d) None of the above
8. Personal characteristic to be successful entrepreneur includes: []
 - a) Understanding environment
 - b) Creating management options
 - c) Encourage open discussion
 - d) All the above
9. Money or property owned are used in business []
 - a) Capitalism
 - b) Capital
 - c) Mentor
 - d) Wage
10. Which of the following is presented as evidence of social factors influencing whether someone becomes an owner-manager? []
 - a) Self-employment is more common among single people than among the married
 - b) Although people believe self-employment runs in families, there is little evidence to support this view
 - c) There seems to be little relationship between self-employment and age.
 - d) Self-employment is more common among some ethnic group
11. Full form of MUDRA []
 - a) Macro units Development and refinance Agency
 - b) Micro units Development and recommend Agency
 - c) Micro units Development and refinance Agency
 - d) None of the above
12. International entrepreneurship is []
 - a) Licensing
 - b) Exporting
 - c) a&b
 - d) None of the above
13. _____ is what the “W” in the SWOT analysis stands for []
 - a) Wedge
 - b) Work
 - c) Worth of business
 - d) Weakness
14. An entrepreneur’s primary motivation for starting business is []
 - a) To make money
 - b) To be independent
 - c) To be famous
 - d) To be powerful
15. To be successful in an entrepreneurial venture you need []

- a) Money b) Luck c) Hard work d) Good idea
16. Entrepreneurs are best as []
- a) Managers b) Venture capitalists c) Planners d) Doers
17. Entrepreneurs are []
- a) High risk takers b) Moderate risk takers c) Small risk takers d) Doesn't matter
18. Entrepreneurs typically from
- a) Service business
b) Manufacturing companies
c) Constructive companies
d) A variety of ventures
19. Female entrepreneurs normally start their venture at the age of _____ years []
- a) 35-45 b) 25-30 c) 20-25 d) 40-45
20. Male entrepreneurs normally start their venture at the age of _____ years []
- a) 35-45 b) 25-35 c) 20-25 d) 40-45
21. In _____ the death of entrepreneur results in the termination of venture []
- a) Limited company b) Proprietorship c) Limited partnership d) Corporation
22. The term entrepreneur came from []
- a) French b) Latin c) English d) UK
23. For the success of business plan the goals should be []
- a) Limitless b) Imaginary c) Specific d) Generalized
24. An actor and a person who managed large project were termed as the entrepreneur in the ____ []
- a) Earliest period b) Middle ages c) 17th century d) 19th century
25. Which of the following is the most important for the entrepreneur, while starting a new venture, to make an assessment of? []
- a) Risk b) Profit c) Market d) competitors
26. Which one of the following is NOT an internal factor? []
- a) New technology b) Marketing c) Manufacturing d) Personnel
27. The Entrepreneur's _____ depends upon his/her perception of opportunity []
- a) Commitment of opportunity b) Commitment of resources
c) Control of recourses d) Strategic orientation
28. _____ refers to what a person heard/apprehended when he/she was young []
- a) Verbal programming b) Modelling c) Disassociation d) None of the above
29. People who own, operate, and take risk of a business venture []
- a) Aptitude b) Employee c) Entrepreneurs d) Entrepreneurship
30. Which one is NOT a disadvantage of Entrepreneurship? []
- a) Risky b) Uncertain Income c) You are the boss d) Work long hours
31. The Entrepreneur was distinguished from capital provider in _____ []
- a) Middle ages b) Early ages c) 18th century d) 20th century
32. The person who managed large projects was known as Entrepreneur in which []
- a) Middle ages b) Early ages c) 18th century d) 20th century
33. Which of the following is alternatively called corporate venturing? []
- a) Entrepreneurship b) Intrapreneurship
c) Act of stating a new venture d) Offering new products by an existing company
34. The activity which occurs when the new venture is started is called: []
- a) Motivation b) Business skills c) Departure point d) Goal orientation
35. Which one of the following is NOT one of the schools of thought under Macro view of entrepreneurship? []
- a) Environmental b) Financial c) Displacement d) None of the above
36. An entrepreneur doing business within the national border is called: []
- a) International entrepreneurship b) Intrapreneurship

- c) Domestic entrepreneurship d) None of the above
37. A firm with five or fewer employees, initial capitalization requirements of under \$50,000, and the regular operational involvement of the owner []
a) Mentor b) Franchise c) Service d) Microenterprise
38. Business activities that avoid harm to the environment or help to protect it in some way is []
a) Free enterprise system b) Entrepreneur
c) Green Entrepreneurship d) Social Entrepreneurship
39. A _____ is a for-profit enterprise with the dual goals of achieving profitability and attaining social returns []
a) Social business b) Green Entrepreneurship
c) Entrepreneur d) Social Entrepreneurship
40. Evaluation of your strengths and weaknesses []
a) Self Assessment b) Employee c) Entrepreneurship d) Entrepreneur
41. Which one is NOT a disadvantage of Entrepreneurship? []
a) Risky b) Uncertain Income c) You are the boss d) Work long hours
42. What type of entrepreneurial business actually produces the products they sell? []
a) Manufacturing b) Wholesaling c) Retailing d) Service
43. What type of entrepreneurial business sells products directly to the people who use or consume them? []
a) Manufacturing b) Wholesaling c) Retailing d) Service
44. Which one is NOT an advantage of Entrepreneurship? []
a) Can choose a business of interest b) You can be creative
c) Make a lot of money d) You will make decisions alone
45. The ability to learn a particular kind of job []
a) Aptitude b) Employee c) Entrepreneurship d) Entrepreneur
46. Entrepreneurs who start a series of companies are known as: []
a) Macropreneurs b) Intrapreneurs c) Multipreneurs d) None of the above
47. The opposite of "opportunity thinking" is: []
a) Obstacle thinking b) Thought self-leadership.
c) Self-efficiency d) Adaptive response behavior.
48. The startups which rarely go public are called: []
a) Life style b) Foundation company c) Small company d) High potential venture
49. Venture capital firms are usually organized as []
a) Closed-end mutual funds b) Limited partnerships
c) Corporations d) nonprofit businesses
50. The entrepreneur who is committed to the entrepreneurial effort because it makes good business sense is classed as a/an _____ []
a) Inventor b) Craftsman c) Hacker d) Opportunist
- 51 Today, inspired by the growth of companies such as Amazon.com, entrepreneurs are flocking to the to start new businesses []
a) Bookstore b) Small Business Administration c) Internet d) None of the above
52. A group of companies or individuals that invests money in new or expanding businesses for ownership and potential profits is known as []
a) An equity financing firm b) Franchising c) A venture capital firm d) A corporation
- 53 .For Internet start-ups, one typical source of first funds is through []
a) Angel financing b) Government funds. C) Stock financing d) Community development financing

54. Felix is an entrepreneur. At this stage of his company, his main concerns are do we have enough customers and money. What stage of growth is Felix's company in? []
 a) Survival b) Start-up c) Resource maturity d) None of the above
55. The primary concerns when first3 starting your business are: []
 a) Marketing and accounting b) Planning and human resources
 c) Financing and marketing d) Financing and planning
56. What are the primary sources of funding for entrepreneurs? []
 a) Personal savings and individual investors
 b) Finance companies and banks
 c) Small Business Administration and banks
 d) None of the above
57. Which one of the following is a barrier to new product creation and development? []
 a) Trial and error b) Opportunity cost c) Opportunity parameter
 d) Intrapreneurship culture
58. Which one of the factors should be considered while assessing the location for business? []
 a) Parking b) Access from roadways to facility
 c) Delivery rates d) All of the given options
59. Which one of the following is a sound strategic option for an entrepreneur when synergy is present? []
 a) Merger b) Joint venture c) Minority interest d) Majority interest
60. The _____ plan shows whether the business is economically feasible or not. []
 a) Financial b) Business c) Economic d) None of the above
61. The point at which a venture is neither making profits nor losses is described by the term []
 a) Start-up b) Buck-up c) Cash strap d) Break even
62. An entrepreneur's failure to adhere to sound business practices can be considered as []
 a) Behaving unethically b) Ignoring indigenous customs
 c) Not observing local regulations d) None of the above
63. Every business venture starts with []
 a) Capital b) An idea c) A market d) An opportunity
64. Which of the following is NOT a method of generating a venture idea []
 a) Training b) Checklist c) Notebook d) Brainstorming
65. Which of the following is NOT a push force of motivation? []
 a) Security needs b) Career advancement goals
 c) Attitude about the supervisor d) Amount and timing of feedback
66. Which of the following is NOT an internal motivating force? []
 a) Goals b) Feedback c) Needs d) None of the above
67. Which is one of the most important leadership qualities among managers and employees in the organization? []
 a) Entrepreneurship b) Motivation c) Communication d) Staffing
68. An individual's search for a new venture creation and the desire to sustain that venture is called _____ []
 a) Entrepreneurial Communication b) Entrepreneurial motivation
 c) Entrepreneurial skills d) None of the above
69. If expected outcomes are _____ than achieved results, the entrepreneurs are motivated to continue the same behaviour []
 a) Less b) More c) Constant d) None
70. Most of the successful entrepreneurs say that they are motivated by []
 a) Desire for money b) Desire to make their vision come true
 c) Both A & B d) None of the above
71. Who was the first lady governor of an Indian state? []
 a) Miss padmaja Naidu b) Mrs. Sarojini Naidu

- c) Mrs. Sucheta Kripalani d) Mrs. Tarakeshwari Sinha
72. Who among the following is the world's first woman cosmonaut? []
a) Bachendri Pal b) Junko Tabei c) Valentine Tereshkova d) Sally Ride
73. Who among the following was the first woman minister of a state []
a) Vijayalakshmi Pandit b) Sarojini Naidu
c) Rajkumari Amrit Kaur d) Indira Gandhi
74. MSMED stands to _____ []
a) Micro, Small & Medium Enterprises Development
b) Mini, Small & Medium Enterprises Development
c) Micro, Small & Medium Entrepreneurship Development
d) Micro, Small & Medium Enterprises Department
75. _____ implies that women entrepreneurs are now economically independent and take decisions independently. []
a) Better utilization of resources b) Improved quality life
c) Economic development d) Employment generation

Signature of the faculty

Signature of the HOD

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)**B.Tech–IV II SEM I Mid Examination Subjective Question Bank**

Subject : Fundamentals of Geology
Branch /Specialization : Mechanical Engineering
Name of the faculty : Dr. C. Srinivas Gupta

| Q.No. | Question | Bloom's Taxonomy Level | CO |
|-------------------------|---|-------------------------------|-----------|
| 1. | Illustrate the short notes on Formation of deltas with neat sketch | Understanding | 1 |
| OR | | | |
| 2. | Illustrate Placer deposits and explain how they are formed? | Understanding | 1 |
| | | | |
| 3. | Explain briefly on weathering of rocks? | Understanding | 1 |
| OR | | | |
| 4. | Analyze the internal structure and composition of the earth with diagram and explain in detail? | Analyzing | 1 |
| | | | |
| 5. | Illustrate about wind erosion? | Understanding | 1 |
| OR | | | |
| 6. | List morphological notes on glacial deposits | Analyzing | 1 |
| | | | |
| 7. | Summarise a short notes on: a) The Karst Topography b) Pedestal rocks & ventifacts | Understanding | 1 |
| OR | | | |
| 8. | Outline in detail about the origin of the Earth | Understanding | 1 |
| <u>Module II</u> | | | |
| 1. | Explain the role of study of physical properties of minerals in the identification of minerals? | Understanding | 1 |
| OR | | | |
| 2. | Identify the important properties of: (a) Bauxite | Applying | 1 |

| | | | |
|--------------------------|---|---------------|---|
| | (b) Magnesite (c) Graphite (d) Galena. | | |
| 3. | Distinguish the relative advantages and disadvantages of different methods of study of minerals? | Analyzing | 1 |
| OR | | | |
| 4. | Construct a short notes on common structures of igneous rocks. | Applying | 1 |
| 5. | Classify the common structures of sedimentary & metamorphic rocks. | Analyzing | 1 |
| OR | | | |
| 6. | Develop a short notes on the following with examples a) Primary and secondary minerals in rocks b) Essential & accessory minerals c) Leucocratic, melanocratic& mesocratic rocks | Applying | 1 |
| 7. | Classify different textures in Igneous rocks | Analyzing | 1 |
| OR | | | |
| 8. | Explain the terms Isomorphism, Polymorphism & Psuedomorphism in mineral giving suitable examples of each | Understanding | 1 |
| <u>Module III</u> | | | |
| 1. | Explain the short notes on Structural geology and describe outcrop, strike & dip with the help of diagrams. | Understanding | 1 |
| OR | | | |
| 2. | Classify the different types of folds & faults. | Understanding | 1 |
| 3. | Examine different types of folds with diagrams. | Analyzing | 1 |
| OR | | | |
| 4. | Illustrate different parts of faults with neat sketch. | Understanding | 1 |

Malla Reddy Engineering College (Autonomous)
DEPARTMENT OF MECHANICAL ENGINEERING
B.Tech.-IV Year II- Semester, I-Mid Examination

Subject: Fundamentals of Geology
Gupta

Name of the Faculty: Dr. Srinivas

- | Sl.No. | Question Description |
|--------|--|
| 1 | The Astronomical Unit expresses the distance of a. One star from another star b. One planet from another planet c. The planet Earth from the sun d. None of the above |
| 2 | One Astronomical Unit is equal to a. 149.6 Million km b. 249.6 Million km c. 349.6 Million km d. 420.6 Million km |
| 3 | The Mohorovicic discontinuity demarks a. The inner core from the mantle b. The outer core from the mantle c. The crust from the mantle d. The upper layer of the crust from the lower layer of the crust |
| 4 | The ozone layer is located in a. The troposphere b. The atmosphere c. The ionosphere d. The exosphere |
| 5. | The tidal hypothesis about the origin of the solar system was propounded by a. American Scientist b. British Astronomer Jeans c. German Physicist Weizascker d. Soviet Mathematician Schmidt |
| 6. | Half-life is a term used to a. The period from which a planet can exist in the solar system b. The time taken by a radioactive element to change to an end product of half of the total volume c. The time taken for one half quantity of a radioactive element to decay a stable end product d. None of the above |
| 7. | Carbonation is the action of a. Carbon dioxide on the limestone rock b. Atmospheric carbon dioxide mixed with moisture on rocks of suitable composition c. Atmospheric carbon dioxide on iron-containing rocks d. None of the above |
| 8. | Soil profile indicates |

- a. The slope of an area is measured on the surface
 - b. The composition of the top layer of soil in an area.
 - c. The character of weathering as reflected by the type of the weathered products up to a certain depth.
 - d. None of the above
 - e.
9. Loess is the name given to
- a. Heaps of sand accumulated in and around a town due to wind transport
 - b. Extensive deposits of silt and clay made by wind in many areas over the years
 - c. A depression in a desert where groundwater has appeared due to excessive erosion
 - d. None of the above
10. Base level of river erosion means
- a. The lowest level of a river valley in a given region
 - b. The lowest level upto which a stream can theoretically cut down its channels.
 - c. The capacity of a river to erode its base
 - d. None of the above
11. Saltation is a term used for expressing
- a. A method of sediment of transport by wind and water in a series of jumps or in skidding and sliding manner.
 - b. A method of sediment transport in which load is transported in a dissolved salt form
 - c. A process of formation of salts by evaporation of river water
 - d. None of the above
12. Incised meanders develop in
- a. The mountainous region of youthful rivers
 - b. The flood plain areas of mature river
 - c. The deltaic regions of old age rivers
 - d. None of the above
13. An oxbow lake is actually
- a. Salt lake formed in a coastal areas when sea water gets trapped in an isolated depression
 - b. A fresh water lake occurring in the mountainous regions.
 - c. An isolated, detached loop of meandering river region
 - d. None of the above
14. Stalactites and stalagmites are features of
- a. Stream erosion developed in limestone region by specific chemical reactions
 - b. Marine erosion and deposition formed along coastal regions by selective erosion followed by deposition by waves
 - c. Ground water deposition in caves formed by precipitation from dripping water rich in dissolved calcium carbonate
 - d. None of the above
15. Atolls is a term used for
- a. Remnant outstanding obstructions in peneplains that have withstood the erosive work of the rivers
 - b. Caves formed by the solvent action of ground water
 - c. Deposits of coral reef group surrounding a central water body or lagoon
 - d. None of the above

16. Glaciers are downward moving bodies of
- Pure snow
 - Mostly ice and may be some snow at the top
 - Snow at the bottom and some ice at the top
 - None of the above
17. Hanging valleys develop when
- Rate of erosion is greater in the main valley compared to the side valley
 - Rate of glacial erosion is greater in the side valley as compared to that of main valley
 - Rate of glacial erosion is same in both the valleys
 - None of the above
18. Roche mountains is a feature of
- Glacial erosion
 - Glacial deposition
 - Glacial erosion and deposition
 - None of the above
19. The rate of downward movement in a glacier is
- Same throughout its body
 - Greater at the top compared to at the base
 - Lesser at the top compared to the base
 - None of the above
20. Tillite is the name given to
- A rock like mass made of river washed sands, clays and boulders and having layers.
 - A rock like mass made of boulders and clays showing no evidence of assortment and indicating direct deposition from glacial ice
 - A cavity created in a rock like mass due to melting of an ice block subsequent to deposition of the mass.
 - None of the above
21. What is the total length of the coastline in India
- 4689 km
 - 5689 km
 - 3550 km
 - 6320 km
22. Name the highest active volcano in the world
- Etna (3300mts)
 - Cotapaxi (5974 mts)
 - Sangay (5980)
 - Fuego (54786mts)
23. Chemical weathering is more effective than mechanical weathering in
- Semiarid region
 - Arid region
 - Wet or humid regions
 - All of the above
24. The second largest island in the world, i.e., New Guinea, is located in the
- Atlantic Ocean
 - Pacific Ocean
 - Indian Ocean
 - Bay of Bengal

25. Bays and headlines are generally found in shorelines of
- Submergence
 - Emergence
 - Neutral type
 - Faulted type
26. An OASIS is formed
- When the glacier terminates
 - By the filling in of a depression by rain water
 - By wind erosion down to water table in a desert
 - A relic in the form of a small lake of large ancient bodies of water near coastal regions.
27. Kalahari desert is in
- India
 - China
 - Africa
 - South America
28. Shadow zone forms at
- Moho discontinuity
 - Gutenberg discontinuity
 - Conrad discontinuity
 - 20° discontinuity
29. The radioactive decay was discovered by
- Becquerel
 - Marie Curie
 - Pierre Curie
 - Marie and Pierre Curie both
30. An instrument that records the warps of volcano is known as
- Tiltmeter
 - Seismogram
 - Pyranometer
 - Altimeter
31. Central Part of the earth's core is
- Solid
 - Liquid
 - Semisolid
 - None of the above
32. Earth's mantle is separated from core by
- Mohorovicic discontinuity
 - Gutenberg discontinuity
 - Separated by igneous rocks
 - None of the above
33. Gutenberg break is located at a depth of
- 3000km
 - 2600 km
 - 2900 km
 - 3900 km
34. Asthenosphere (a low velocity layer) has been identified in the upper part of the mantle from around _____ km to _____ km of depth.
- 100 km to 350 km
 - 125 km to 360 km

- c. 300 km to 400 km
 - d. 60 km. to 350 km
35. The thickness of crust varies at different places but its maximum thickness is _____ on the continents
- a. 90km
 - b. 79km
 - c. 140km
 - d. 70km.
36. From 'Focus' the type of earthquake waves starts
- a. Push-waves
 - b. Shaky- waves
 - c. Long - waves
 - d. All the above waves
37. The process of glacial erosion, transportation and deposition is called as
- a. Abrasion
 - b. Fluvial cycle
 - c. Glaciation
 - d. Ice process
38. Spheroidal weathering is generally seen in
- a. Granites and basalts
 - b. Granites and graphites
 - c. Granites and schist
 - d. Granites and sandstones
39. Age of the earth is
- a. 4.5 million years
 - b. 4.5 billions years
 - c. 450 million years
 - d. 450 billions years
40. Nearest planet to the Earth is
- a. Uranus
 - b. Mars
 - c. Jupiter
 - d. Mercury
41. "Sial" layer consists of
- a. Silica and Magnesium
 - b. Silica and Aluminum
 - c. Silica and Iron
 - d. Aluminum and Magnesium
42. "Sima" layer consists of
- a. Silica and Iron constituents
 - b. Silica and Magnesium constituents
 - c. Silica and Aluminum constituents
 - d. Aluminum and Magnesium constituents
43. Meanders are the
- a. Curve shape of the wind deposits
 - b. Curve shape of the rivers
 - c. Curve shape of the mountains
 - d. None of the above
44. Deposition takes place in meanders of a river on the
- a. Inner curve of the river

- b. Outer curve of the river
 - c. Both the above
 - d. None of the above
45. Moraines
- a. Accumulation of the material which has been transported by rivers
 - b. Accumulation of the material which has been transported by wind
 - c. Accumulation of the material which has been transported and deposited by the magma
 - d. Accumulation of the material which has been transported and deposited by glacier.
46. Stalactites and stalagmites forms generally
- a. Cave deposits
 - b. River deposits
 - c. Wind deposits
 - d. Glacier deposition
- 47 Alluvial deposits are forms due to the action of
- a. Volcanoes
 - b. Earthquakes
 - c. Glaciers
 - d. Rivers
48. "Ventifacts" are the
- a. Pebbles of rocks or minerals which have developed some plane faces due to wind abrasion
 - b. Vein-like structures in the volcanic area due to the magmatic intrusions
 - c. Ventilator like formation due to chemical weathering in a limestone area
 - d. None of the above
49. Sand dunes
- a. Sands deposited by wind
 - b. Sands deposited by water
 - c. Sands deposited by ice
 - d. All of the above
- 50 Rock fragments constituting of different sizes of the ejected material on the volcanoes called as
- a. Pyroclastic material
 - b. Clastic material
 - c. Volcanic ash
 - d. Cinders or lapilli
1. The hardness of a mineral is defined as
- a. The resistance a mineral offers to load imposed on it
 - b. The resistance a mineral offers to decay and deterioration to atmospheric agencies
 - c. The resistance a mineral offers to scratching or rubbing action.
 - d. None of the above
2. Cleavage of a mineral
- a. Tendency to split along certain directions yielding smooth surfaces
 - b. Appearance on a broken surface of a mineral
 - c. Arrangement of mineral in layers due to pressure etc., at the time of its formation
 - d. None of the above
3. Streak of a mineral is

- a. Its appearance in diffused light as obtained by rotating it.
 - b. Colour of the powder of coloured mineral as obtained by rubbing it on a porcelain plate
 - c. Its appearance in thin sections as seen under a polarizing microscope
 - d. None of the above
4. Ore mineral generally have specific gravity _____ than the non-metallic minerals.
 - a. Higher
 - b. Lower
 - c. Same
 - d. None of the above
5. Feldspars are formed by
 - a. Process of crystallization from igneous rocks
 - b. Consolidation of vapours from volcanic emanations
 - c. Evaporation and precipitation from saturated solutions over the surface of the earth
 - d. None of the above
6. In composition, halite, is
 - a. A carbonate of magnesium....(Mg) $_2\text{CO}_3$
 - b. An oxide of Silica... SiO_2
 - c. A chloride of sodium NaCl
 - d. None of the above
7. The cleavage angles in pyroxenes are
 - a. 93° and 87°
 - b. 124° and 56°
 - c. 90° and 90°
 - d. None of the above
8. The plagioclase feldspar isomorphous series is known as
 - a. Orthoclase-microcline series
 - b. Albite – Anorthite series
 - c. Augite – Anorthite-albite series
 - d. None of the above
9. Plutonic igneous rocks are always formed from the cooling of
 - a. The lava under water;
 - b. Magma just below the surface of the earth;
 - c. Lava over the surface of the earth;
 - d. Magma at great depths below the surface of the earth
10. Poikilitic texture is characterized with
 - a. Presence of large sized crystals in a fine ground mass
 - b. Presence of small sized crystals dispersed within the body of large sized mineral
 - c. Distribution of crystals of same size in a fine grained ground mass
 - d. The entire constituents being present in glassy form
11. The rocks 'syenites' contain Essential mineral groups
 - a. Alkali-feldspars
 - b. Orthoclase+ quartz
 - c. Plagioclase + quartz
 - d. Lime -soda feldspars
12. The rocks 'gabbro' contain Essential mineral groups
 - a. Alkali-feldspars
 - b. Orthoclase+ quartz

- c. Plagioclase + quartz
 - d. Lime-soda feldspars
- 13. The rocks 'granite' contain Essential mineral groups
 - a. Orthoclase+ quartz
 - b. Alkali-feldspars
 - c. Plagioclase + quartz
 - d. Lime –soda feldspars
- 14. The rocks 'Tonalite' contain Essential mineral groups
 - a. Orthoclase+ quartz
 - b. Alkali-feldspars
 - c. Plagioclase + quartz
 - d. Lime –soda feldspars
- 15. The rocks 'Trachylite' contain Essential mineral groups
 - a. Orthoclase+ quartz
 - b. Felspathoids+feldspars
 - c. Plagioclase + quartz
 - d. Lime –soda feldspars
- 16. The rocks 'Diorite' contain Essential mineral groups.....
 - a. Orthoclase+ quartz
 - b. Alkali-feldspars
 - c. Plagioclase + quartz
 - d. Lime –soda feldspars
- 17. The term lamination is used to express
 - a. The stratified nature of fine-grained sedimentary rocks in which individual layers are very thin;
 - b. Occurrence of fossils in sedimentary rocks
 - c. Inclination of layers in sedimentary rocks
 - d. None of the above
- 18. Oolitic structure explains
 - a. Occurrence of walnut sized concretions in sedimentary rocks
 - b. Presence of fish-egged size concretions in rocks
 - c. Presence of gravel-size concretions in rocks
 - d. None of the above
- 19. Kankar is a variety of
 - a. Sandstone
 - b. Limestone
 - c. Shale
 - d. Coal
- 20. Flint is a type of sedimentary rocks formed by
 - a. Mechanical processes like erosion, transport, deposition and welding.
 - b. Organic process like accumulation of remains of siliceous bodied animals.
 - c. Chemical processes of precipitation from sea water rich in amorphous silica
 - d. None of the above
- 21. Metamorphism is a process of change in the rocks in which
 - a. Pre-existing rocks undergo complete re-crystallization after undergoing melting due to high temperature and pressure
 - b. Pre-existing rocks may undergo changes in structure, texture and even composition under the changed conditions of heat, pressure and chemically active fluids remaining in solid state all the time.

- c. Pre-existing rocks suffer only structural changes under crushing loads under without undergoing any changes in texture, composition, etc.
 - d. None of the above conditions are valid
- 22. A metamorphic facies
 - a. Is indicative of metamorphic environment through which pre-existing rocks have passed to form metamorphic rocks of different types
 - b. Defines the nature of pre-existing rock before it undergoes metamorphism;
 - c. Is a textural term defining the development of large scale textures and structures over broad areas of metamorphic rocks.
 - d. Is not covered by any of the above three definitions.
- 23. Stress minerals are characterized with
 - a. Flaky, platy and elongated shapes;
 - b. Angular, regular and polyhedral outlines.
 - c. Perfectly rounded and granular minerals.
 - d. None from above forms.
- 24. The formation of placer deposits is primarily due to
 - a. The sorting power of the transporting medium and the inherent physical properties of the placer mineral.
 - b. Igneous process resulting in crystallization of economic minerals at a suitably located geological situation.
 - c. Metamorphic processes that make pressure and temperature conditions conducive to transformation of original minerals into placer accumulations
 - d. None of the above
- 25. Coal deposits are formed due to
 - a. Thermal metamorphism of organic source material.
 - b. Accumulation of vegetable matter in a proper sedimentary environment and its subsequent bio-chemical-mechanical transformation
 - c. Some undefined igneous process which is not yet to be understood.
 - d. None of the above
- 26. Hardness of feldspar mineral is
 - a. 8
 - b. 7
 - c. 6
 - d. 5
- 27. Fosterite mineral belongs to
 - a. Feldspar group
 - b. Epidote group
 - c. Zeolite Group
 - d. Olivine Group
- 28. Diamond crystallizes in
 - a. Cubic system
 - b. Tetragonal system
 - c. Hexagonal system
 - d. Orthorhombic system
- 29. Quartz mineral typically shows
 - a. Even fracture
 - b. Uneven fracture
 - c. Conchoidal fracture
 - d. Smooth surface
- 30. The chemical composition of the mineral Microcline is

- a. KAlSi_3O_8
 - b. $\text{NaAl}_2\text{Si}_2\text{O}_8$
 - c. $\text{CaAl}_2\text{Si}_2\text{O}_8$
 - d. $\text{KAl}_2\text{Si}_2\text{O}_8$
31. Most of the carbonate minerals crystallizes in
- a. Tetragonal system
 - b. Cubic system
 - c. Hexagonal system
 - d. Monoclinic system
32. Serpentine alteration can be seen in
- a. Olivine
 - b. Orthoclase
 - c. Augite
 - d. Hornblende
33. Steatite is an impure variety of
- a. Asbestos
 - b. Barites
 - c. Talc
 - d. Gypsum
34. Magnesium – aluminium garnet mineral is
- a. Pyrope
 - b. Grossularite
 - c. Spessertite
 - d. Almondite
35. Fracture is a
- a. Cleavage surface of the mineral
 - b. Broken surface of the mineral
 - c. Flat surface of the mineral
 - d. None of the above
36. 'Lustre' is a
- a. Broken surface of the mineral
 - b. Shining on mineral surface
 - c. Flat surface of the mineral
 - d. Polished surface of the mineral
37. Indicate the physical property of a mineral which is dependent on light.
- a. Lustre
 - b. Fracture
 - c. Streak
 - d. Specific gravity
38. Even fracture can be seen in
- a. Quartz
 - b. Microcline
 - c. Limestone
 - d. Orthoclase
39. Kyanite mineral occurs in
- a. Sheet form
 - b. Bladed form
 - c. Acicular form
 - d. Fibrous form
40. Chemical composition of the Barite mineral is

- a. BaSO_4
 - b. BaCO_3
 - c. CaSO_3
 - d. MgSO_3
41. Dykes occur
- a. Only in discordant form
 - b. Only concordant form
 - c. Both concordant and discordant form
 - d. None of the above
42. Sill occurs as
- a. Only in discordant form
 - b. Only concordant form
 - c. Both concordant and discordant form
 - d. None of the above
43. Vesicular structures characteristic feature of
- a. Plutonic igneous rocks
 - b. Hypabyssal igneous rocks
 - c. Volcanic igneous rocks
 - d. Deep-seated sedimentary rocks
44. Bun shaped mass of igneous rock formed, which has a flat base and domed top is described as
- a. Laccolith
 - b. Lopolith
 - c. Dykes
 - d. Sill
45. Rocks formed due to the consolidation of magma below the surface of the earth are described as
- a. Intrusive rocks
 - b. Extrusive rocks
 - c. Volcanic rocks
 - d. None of the above
46. The metamorphism in which the great heat and uniform pressure at depth are described as
- a. Volcanic metamorphism
 - b. Contact metamorphism
 - c. Caustic metamorphism
 - d. Plutonic metamorphism
47. Characteristic feature of sedimentary rocks is
- a. Vesicular structure
 - b. Amygdaloidal structure
 - c. Stratification or bedding
 - d. Gneissosity
48. Dunite is a
- a. Mono-mineral rock
 - b. Double Mineral rock
 - c. Multi mineral rock
 - d. It occurs in all the above ways
49. Delta structure consisting of consists of
- a. Only topset beds
 - b. Only foreset beds

- c. Only bottomset beds
 - d. All the above types of beds
- 50. Shale belongs to
 - a. Rudaceous rocks
 - b. Argillaceous rocks
 - c. Arenaceous rocks
- 1. Dip is defined as
 - a. The inclination of a layer of rock with a horizontal plane
 - b. The angle of inclination of a layer of rock with vertical plane;
 - c. The angle which the slope of mountain makes in general
 - d. None of the above
- 2. Plunge is the angle which is determined in a fold with respect to
 - a. Axial plane of the fold
 - b. Axis of the fold
 - c. Strike of the fold
 - d. None of the above
- 3. In Isoclinal fold, all the axial planes
 - a. Are essentially vertical and parallel
 - b. May be vertical, inclined or horizontal, but all are parallel;
 - c. Are essentially horizontal, but parallel
 - d. None of the above
- 4. Drag folds are developed in the layers
 - a. Which are competent and surrounded on sides by incompetent layers
 - b. Which are incompetent and surrounded on sides by competent layers on both sides
 - c. Which are surrounded by on sides by igneous rocks
 - d. None of these conditions
- 5. A fault is essentially a fracture
 - a. With or without a relative displacement having taken place apast its surface;
 - b. Along which some definite amount of relative displacement has taken place;
 - c. That has opened up without a relative displacement;
 - d. None of the above
- 6. Block mountain is the term used for
 - a. Mountains created by thrust faults;
 - b. Mountains created due to slipping of side blocks along parallel strike faults having behind raised blocks
 - c. Mountains developed due to denudation of original land by glaciers.
 - d. None of the above
- 7. Anticline is a structure, where the two limbs of the fold dips
 - a. In opposite direction
 - b. Towards each other
 - c. Both the above (a) and (b)
 - d. None of the above
- 8. 'True dip' value is
 - a. Lesser than the apparent dip value
 - b. Equal to the apparent dip value
 - c. Greater than the apparent dip value
 - d. Not related to t the apparent dip value
- 9. 'Outlier'
 - a. In which the older rocks surrounded by the younger rocks

- b. In which the younger rocks surrounded by the older rocks
 - c. Older rocks and younger rocks are parallel to each other
 - d. Older rocks perpendicular to the younger rocks
- 10. 'Syncline' is a structure, where two limbs of the fold dips
 - a. In opposite direction
 - b. Towards each other
 - c. Both the above (a) and (b)
 - d. None of the above
- 11. 'orogeny' is a process
 - a. The results for the formation of new economic mineral formation
 - b. Of mountain building activity
 - c. Of secondary enrichment of ore deposits
 - d. None of the above
- 12. "Strike"
 - a. The direction in which a horizontal line can be drawn on a plane surface of the bed
 - b. The direction in which a vertical line can be drawn on a plane surface of the bed
 - c. The direction in which straight line can be drawn on plane surface of the bed
 - d. The direction in which a straight line can be drawn on inclined surface of the bed
- 13. Shield area are also described as
 - a. Cratons
 - b. Basins
 - c. Negative areas
 - d. None of the above
- 14. 'Geosynclines' are considered to be
 - a. Negative areas
 - b. Positive areas
 - c. Volcanic areas
 - d. None of the above
- 15. 'Shield' areas are the
 - a. Orogenic areas
 - b. Most-unstable
 - c. Most-stable areas
 - d. None of these
- 16. 'Nappe' is the structure related to
 - a. Joints
 - b. Folds
 - c. Faults
 - d. Unconformities
- 17. 'Hinge' of a fold is the line of
 - a. Minimum curvature in a folded bed
 - b. Maximum curvature in a folded bed
 - c. Lower most part of the fold
 - d. Upper most part of the fold
- 18. 'fold axis'
 - a. Is a line oblique to the hinges
 - b. Is a line parallel to the hinges
 - c. Is a line oblique to the trough
 - d. Is a line parallel to the trough

19. The sides of a fold is described as
- Troughs
 - Crusts
 - Limbs or flanks
 - Crests
20. In an 'anticline'
- Older rocks are in the centre
 - Younger rocks are in the centre
 - It occurs in both the above ways
 - None of the above
21. The shape of 'syncline' is
- Concave upward
 - Convex upwards
 - Plane surface
 - None of the above
22. 'Cheveron fold'
- In which the hinges are irregular and rounded
 - In which the hinges are smooth and rounded
 - In which the hinges are sharp and angular
23. 'Box fold'
- In which the crest is broad, flat and two hinges are present
 - In which the crest is not broad and only one hinge is present
 - In which the crest is rounded and only one hinge is present
 - None of the above
24. 'Fan fold '
- A fold in which one limb is overturned
 - A fold in which both limbs are overturned
 - A fold in which none of the limbs is overturned
 - None of the above
25. 'Dome '
- Is anticlinal uplift that has no distinct trend
 - Is anticlinal uplift that has a distinct trend
 - Is synclinal depression that has no distinct trend
 - Is synclinal depression that has distinct trend

Signature of the Faculty

Signature of the HoD

Code: 50150

MR 15

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

B.Tech IV-I Semester (MR 15)

I Mid Examination Subjective Question Bank

Subject: Green Buildings (50150)

Branch: CE

Name of the faculty: K.HARSHADA/A.SAI BABA

| Q.No. | Question | Bloom's Taxonomy Level | CO |
|-------------------------|---|---------------------------------------|-----------|
| <u>Module-I</u> | | | |
| 1. | Define Green Buildings | Remembering | 1 |
| OR | | | |
| 2. | What are the objectives of Green Building | Remembering | 1 |
| 3. | Explain High Performance in buildings | Understanding | 1 |
| OR | | | |
| 4. | Explain the various methods for building assessments | understanding | 1 |
| 5. | Identify the different tools used for building assessment | Applying | 1 |
| OR | | | |
| 6. | Identify the Advantages of green Buildings | Applying | 1 |
| OR | | | |
| 7. | Analyze the different methods for building assessments | Analyzing | 1 |
| OR | | | |
| 8. | Analyze Green Globes | Analyzing | 1 |
| <u>Module-II</u> | | | |

| | | | |
|-----------|---|---------------|---|
| 1. | Explain the process of Green Buildings | Understanding | 2 |
| OR | | | |
| 2. | Explain few Key points for designing Green Buildings | Understanding | 2 |
| 3. | Illustrate the design and construction relationships for Green Buildings | Understanding | 2 |
| OR | | | |
| 4. | Interpret the benefits of Green Buildings to society | Understanding | 2 |
| 5. | Identify some important quality check of Green Buildings | | 2 |
| OR | | | |
| 6. | Identify some of the salient features for healthy and safe environment in Green Buildings | Applying | 2 |
| OR | | | |
| 7. | List the precautions for selecting the site for Green Buildings | Analyzing | 2 |
| | | | |
| 8. | Examine the Landscape Strategies | Analyzing | 2 |

Module-III

| | | | |
|-----------|--|---------------|---|
| 1. | Illustrate basic building energy system strategies | Understanding | 3 |
| OR | | | |
| 2. | Summarize IEQ | Understanding | 3 |
| 3. | Analyze the water cycle procedure in Green Buildings | Analyzing | 3 |
| OR | | | |
| 4. | Compare few strategies for construction of Green Buildings | Analyzing | 3 |

Signature of the faculty

Signature of HoD

MALLAREDDY ENGINEERING COLLEGE (AUTONOMOUS)

IV B.TECH I SEM (MR15REGULATIONS)1ST MID EXAM QUESTIONS

Subject: Green Buildings (Open Elective)

Branch: MECHANICAL

SureshchandraBabu

Name Of the Faculty: K.Harshada/ P

Objective Questions:

MODULE-I

1 IGBC Stands for

- a. Indian Green Body Council
- b. Indo Green Building Council
- c. Indian Green Building Council
- d. none of these

2) VOC Stands for

- a. Volatile Organic Compound
- b. Volume Organic Compound
- c. Volatile Organism Compound
- d. Volume Organism Compound

3) Green Building also known as

- a. Green Construction
- b. Sustainable Building
- c. Both (a) & (B)
- d. Conventional Building

4) A Green Building is one which....

- a. Uses Less water
- b. Optimizes energy efficiency
- c. Conserves Natural resources

- d. All the above

5) Fundamental Principles of Green Building are

- a. Structure design efficiency
- b. Energy Efficiency
- c. Water Efficiency
- d. All the above

6) Reduce Operating cost comes under which benefit of green buildings

- a. Environmental
- b. Economic
- c. Social
- d. None of these

7) Improve Quality of life comes under which benefit of green buildings

- a. Environmental
- b. Economic
- c. Social
- d. None of these

8) Improve air and water quality comes under which benefit of green buildings

- a. Environmental
- b. Economic
- c. Social
- d. None of these

9) Disadvantage of Green Building is.....

- a. Initial Cost is High
- b. Eco-Friendly Construction
- c. Pollution can be decreased

d. All the Above

10) Green Building involves inactivities

- a. Energy
- b. Materials
- c. Indoor Air Quality
- d. All the above

11) India will have one lakh green building by the year

- a. 2022
- b. 2023
- c. 2025
- d. 2026

12) Green Building can be accomplished when certain requirements are fulfilled

- a. Reuse
- b. Reduce
- c. Recycle
- d. All the above

13) Green Building is actually an important factor in lowering the -----

- a. Negative Impact
- b. Positive Impact
- c. Both Negative and Positive Impact
- d. None of these

14)is a material used in construction

- a. Chalk
- b. Brick
- c. Paper

- d. Computers

15) **LEED** Stands for

- a. Leadership in Eco and Environmental Design
- b. Leadership in Energy and Environmental Design
- c. Leadership in Energy and Eco Design
- d. Leadership in East and Environmental Design

16) **CII** Stands for

- a. Confederation of Italian Industry
- b. Confederation of Indian Income
- c. Confederation of Indian Insulation
- d. Confederation of Indian Industry

17) The major gas that emits by the industry is.....

- a. CO
- b. CO₂
- c. CFC
- d. All the above

18) Safeguarding the rain Water is done by which technique

- a. Room Harvesting
- b. Pit Harvesting
- c. Rain water safeguarding
- d. Rain Water Harvesting

19) Building waste often includes

- a. Concrete
- b. Metals
- c. Wood

- d. All the above

20) Disposing of waste has huge environmental impacts and can cause

- a. Landfill sites
- b. Holes in the Ground
- c. Methane gas
- d. All the above

21) ----- produced as waste decomposes may cause pollution

- a. cosmosis
- b. Leeder
- c. Leachate
- d. Voltaic

22) Scale Model Measurement is a

- a. Comparing of existing method
- b. Standard Skies Method
- c. Sophisticated Method
- d. Evaluation Method

23) Evaluation Method for day lighting design

- a. Scale-model measurement
- b. Simplified calculation method
- c. Sophisticated computational method
- d. All the above

24) Scale models portray the distribution of daylight within the model room almost

- a. Full-Size Room
- b. Half-Size Room
- c. Quarter-Size Room

- d. None of the above

25) Artificial Sky Measurement is done by

- a. Artificial Sky
- b. Sky- Simulator
- c. Both (a) & (b)
- d. None of the above

26) Simplified Calculation Method

- a. Daylight Factor
- b. Average Day light factor
- c. Vertical day light factor
- d. All the above

27) Day light Factor

- a. $DF = E_v/E_{vd} \times 110 \%$
- b. $DF = E_v/E_{vd} \times 120 \%$
- c. $DF = E_v/E_{vd} \times 100 \%$
- d. $DF = E_v/E_{vd} \times 130 \%$

28) Sophisticated Computational Method

- a. Maxwell's Electromagnetic Wave
- b. Radiosity
- c. Ray Tracing
- d. All the above

29) EMW Stands for.....

- a. Electro mono Wave
- b. Electro Magnetic Wave
- c. Electro Mass Wave

- d. Elemented magnetic Wave

30) The following geometrics are available in Radiance....

- a. Polygon
- b. Ring
- c. Tube
- d. All the above

31)Green Building Emphasies on

- a. Reduced Energy Use
- b. Reduced Waste
- c. Both (a) & (b)
- d. None of the above

32)Green Building Material can also be called as

- a. Conventional Material
- b. Renewable Material
- c. Eco Friendly Material
- d. Non- Renewable Material

33.Production of building materials leads to.....

- a. Environmental Impact
- b. reversible Environmental Impact
- c. Irreversible Environmental Impact
- d. None of the above

34.Brick Kilns leads to.....

- a. Impact on water
- b. Impact on air
- c. No impact on Environment

- d. Environmental Impact

35.A material by itself can be eco-friendly

- a. Steel
- b. Brick
- c. Bamboo
- d. Wood

36.Conventional Material can become eco-friendly based on

- a. Quality
- b. Quantity
- c. Construction Technique
- d. None of the above

37.....bond can be a Conventional eco-friendly

- a. Header Bond
- b. Stretcher Bond
- c. English Bond
- d. Rat Trap Bond

38.Sources of Green Building Materials are

- a. Renewable Sources
- b. Reuse of waste
- c. Both (a) & (b)
- d. None of these

39.Example for Renewable Source of Eco-Friendly Material

- a. Wood
- b. Steel
- c. Concrete

d. Old Plumbing

40).Example for Reuse of Waste Eco-Friendly Material

a. Wood

b. Steel

c. Old Plumbing

d. Concrete

41 .Bagasse Board is a.....Eco-Friendly Material

a. Renewable Source

b. Non-Renewable Source

c. Reuse of Agricultural Waste

d. Reuse of Industrial Waste

42.Energy Conservation can be done by implementinglamps

a. EED

b. LFL

c. CFL

d. LED

43. Bagasse is aEco-Friendly Material

a. Conventional Eco-Friendly

b. Potential Eco-Friendly

c. Both Conventional & Potential Eco-Friendly

d. None

44. Windows and openings can be replaced withgreen material

a. Insulated Glass

b. Aluminum Paneled

c. Plain Glasses

d. None of these

45. Lighting Fixtures can be replaced withgreen material

- a. CFL Lights & Bulbs
- b. High Watt LED Tube lights & bulbs
- c. Low Watt LED Tube lights & bulbs
- d. None of these

46. Plumbing Fixtures can be replaced withgreen material

- a. Conventional Fixtures
- b. Special Green Fixtures
- c. Any Fixtures
- d. None of these

47) Flooring can be replaced withgreen material

- a. HDPC Flooring
- b. PVC Flooring
- c. Glazed Tiles
- d. China Mosaic

48) Doors can be replaced withgreen material

- a. Pine Wood
- b. Engineering Wood
- c. Bamboo
- d. None of these

49. Paints can be replaced withgreen material

- a. VOC
- b. Plastic VOC
- c. Plastic Non VOC
- d. None of the above

50.Bricks can be replaced withgreen material

- a. Clay Bricks
- b. Flyash Bricks
- c. Cement Bricks
- d. None of the above

51.Cement can be replaced withgreen material

- a. Pozzalonc Portland Cement
- b. Ordinary Portland Cement
- c. Special Cements
- d. None of the above

52.Green Globes is anCertification Tool

- a. Offline Green Building Rating
- b. Online Green Building Rating
- c. Both (a) & (b)
- d. None of the above

53.Green Globes New construction assessment can be used for

- a. Commercial Buildings
- b. Institutional Buildings
- c. Multi-residential Buildings
- d. All the above

54.Green Globes is structures as a self-assessment to be done in-house using a

- a. Project Manager
- b. Design Team
- c. Both (a) & (b)
- d. Planning Engineer

55.Green Globes is a -----Organization

- a. Profit
- b. Non-Profit
- c. Money saving
- d. None of the above

56.A green building with majority of renewable sources utilization can be called as.....

- a. Sustainable Building
- b. Green Construction
- c. High Performance Building
- d. All the above

57.A green building with 100 % of renewable sources utilization can be called as.....

- a. Sustainable Building
- b. Zero-Energy Building
- c. High Performance Building
- d. All the above

58.High Performance Buildings involves with

- a. Sustainable
- b. Cost Effective
- c. Safe & secure
- d. All the above

59.The key to a high-performance building is.....

- a. Optimization
- b. Integration
- c. Both (a) & (b)
- d. None of the above

60. Rajiv Gandhi International Airport, Hyderabad is rated ascertification

- a. Gold
- b. Platinum
- c. Silver
- d. All the above

61. CII- Sohrabji Godrej Green Business Centre,, Hyderabad is rated as

- a. LEED silver
- b. LEED Gold
- c. LEED Platinum
- d. None of these

62. Site Selection and Planning is concerns mainly on

- a. Soil Erosion
- b. Sedimentation
- c. Both (a) & (b)
- d. None of the above

63. Water reduction and energy consumption can be monitored by

- a. Water Metering
- b. Energy Metering
- c. CO₂ Metering
- d. All the above

64. To minimize the environmental impacts associated with the use of fossil fuel energy

- a. Use of electrical heaters
- b. Use of solar panels
- c. Use of coal
- d. Use of thermal energy

65.-----Type of irrigation is considered as green irrigation

- a. Rotary Irrigation
- b. Trickle Irrigation
- c. Drip Irrigation
- d. All the above

66.Protect or restore habitat can be done by

- a. Limiting all Site disturbances
- b. Walkways & Patios
- c. Both (a) & (b)
- d. None of the above

67.Concrete which allows water in to it is called.....

- a. Conventional Concrete
- b. Fresh Concrete
- c. Hardened Concrete
- d. Pervious Concrete

68.Waste Management can be done by.....methods

- a. Mixing all waste materials
- b. Segregating all waste materials
- c. Both (a) & (b)
- d. None of the above

69.-----materials should be used for green building construction

- a. 50 % of wood
- b. 50 % of metals
- c. 80 % of recycle materials
- d. 100 % of non- renewable source materials

70.IAQ Stands for

- a. Indoor Air Quality
- b. Inside Air Quality
- c. In between Air Quality
- d. Indoor Ambience Quality

71.How is the air quality in your home be Affected

- a. By introducing Non VOC paints
- b. Cigarette Smoke
- c. Bamboo
- d. PPC

72 .Indoor Air quality can be improved by

- a. Ultra Violet Electronic Air Cleaners
- b. HEFA Filtration
- c. Humidifiers
- d. All the above

73.Health effects due to bad Indoor Air Quality

- a. Sinusitis
- b. Memory Lapse
- c. Headaches
- d. All the above

74.**BEE** Stand for

- a. Bureau of Engineering Efficient
- b. Bureau of Energy Efficiency
- c. Bureau of Energy Efficient
- d. Bureau of Energy Ecosystem

75.**NBA** stands for

- a. Nation Building Code
- b. National Building Code
- c. National Body Code
- d. National Building Circular

76.**SRI** Stands for

- a. Solar Reflective Index
- b. Solar Relex Index
- c. Solar Reflective Induction
- d. Solar Reflection Index

77.**CFC** Stands for

- a. Chloro Fluoride Carbons
- b. Chloro Fluoro Carbide
- c. Chloro Fluoro Carbons
- d. Chloro Fluoro Cardondioxide

78.**HVAC** Stands for

- a. Heater, Ventilation and Air-Conditioning
- b. Heating, Volatile and Air-Conditioning
- c. Humidity, Ventilation and Air-Conditioning
- d. Heating, Ventilation and Air-Conditioning

79.**SHGC** Stands for

- a. Solar Humid Gain Coefficient
- b. Simple Humid Gain Coefficient
- c. Simple Heat Gain Coefficient
- d. Solar Heat Gain Coefficient

80.**LPD** Stands for

- a. Lighting Power Duty
- b. Lighting Power Densities
- c. Lighting Powder Densities
- d. Lower Power Densities

81.**CPCB** Stands for

- a. Central polluting Control Board
- b. Central population Control Board
- c. Control polluting Control Board
- d. Central people Control Board

82.**EER** Stands for

- a. Energy Efficient Radiance
- b. Energy Efficient Ratio
- c. Economic Efficient Ratio
- d. Economic Efficient Radiance

83.**VOC** Stands for

- a. Volatile Organism Compound
- b. Volatile Organic Compound
- c. Valuable Organic Compound
- d. Volatile Organic Commence

84.**FSC** Stands for

- a. Forest Stewardship Council
- b. Forest Stewardship Centre
- c. Forensic Stewardship Centre
- d. Forensic Stewardship Council

85.**LEED** Stands for

- a. Leadership in Energy and Environmental Duty
- b. Leadership in Energy and Environmental Design
- c. Leadership in Eco and Environmental Design
- d. Leadership in Eco and Environmental Duty

86.Sustainable Sites comes under which indian ethos

- a. Prithvi (Earth)
- b. Jal (Water)
- c. Agni (Fire)
- d. Vayu (Air)

87.Water Efficiency comes under which indian ethos

- a. Prithvi (Earth)
- b. Jal (Water)
- c. Agni (Fire)
- d. Vayu (Air)

88.Energy & Atmosphere comes under which indian ethos

- a. Prithvi (Earth)
- b. Jal (Water)
- c. Agni (Fire)
- d. Vayu (Air)

89.Indoor Environmental Quality comes under which indian ethos

- a. Prithvi (Earth)
- b. Jal (Water)
- c. Agni (Fire)
- d. Vayu (Air)

90. Day light, Night Sky Pollution comes under which Indian ethos

- a. Prithvi (Earth)
- b. Jal (Water)
- c. Agni (Fire)
- d. Akash (Sky)

91. Flyash Blocks are

- a. Eco-friendly Material
- b. Green Building Materials
- c. Both (a) & (b)
- d. None of the above

92. Green Building Consists of

- a. Waterless Urinals
- b. High CoP Chillers
- c. CO₂ Sensors
- d. All the above

93. Indian Green Building Council Consists of

- a. Engineers
- b. Architects
- c. Financial Planners
- d. Nonprofit Leaders

94. Impacts of Building Construction

- a. Electricity Consumption
- b. Non CO₂ Emissions
- c. Industrial Waste Generation
- d. None of the above

95.Reduced urban heat island effect is a green building.....

- a. Long Term Advantage
- b. Immediate Advantage
- c. Dis-Advantage
- d. None

96.LEED Categories are

- a. Site Planning
- b. Water Efficiency
- c. Energy Efficiency
- d. All the above

97.Normal LEED Certification is points are

- a. 40 %
- b. 50%
- c. 60%
- d. 80%

98.Silver LEED Certification is points are

- a. 40 %
- b. 50%
- c. 60%
- d. 80%

99 .Gold LEED Certification is points are

- a. 40 %
- b. 50%
- c. 60%
- d. 80%

100. Platinum LEED Certification is points are

- a. 40 %
- b. 50%
- c. 60%
- d. 80%

101. IEQ Refers to.....

- a. Quality
- b. Quantity
- c. Qualification
- d. Questioning

102. Indoor Air Quality involves with

- a. Odors
- b. Fresh Air
- c. Supply of Air
- d. All the above

103. Goals of IEQ

- a. Minimize the Risk of health of problem
- b. High quality indoor
- c. Both (a) & (b)
- d. None of the above

104.**SBS** Stands for

- a. Sick Building Sundrome
- b. Sick Built Sundrome
- c. Sick Building Syndrome
- d. Sick Building Sunshine

105.**SBS** Symptoms are.....

- a. Dry eyes
- b. Dry throat
- c. Dry Skin
- d. All the above

106.**PSV** Stands for.....

- a. Passive Stack Ventilator
- b. Passive Strong Ventilation
- c. Passive Stack Ventilation
- d. Password Stack Ventilation

107.**MEV** Stands for.....

- a. Mechanical Extract Ventilator
- b. Mechanical Extract Ventilation
- c. Machined Extract Ventilation
- d. Mechanical Extreme Ventilation

108.**PIV** Stands for.....

- a. Positive indoor Ventilation
- b. Positive input Ventilator
- c. Positive input Ventilation

- d. Passive input Ventilation

109.**MVHR** Stands for.....

- a. Mechanical Ventilation Heat Record
- b. Mechanical Ventilator Heat Recovery
- c. Mechanical Ventilation Hot Recovery
- d. Mechanical Ventilation Heat Recovery

110.**HRV** Stands for.....

- a. Heat Recovery Ventilator
- b. Heat Record Ventilation
- c. Heat Recovery Ventilation
- d. Hot Recovery Ventilation

111.A green building with majority of renewable sources utilization can be called as....

- a. Sustainable Building
- b. Green Construction
- c. High Performance Building
- d. All the above

112.Renewable Source of Energy is

- a. Mars
- b. Jupiter
- c. Moon
- d. Sun

113.Non- Renewable Sources of Energy

- a. Sun
- b. Fossil Fuels
- c. Water

- d. Tides

114.Green Building also known as

- a. Green Construction
- b. Sustainable Building
- c. Both (a) & (B)
- d. Conventional Building

115.Green House Effect is mainly due to increase of

- a. CO
- b. CO₂
- c. CFC
- d. All the above

116.-----produced as waste decomposes may cause pollution

- a. cosmosis
- b. Leeder
- c. Leachate
- d. Voltaic

117.**SRI** Stands for

- a. Solar Reflective Index
- b. Solar Relex Index
- c. Solar Reflective Induction
- d. Solar Reflection Index

118.The major gas that emits by the industry is.....

- a. CO
- b. CO₂
- c. CFC

- d. All the above

119.Green Building also known as

- a. Green Construction
- b. Sustainable Building
- c. Both (a) & (B)
- d. Conventional Building

120.**WGBC** Stands for.....

- a. World Gas Building Council
- b. Wool Green Building Council
- c. World Garden Building Council
- d. World Green Building Council

121.Improve Quality of life comes under which benefit of green buildings

- a. Environmental
- b. Economic
- c. Social
- d. None of these

122.Green Building Emphasies on

- a. Reduced Energy Use
- b. Reduced Waste
- c. Both (a) & (b)
- d. None of the above

123.Green Building can be accomplished when certain requirements are fulfilled

- a. Reuse
- b. Reduce
- c. Recycle

- d. All the above

124. **USGBC** Stands for

- a. United States of Green Building Council
- b. United States of Gas Building Council
- c. United States of Go Building Council
- d. United States of Green Building Counter

125. Concrete which allows water in to it is called.....

- a. Conventional Concrete
- b. Fresh Concrete
- c. Hardened Concrete
- d. Pervious Concrete

Signature of the faculty

HoD,ME

Malla Reddy Engineering College
DEPARTMENT OF MECHANICAL ENGINEERING
Question Bank with BT Level and CO

IV B.TECH II SEM (MR15)
I Mid Examination Subjective Question Bank

Subject: PLANT LAYOUT & MATERIAL HANDLING

Branch: ME

Instructions:

1. All the questions carry equal marks

2. Answer all the questions

Name of the faculty: Mr.C.Chandra Sekhara

| Q.No. | Question | Bloom's Taxonomy Level | CO |
|--------------|--|-------------------------------|-----------|
| 1. | Explain briefly about different types of layouts. | Understanding | 1 |
| OR | | | |
| 2. | Explain about the advantages and disadvantages of process layout. | Understanding | 1 |
| | | | |
| | | | |
| 3. | List various factors that influencing the plant layout?. | Analyzing | 1 |
| OR | | | |
| 4. | List the objectives of a good layout. | Analyzing | |
| | | | |
| | | | |
| 5. | Explain about the advantages and disadvantages of product layout. | Understanding | 1 |
| OR | | | |
| 6. | Explain about specification, installation and follow up of a layout? | Understanding | 1 |
| | | | |
| | | | |
| 7. | What are the steps to be followed in designing a layout? | Understanding | 1 |

| | | | |
|--------------------------|---|---------------|---|
| OR | | | |
| 8. | Explain about principles of plant layout, | Understanding | 1 |
| <u>Module II</u> | | | |
| 1. | Discuss the steps to be followed in CRAFT algorithm? | Creating | 2 |
| OR | | | |
| 2. | Discuss the steps to be followed in ALDEP algorithm? | Creating | 2 |
| | | | |
| 3. | Illustrate the advantages and disadvantages of CRAFT | Understanding | 2 |
| OR | | | |
| 4. | Illustrate the advantages and disadvantages of ALDEP. | Understanding | 2 |
| | | | |
| 5. | Explain the steps to be followed in CORELAP algorithm | Understanding | 2 |
| OR | | | |
| 6. | Explain the methods employed for development of Group technology layout. | Understanding | 2 |
| | | | |
| 7. | Compare the fixed position layout and group layout | Understanding | 2 |
| OR | | | |
| 8. | Explain about the fixed position layout. What are the advantages and disadvantages of fixed position layout | Understanding | 2 |
| <u>Module III</u> | | | |
| 1. | Define material handling. What are the functions of material handling | Understanding | 3 |
| OR | | | |
| 2. | List out the objectives of the material handling | Understanding | 3 |
| | | | |
| 3. | Briefly classify the various types of material handling equipment in detail | Understanding | 3 |
| OR | | | |

| | | | |
|----|--|---------------|---|
| 4. | What are the merits of material handling systems | Understanding | 3 |
|----|--|---------------|---|

Signature of the faculty

HoD,ME

- c Flow
- d job
- 6 ____ is also known as Buffer stock []
- a Control s stock
- b Conversion s stock
- c Safety stock
- d All the above
- 7 A strategy which aims to produce a perfect product which will suit every body is called: []
- a Marketing orientation...
- b Production orientation
- c Product orientation
- d Perfection orientation
- 8 A strategy which aims to produce the maximum amount of goods at the lowest possible price is called: []
- a Production orientation.
- b Selling orientation
- c Societal marketing
- d Cost orientation.
- 9 ____ is associated with high cycle time []
- a Fixed position layout
- b Product layout
- c Process layout
- d Group Technology layout
- 10 The layout used in ship building industry is _____ []
- a Fixed position layout
- b Product layout
- c Process layout
- d Group Technology layout
- 11 The marketing concept should be central to business strategy because[]

- a Business strategy is aimed at customers.
 - b Companies have a moral responsibility to care for their customers.
 - c Marketing enables firms to persuade their customers to buy things they do not really need.
 - d Customers will only spend money with firms that look after their needs.
- 12 The important ratings in SLP is expressed with _____ []
- a Nearness codes
 - b Reason codes
 - c Relaxation codes
 - d Matrix codes
- 13 Volume of production in process layout _____ []
- a Large
 - b Relatively low
 - c Moderate
 - d Very large
- 14 Costs associated with the storage requirements of inventories are usually referred to as _____ []
- a Storage cost
 - b Production cost
 - c Running cost
 - d All the above
- 15 Paper mill is an example of []
- a Fixed position layout
 - b Product layout
 - c Process layout
 - d Group Technology layout
- 16 Duties of HR manager and staff functions consist of []
- a Assistant line manager
 - b Implementing policies
 - c Directing tasks of people
 - d All of the above

- 17 Human Resource Management is process of[]
- a Acquiring employees
 - b Training employees
 - c Appraising and compensating employees
 - d All of the above
- 18 Use of data, facts, analytics and evaluated research for making decision is []
- a Evidence based HRM
 - b High performance work system
 - c Both A and B
 - d None of the above
- 19 Process layout initiates supply of raw materials to a machine based on _____[]
- a Priority
 - b Convenience
 - c Nature
 - d Need
- 20 Planning function of management process involves[]
- a Developing employees
 - b Evaluating performance
 - c Establishing departments
 - d Establishing goals
- 21 The following is (are) the key components of a business process Re-engineering program me?[]
- a Product development
 - b Service delivery
 - c Customer satisfaction
 - d All of the above
- 22 The actual achievements compared with the objectives of the job is[]
- a Job performance
 - b Job evaluation

- c Job description
 - d None of the above
- 23 The following is (are) concerned with developing a pool of candidates in line with the human resources plan[]
- a Development
 - b Training
 - c Recruitment
 - d All of the above
- 24 Majority of the disputes in industries is (are) related to the problem of[]
- a Wages
 - b Salaries
 - c Benefits
 - d All of the above
- 25 In an organization initiating career planning, the career path model would essentially form the basis for[]
- a Placement
 - b Transfer
 - c Rotation
 - d All of the above
- 26 Duties of HR manager and staff functions consist of[]
- a Assistant line manager
 - b Implementing policies
 - c Directing tasks of people
 - d All of the above
- 27 Examples of flow production system are[]
- a Chemical
 - b Petrol
 - c Automobile
 - d All the above

- 28 Low skilled labors are required in []
- a Continuous production
 - b Job production
 - c Mass production
 - d None of these
- 29 _____ is used to represent the physical arrangement of a plant[]
- a Plant layout
 - b Production Layout
 - c Group Plant layout
 - d None of these
- 30 Arrangement of machines according to nature of operation sis called []
- a Plant layout
 - b Production Layout
 - c Process layout
 - d None of these
- 31 Break down of equipment can be easily handling in[]
- a Plant layout
 - b Production Layout
 - c Process layout
 - d None of these
- 32 One way to decouple the production system and the sales system is[]
- a To introduce a feedback loop
 - b To treat the systems as black boxes
 - c To decrease sales
 - d To introduce an inventory
- 33 Which of the following best describes 'formal information'[]
- a Produced by standard procedures. Passed by word of mouth
 - b Produced by standard procedures. Objective
 - c Objective. Passed by word of mouth

- d Subjective. Based on estimates
- 34 Long-term capacity planning deals with which of the following factors?[]
- a Overtime budgets
 - b Workforce size
 - c Inventories
 - d Investment in new facilities
- 35 The first steps of capacity planning and control do not include[]
- a Identifying the alternative capacity plans
 - b Measuring aggregate demand and capacity
 - c Studying the effect of queuing theory
 - d Choosing the most appropriate capacity plan
- 36 When demand exceeds capacity, a firm should[]
- a Lower prices.
 - b Add workers
 - c Temporarily lay-off workers
 - d Advertise.
- 37 Long-term capacity planning deals with which of the following factor[]
- a Overtime budgets
 - b Workforce size
 - c Inventories
 - d Investment in new facilities
- 38 The _____ program me once installed must be continued on a permanent basis.[]
- a Job evaluation
 - b Training & Development
 - c Recruitment
 - d All of the above
- 39 The following person has suggested the new concept which takes into account various key factors that will tell the overall performance of a job.[]
- a Elliot Jecques

- b Fred Luthas
- c Juran
- d None of the above

40 _____ is concerned with the branch of economics relating the behavior of principals and their agents. []

- a Financial management
- b Profit maximization
- c Agency theory
- d Social responsibility

41 _____ establishes the overall production, workforce, and inventory levels[]

- a Production activity control
- b Distribution requirements planning
- c Master production schedule
- d Sale and operations planning

42 Managers can use work standards in which of the following ways []

- a Scheduling
- b Motivating workers
- c Capacity planning
- d All of the above

43 Mark the wrong statement:[]

- a A project is a set of activities that can be performed in a certain logical sequence.
- b A network is a graphic portrayal of independency relationship among the activities of a project.
- c An arrow representing an activity can have any length and shape.
- d An activity cannot be represented by more than one arrow but an arrow can represent one or more activities.

44 Use of data, facts, analytics and evaluated research for making decision is []

- a Evidence based HRM
- b High performance work system
- c Both A and B

- d None of the above
- 45 HR manager must be familiar with []
- a Strategic planning
- b Production department
- c Marketing and finance
- d All of the above
- 46 Planning function of management process involves []
- a Developing employees
- b Evaluating performance
- c Establishing departments
- d Establishing goals
- 47 The following is (are) the key components of a business process Re-engineering program me?[]
- a Product development
- b Service delivery
- c Customer satisfaction
- d All of the above
- 48 CMM ranks software development organization in a hierarchy of []
- a Four levels
- b Three levels
- c Six levels
- d Five levels
- 49 The work measurement method that eliminates the need for time studies is: []
- a The predetermined data approach
- b The work sampling method
- c The elemental standard data approach
- d The time study method
- 50 The work measurement method that is not usually used for setting standards for repetitive, well-defined jobs is: []
- a The elemental standard data approach

- b The predetermined data approach
 - c The time study method
 - d The work sampling method
- 51 Which layout helps in producing products having different parts []
- a Process
 - b Group
 - c Cellular
 - d All
- 52 In which layout the production of a product is independent of its capacity []
- a Process
 - b Group
 - c Cellular
 - d Fixed
- 53 What type of technology is used to increase the rate of production[]
- a Group
 - b Point
 - c Line
 - d Fixed
- 54 Fixed position layout is used for the producing which products []
- a Same
 - b Different
 - c Both
 - d None
- 55 Check for the total cost of new layout is less than the cost of present layout []
- a TRUE
 - b FALSE
 - c NONE
 - d TRUE ONLY FOR FEW CASES
- 56 Group layout is best for[]

- a Aircraft industry
 - b Automobile industry
 - c Ship building
 - d Casting industry
- 57 Determine the total handling cost of present layout by using flow parameters []
- a Cost
 - b Distance
 - c Cost and distance
 - d All
- 58 The first improvement algorithm which is most widely used in plant layout design []
- a Process
 - b Fixed
 - c Point
 - d Craft
- 59 Plant layout is mainly influenced by the availability of []
- a Economical
 - b Materials
 - c Tools
 - d All
- 60 The engineering department is responsible for ----- layout []
- a Designing and installing
 - b Cost
 - c Process
 - d Fixed
- 61 Space available in vertical & horizontal directions is most effectively utilized” is[]
- a Cubic space utilization

- b Flexibility
- c Flow
- d Minimum distance

62 **If all the processing equipment and machines are arranged according to the sequence of operations of a product the layout is known as []**

- a Product layout
- b Process layout
- c Fixed position layout
- d Combination layout

63 **The following is preferred to manufacture a standard product in large quantity []**

- a Product layout
- b Process layout
- c Fixed position layout
- d Combination layout

64 **The following is preferred for low volume production of non-standard products[]**

- a Product layout
- b Process layout
- c Fixed position layout
- d Combination layout

65 **In ship manufacturing, the type of layout preferred is[]**

- a Product layout
- b Process layout
- c Fixed position layout
- d Combination layout

66 **The chart is a graphic representation of all the production activities occurring on the shop floor[]**

- a Operation process chart
- b Flow process chart
- c Templates

d All of the above

67 Which of the following processes most likely uses batch production? []

a Sugar refinery

b Plastic part manufacturer

c Consumer electronics

d Oil refinery

68 Which of the following most likely uses mass assembly lines production? []

a Commercial printer

b Plastic part manufacturer

c Car production

d Sugar refinery

69 All of the following will increase the capacity of process except: []

a The purchase of additional equipment

b Scheduled machine maintenance

c Larger production lot sizes

d Increasing the backlog before each machine

70 which of the following layouts is suited for mass production? []

a Process layout

b Product layout

c Fixed position layout

d Functional layout

71 In which of the following layouts, the lines need to be balanced? []

a Process layout

b Product layout

c Fixed position layout

d Functional layout

72 Process layout is employed for []

a Batch production

b Continuous type of production

- c Effective utilization of machines
 - d All of the above
- 73 For a product layout, the material handling equipment must[]
- a Have full flexibility
 - b Be general purpose type
 - c Be designed as special purpose for a particular application
 - d Employ conveyor belts, trucks
- 74 The process layout is best suited where []
- a Specialization exists
 - b Machines are in sequence of operation
 - c Non-standardized units are to be produced
 - d Mass production is envisaged
- 75 The most important objective behind plant layout is[]
- a Overall simplification & ease in integration
 - b Economy in machines
 - c Maximum travel time in plant
 - d Minimum work-in-progress
- 76 A low unit cost can be achieved by following []
- a Process layout
 - b Product layout
 - c Fixed position layout
 - d Functional layout
- 77 In the corelap layout, which type of computer are use []
- a Main frame
 - b Sub frame
 - c Wide frame
 - d Intuitive frame
- 78 Corelap belongs to _____ method []
- a Influential based

b Adjacency based

c Fixed based

d Floating based

79 The corelap layout is depending upon which factor []

a Randomness

b Closeness

c Total closeness

d Linear

80 The aldep layout is depending upon which factor []

a Randomness

b Closeness

c Total closeness

d Linear

81 The aldep layout having the capacity of []

a Single floor

b Multi floor

c Indefinite number

d None

82 In the aldep layout, the pattern will be []

a Horizontal

b Vertical sweep

c Inclined

d Not applicable

83 The aldep layout can be repeated upto[]

a 10 layout/run

b 20 layout/run

c 30 layout/run

- d None
- 84 In quadratic assignment model, the objective is []
- a Matrices definition
- b Matrix differentiation
- c Integration
- d None of the above
- 85 The basic of craft algorithm is []
- a Minimize total cost
- b Maximize total cost
- c Break even
- d Both a & b
- 86 Craft algorithm takes inputs with the representation of []
- a Chart diagram
- b Block layout
- c Pie diagram
- d Scatter plot
- 87 Craft begins by determining []
- a Semi-circle
- b Centroid
- c Ellipse
- d Hyperbola
- 88 The final layout obtained in craft is known as []
- a Two optional layout
- b Three optional layout
- c Both
- d None
- 89 Craft is efficient in terms of []
- a Cpu engagement
- b Arithmetical model

- c Mathematical model
 - d None
- 90 The quadratic assignment model is a generalization of []
- a Tsp problem
 - b Scheduling problem
 - c Routing
 - d All of the above
- 91 Quadratic assignment problem is limited to []
- a Small problems
 - b Huge problems
 - c Optimized problems
 - d All of the above
- 92 Quadratic Assignment Problem is _____ stage[]
- a Fundamental
 - b Last stage
 - c Middle of the problem
 - d None of the above
- 93 Quadratic Assignment Problem restricts number of solutions []
- a Unfeasible
 - b Feasible
 - c Determinant
 - d All of the above
- 94 Branch and bound method is applicable for []
- a Hard problems
 - b False noise analysis
 - c Non-linear programming
 - d All of the above
- 95 Branch and bound algorithm depends upon efficient estimation of []
- a Lower bounds

- b Upper bounds
 - c Lower and upper
 - d None
- 96 Branch and bound algorithm is similar to []
- a Back tracking method
 - b Craft algorithm
 - c Aldep
 - d Craft
- 97 The difficulty of designing branch and bound algorithm is finding []
- a Bounding function
 - b Routing function
 - c Both
 - d None
- 98 Branch and bound method is applicable for []
- a Only integer programming problems
 - b Only linear programming problems
 - c Different number of problems
 - d None
- 99 Branch and bounding used for solving the problems []
- a Quickly
 - b Accurately
 - c Both
 - d None
- 100 Group layout defines []
- a Sequential groups
 - b Parallel groups
 - c Both
 - d None
- 101 Which of the following industries is likely to have low equipment utilization? []

- a Auto manufacturing
- b Beer making
- c Television manufacturing
- d Hospitals

102 ----- conveyors can be used in the same applications of roller conveyors[]

- a Belt
- b Chain
- c Skate wheel
- d None

103 Which of the following belt conveyors have low volume carrying capacity? []

- a Flat
- b Troughed
- c Both
- d None of the above

104 Which of the following is not a hoisting equipment with lifting gear? []

- a Cage
- b Jib
- c Pulleys
- d Troughed belts

105 Which discharge method provides only intermediate discharge for low speed flat belt conveyor?
[]

- a Plow discharge
- b Tripper discharge
- c Both and B.
- d None of the above

106 Which one of the following technologies is used only for material handling, not for actual production or assembly? []

- a Robots
- b CNC
- c CAD

d AGVs

107 Which type of conveyor equipment consists of wheeled carriage fixed with the trolleys []

a Belt conveyor

b Rope

c Free overhead

d None

108 Operator-carrying overhead cranes must be provided with []

a Automatic switch to halt up-travel.

b Audible warning signal w/in reach of operator.

c Means to lock out disconnect switch

d All of the above .

109 Dropping materials from overhead can be done only when []

a Drop area is clear

b Area guarded or suitable warning is given

c Both A and B

d None of the above.

110 A drawing of the movement of material, or people is a []

a Flow diagram

b process chart

c service blueprint

d process map

111 A helps to avoid crowding of jobs at a particular machine by change of route of some of the jobs or by diverting work to other machine. []

a Control chart

b Beer making

c Television manufacturing

d Hospitals

112 Roller conveyors contain a series of _____ []

- a Tubes
- b Rollers
- c Rollers and tubes
- d None of these

113 A compact estimate of the handling which must be done between various work stations is obtained from []

- a TRVELING CHART
- b CNC
- c CAD
- d AGVs

114 The position of rollers is ----- to the direction of motion of conveyor []

- a Parallel
- b Perpendicular
- c Inclined
- d None

115 What are bulk loads? []

- a Lump of material
- b Single rigid mass
- c Homogeneous particles
- d Heterogeneous particles

116 Equipment used for dumping of material is known as []

- a Scraper
- b Dumper
- c Crane
- d Conveyer

117 Which of the following statements is false for troughed belt conveyors?

1. Troughed belt conveyors use flexible belts
2. They contain five idlers
3. Depth of trough decreases with increasing number of idlers
4. Flexibility of belt increases as depth of trough decreases

[]

- a 1 and 2

- b 2 and 3
- c 3 and 4
- d None of the above

118 Material handling and plant location is analyzed by []

- a Gnat chart
- b Bin chart
- c Emerson chart
- d Travel chart

119 In witch of the following layouts the lines need to the balanced []

- a Process layout
- b product layout
- c fixed position layout
- d plant layout

120 Which belt conveyor prevents sliding down of material at an inclination of 55o with horizontal?
[]

- a Flat belt conveyor
- b Troughed belt conveyor
- c Blanket belt conveyor
- d Woven wire belt conveyors

121 Mass capacity of a conveyor is 200 ton/hr, if speed of the belt is 4 m/s then what is the width of horizontal flat belt conveyor carrying the load? (Surcharge factor = 0.075 & $\rho = 1000 \text{ kg/m}^3$)
[]

- a 499.23 mm
- b 500.0 mm
- c 533.7 mm
- d Insufficient data

122 Witch of the following layout is suited to mass production []

- a Process layout
- b Product layout
- c Fixed position layout

d Plant layout

123 Which of the following layout is suited to job production []

a Process layout

b Product layout

c Fixed position layout

d Plant layout

124 Queuing theory is used for []

a Inventory problems

b Traffic congestion studies

c Job shop scheduling

d All of the above

125 Queuing theory is associated with []

a Sales

b Inspection time

c Waiting time

d Production time

Signature of the faculty

HoD,ME