**Faculty of Engineering First Year Mechanical**

**Mai khatter**

**Subject: English Date: 3/1/ 2019**

**Final Exam Time: 2 hours**

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**Decide whether the following statements are A. True or B. False:**

1- A successful researcher has to refuse any unexpected occurrences

2- Present day scientist who works for research organizations has to conform to a predetermined program.

3- The number '158' has three digits.

4- Private industry and government departments tend to concentrate on pure research in a university.

5- There is currently a lot of interest in tidal power on the part of governments and business.

6- The results of research into radioactivity are applied in cancer treatment.

**Match the words to the appropriate equivalent:**

7- Pure science 8- Applied science 9- Hypothesis 10- Digit

A. Technology B. Basic research C. A single numeral D. Model

**Complete the sentences using words from the box below:**

|  |
| --- |
| A. statement B. adjustment C. measurement D. establishment |

11- The accurate -------------- of quantities is very important in science.

12- Scientific instruments and machines frequently need -------------- before they are used.

13- Experimental methods often lead to the ------------ of working principles or laws.

14- A good scientist is highly critical of his own ------------.

**Use the appropriate connective in the suitable place to complete the extract below:**

|  |
| --- |
| A. moreover B. too C. inasmuch as D. as well as |

Another way of approaching the problem is to increase the food supplies available. This, ---(15)---, can be done through the scientific methods we have at our disposal now, e.g. by raising the yield of crops and animals. This is possible by the introduction of genetically improved varieties and by the use of fertilizers and weed-killers, ---(16)--- by the extension of more scientific methods of cultivation. ---(17)---, these measures are more likely to be put into immediate operation ---(18)--- they do not usually involve interference with existing religious or social patterns.

**Match the terms in the first column with the correct definition in the second:**

|  |  |
| --- | --- |
| 19- Notation20- Power plants21- Transistor22- Tides | A. Industrial facilities for the generation of electricity.B. The regular upward and downward movement of the level of the ocean.C. A system of signs to represent numbers, etc.D. A small electronic device, often used in radios, etc. instead of the older valve. |

**Choose the correct answer:**

23- In his experiment, Oersted made the needle of the magnet deviate to the opposite direction to that of its original deflection by ------------------------------------------------.

A. holding the wire horizontally and parallel to the needle B. moving the wire above the needle

C. moving the wire underneath the needle D. reversing the current

24- Pathogenes are ------------------------------.

A. useful bacteria B. contaminated bacteria C. disease-causing bacteria D. penicillium colonies

25- A spectroscope is an instrument used to -----------------------------------.

A. observe celestial bodies B. make distant objects appear magnified

C. see objects that are too small to see by the naked eye

D. analyze the gas given off by a certain mineral when treated with acid

26- It is difficult nowadays for the individual scientist to make significant contributions to science because it is impossible for the individual scientist to -------------------.

A. have access to previous researches and theories B. carry out research accurately and efficiently

C. deal with the huge mass of new data, techniques and equipment D. own a private laboratory

27- At the beginning of the century, laboratories were -----------------------.

A. run by a large number of scientists B. supplied with highly complicated equipment

C. directed by industrial research organizations D. set in unsuitable rooms with inadequate equipment

28- Money plays a ------------------ role in directed research.

A. trivial B. crucial C. marginal D. temporary

29- The technology of tidal power is essentially the same as that for river hydroelectric power except for one major difference, which is ----------------------------------.

A. rivers dry out but tides do not B. rivers flow in only one direction

C. tidal plant use salt water D. tidal plants will not have to store electricity

30- The vertical distance between high and low tide is called -------------------------.

A. tidal range B. crucial basin C. turbine limitation D. straight measure

31- The children who lived on the coast preferred the quieter waters of the estuaries to the wild waves of the sea. The underlined word is closest in meaning to:

A. fruit trees that grow along the coast. B. broad sections of the open ocean

C. arms or inlets of the sea that extend inland D. man-made lagoons along the cost

32- In the system of notation, numbers which are less than unity "one" are expressed in columns -----------.

A. to the right of the digit 1 B. to the left of the digit 1

C. to the right of a decimal point D. to the left of a decimal point

33- When the machine may be continuously in use for years, a pointer on a scale is not a very satisfactory method of indicating different numbers because --------------------.

A. components deteriorate as valves and transistors change with age

B. the pointer on a scale can show any number which may be 0 to 9 or higher

C. the pointer on a scale is either "on" or "off" with no other alternative indication

D. only one digit is visible at a time on the scale

34- The ------------- system uses ten as its base.

A. duodenary B. denary C. binary D. ternary

35- Many branches of applied research developed out of -----------------.

A. the work of technologists B. pieces of basic research

C. equations describing the behavior of fundamental particles D. new processes

36- New kinds of instruments are frequently essential for -----------------.

A. developing basic research B. improving fertilizers in agriculture

C. describing the life cycles of insects D. finding the cube root of fractions

37- Investigating the strength and uses of materials is an example of ------------------.

A. the principles of pure science B. the interaction of basic and applied research

C. technology D. a theoretical model

38- Theories -------------- the nature of the universe are constantly revised by scientists.

A. are described B. described C. are describing D. describing

39- I ------------ forget to take my key with me. There will be nobody at home when I come back.

A. have to B. don't have to C. ought to D. mustn't

40- When an integrated organism or system breaks down or is split up into its separate parts, it is said to ----.

A. disintegrate B. dislike C. disprove D. disagree

41- A scientist must ------------ adequate evidence to validate a hypothesis.

A. obtain B. design C. modify D. develop

42- Thank you --------------- me carry the packaged to the post office.

A. to help B. by helping C. for helping D. of helping

43- That government department plans to make its laboratories larger. The correct verb form of the underlined words is ---------------.

A. lager B. enlarge C. enlarged D. large

44- The class trip to the art museum is optional. You ------------ go, but you might enjoy it.

A. should B. had better C. don't have to D. mustn't

45- If an experiment is not successful, we must ------------- it.

A. conduct B. perform C. prove D. repeat

46- Everyone in the neighborhood participated ----------- searching for the lost child.

A. on B. in C. for D. about

47- A theory of air pressure -------------- forward over 300 years ago.

A. puts B. is put C. was put D. had put

48- The gas tank is almost empty. We -------------- stop at the next service station. There no other service station in the next 100 miles.

A. don't have to B. had better C. had better to D. mustn't

49- The research scientist often comes across problems ----------- new types of instrument for their solution.

A. require B. required C. are requiring D. requiring

50- Mary sold her car. Now she can't take trips to see her friends and relatives. She ---------------- it.

A. shouldn't have sold B. should have sold C. ought not to sell D. shouldn't sell

51- We shall have to go to Italy. There is no ---------------; we can't go anywhere else.

A. alternative B. decision C. objective D. possibility

52-Engineers in many parts of the world are engaged in ---------------- machines capable of exerting extreme pressure on materials.

A. develop B. developed C. developing D. the development

53- Mathematics --------------- in all branches of science.

A. are used B. is used C. use D. uses

54- The weather will get better soon. We can leave as soon as it quits --------------.

A. rained B. raining C. to rain D. for raining

55- You're coughing and sneezing, blowing your nose, and running a fever. You ------------- feel terrible.

A. may B. could C. must D. might

56- An experiment must be carefully controlled if we want it to ------------ a theory properly.

A. conduct B. obtain C. design D. prove

57- -------------- correct measurements, it is necessary to use accurately adjusted instruments.

A. To take B. To taking C. Take D. Took

58- *Ann*: What kind of watch is Tom wearing? *Mary*: I don't know. It ----------- a Rolex.

A. may be B. could C. is D. must be

59- I found out what "quench" means ---------------- it up in the dictionary.

A. from looking B. to look C. by looking D. in looking

60- Atmospheric pressure varies considerably, but these ----------- can be recorded by means of a graph.

A. emissions B. fluctuations C. implications D. associations

**Good Luck**

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**------------------------------------------------------------------------------------------------------------------------**

**Decide whether the following statements are A. True or B. False:**

1- B. False

2- A. True

3- A. True

4- B. False

5- A. True

6- A. True

**Match the words to the appropriate equivalent:**

7- B. Basic research 8- A. Technology 9- D. Model 10- C. A single numeral

**Complete the sentences using words from the box below:**

11- C. measurement

12- B. adjustment

13- D. establishment

14- A. statement

**Use the appropriate connective in the suitable place to complete the extract below:**

15- B. too

16- D. as well as

17- A. moreover

18- C. in so far as

**Match the terms in the first column with the correct definition in the second:**

19- C.

20- A.

21- D.

22- B.

**Choose the correct answer:**

23- D. reversing the current

24- C. disease-causing bacteria

25- D. analyze the gas given off by a certain mineral when treated with acid

26- C. deal with the huge mass of new data, techniques and equipment

27- D. set in unsuitable rooms with inadequate equipment

28- B. crucial

29- B. rivers flow in only one direction

30- A. tidal range

31- C. arms or inlets of the sea that extend inland

32- C. to the right of a decimal point

33- A. components deteriorate as valves and transistors change with age

34- B. denary

35- B. pieces of basic research

36- A. developing basic research

37- C. technology

38- D. describing

39- D. mustn't

40- A. disintegrate

41- A. obtain

42- C. for helping

43- B. enlarge

44- C. don't have to

45- D. repeat

46- B. in

47- C. was put

48- B. had better

49- D. requiring

50- A. shouldn't have sold

51- A. alternative

52-C. developing

53- B. is used

54- B. raining

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