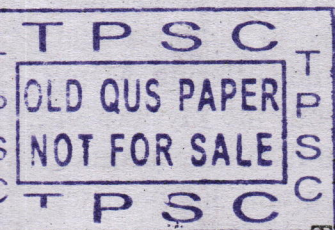Total No. of printed pages = 20

TR/SIP/P-I(One)/19

PAPER – I

Full Marks – 100

Time – Three hours

The figures in the margin indicate full marks
for the questions.

This question paper is divided into 2 (two) sections
i.e. Section-I and Section-II. Section-I contains
Comprehension and English Grammar and questions
under this section are of Conventional type. Section-
II contains 60 marks and questions under this section
are of objective type.

2 (two) Answer books will be supplied to each
candidate for writing answers of Section-I and
Section-II. Candidates will have to answer both the
sections in the Answer books in English only.

SECTION – I

1. Read carefully the passage given below and write
    your answers to the questions that follow in clear,
    correct and concise language.   5×4=20

    It is no doubt true that we can not go through
    life without sorrow. There can be no sunshine

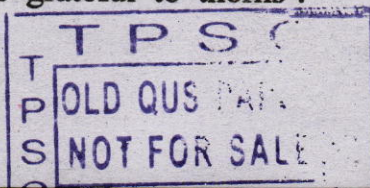[Turn over

without a shade. We must not complain that roses have thorns, but rather be grateful that thorns bear flowers. Our existence here is so complex that we must expect much sorrow and suffering. Many people torment themselves about the mystery of existence. But although a good man may at times be angry with the world, it is certain that no man, who did his duty in it, was ever discontented with the world. The world is like a looking glass, if you smile, it smiles, if you frown, it frowns back. If you look at it through a red glass, all seems red and rosy; if through a blue, all blue, if through a smoked one, all dull and dingy. Always try then to look at the bright side of things; almost everything in the world has a bright side. There are some persons, whose smile, the sound of whose voice, whose very presence is like a ray of sunshine and brightens the whole room. Great everybody with a bright smile, kind words and pleasant welcome. It is not enough to love those who are near and dear to us. We must show that we do so. While, however, we should be grateful and enjoy to the full the innumerable blessings of life, we cannot expect to have no sorrow or anxieties. Life has been described as a comedy to those who think, and a tragedy to those who feel. It is indeed tragedy, at times, and a comedy very often, but it is as a rule what we choose to make it.
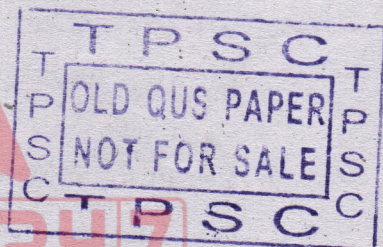
(a) Why should man be grateful to thorns?

(b) What brings forth the complexity of human existence ?

(c) Why is the world a looking glass ?

(d) Who find life a tragedy ?

(e) What does the writer plead for ?

2. Use the following **idioms and phrasal verbs** in sentences so as to bring out their meaning clearly :   1×5=5

(a) A maiden speech

(b) Bag and baggage

(c) Give up

(d) In black and white

(e) Fair and square.

3. Write the **antonyms** of the following :   1×3=3

(a) Mislead   (b) Impulsive

(c) Rambling.

4. Write the **synonyms** of the following :   1×2=2

(a) Barbarous   (b) Diligent

5. Fill up the blanks with appropriate articles : 1×3=3

(a) He went without —— umbrella.

(b) She took —— dozen of apples.

(c) Krishna got —— best award.

6. Fill up the blanks with appropriate prepositions :   1×2=2

   (a) Depth is preferable —— digress.

   (b) Jaya has no special liking —— mathematics.

7. Correct the following sentences without changing their meaning. Do not make necessary changes in the original sentence.   1×5=5

   (a) He has suffered from fever since four days.

   (b) The patient died from fever.

   (c) Rajkapoor is elder to his neighbour by three years.

   (d) From now we will meet in the evenings.

   (e) They discussed about the matter.

SECTION – II

Four options are given against each of the following questions (Q. No. 1 to 60). Each question carries 1 (one) mark only. Select the best/correct option from among the four options and write it in the answer sheet. One example is given below :

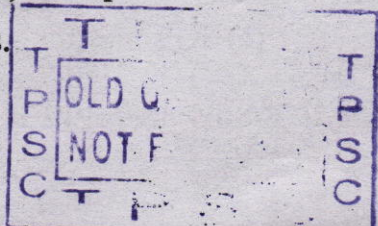**Example** : The wheel in our National Flag has

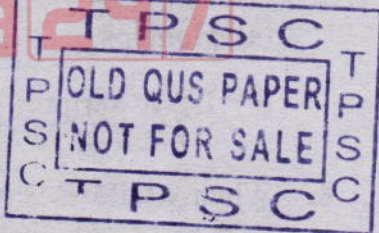   (a) 20 spokes   (b) 24 spokes

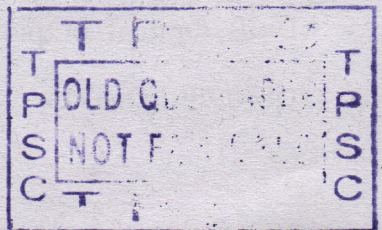   (c) 30 spokes   (d) 25 spokes.

Answer : (b) 24 spokes.

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C

SECTION – A
(Q. No. 1 to 20)

1. The term 'Computer' is derived from

   (a) Latin   (b) German

   (c) French   (d) Arabic

2. Who is the father of personal computer ?

   (a) Edward Robert   (b) Allen Turing

   (c) Charles Babbage   (d) Simur Cray

3. The first computers were programmed using

   (a) Assembly language

   (b) Machine language

   (c) Source code

   (d) Object code

4. What is a light pen ?

   (a) A mechanical input device

   (b) Optical input device

   (c) Electronic input device

   (d) Optical output device

5. Junk e-mail is also called

(a) spam   (b) spoof

(c) sniffer script   (d) spool

6. Which of the following is true about Hackers?

(a) are people who are allergic to computers.

(b) break into other people's computers

(c) may legally break into computers as long as they do not do any damage

(d) None of these

7. First page of Website is termed as

(a) Homepage   (b) Index

(c) JAVA script   (d) Bookmark

8. When a file is saved for the first time

(a) a copy is automatically printed

(b) it must be given a name to identify it

(c) it does not need a name

(d) it only needs a name if it is not going to be printed.

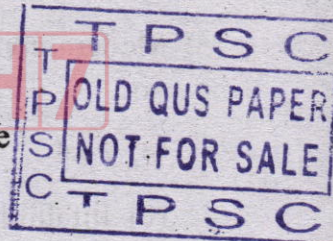9. Which of the following is not anti-viruses' software ?

   (a) NAV   (b) F-Prot

   (c) Oracle   (d) McAffe

10. Which device is required for the Internet connection ?

    (a) Joystick   (b) Modem

    (c) CD Drive   (d) NIC card

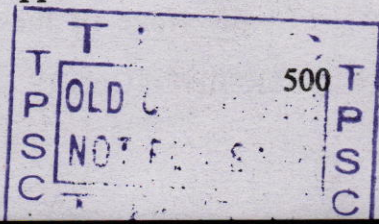11. The output quality of a printer is measured by

    (a) Dot per inch

    (b) Dot per square inch

    (c) Dots printed per unit time

    (d) All of the above

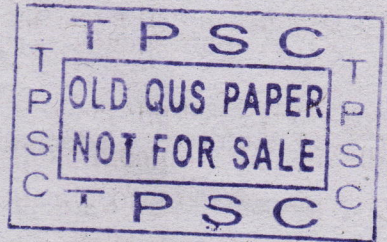12. In latest generation computers, the instructions are executed

    (a) Parallel only

    (b) Sequentially only

    (c) Both sequentially and parallel

    (d) None of these

13. Who designed the first electronic computer ENIAC ?

(a) Van Neumann

(b) Joseph M. Jacquard

(c) J. Presper Eckert and John W Mauchly

(d) All of the above

14. Human beings are referred to as Homo-sapiens, which device is called Silico-sapiens ?

(a) Monitor   (b) Hardware

(c) Robot   (d) Computer

15. Modern computers are very reliable but they are not

(a) Fast   (b) Powerful

(c) Infallible   (d) None of these

16. What is meant by a dedicated computer ?

(a) Which is used by one person only

(b) Which is assigned one and only one task

(c) Which uses one kind of software

(d) Which is meant for application software

17. On line real time systems become popular in
—— computer.

    (a) First generation

    (b) Second generation

    (c) Third generation

    (d) Fourth generation

18. The process of transferring files from Internet to your computer is called

    (a) Downloading   (b) Uploading

    (c) FTP   (d) JPEG

19. In a computer, most processing takes place in

    (a) Memory   (b) RAM

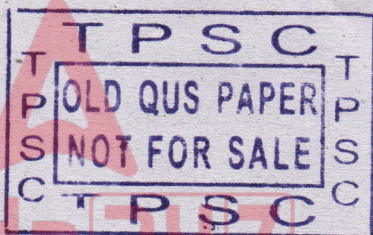   (c) Motherboard   (d) CPU

20. PARAM is an example of

    (a) Super computer   (b) PC

    (c) Laptop   (d) PDA .

SECTION – B

(Q. No. 21 to 40)

21. A man spends $\frac{2}{3}$ rd part of the total income on children's education, $\frac{1}{4}$ part on food and remaining Rs. 7,200 on other items. Then his expenditure on food is

   (a) Rs. 21,600

   (b) Rs. 86,400

   (c) Rs. 25,600

   (d) Rs. 5,600

22. If $3x + \frac{1}{3x} = 9$ then the value of $x^2 + \frac{1}{81x^2}$ is

   (a) 9

   (b) $3\frac{2}{9}$

   (c) $\frac{79}{9}$

   (d) None of these.

23. The cube root of 5832 is

   (a) 18

   (b) 38
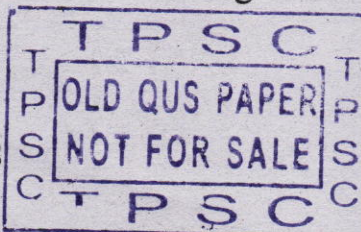
   (c) 48

   (d) None of these

24. "P" has a certain average for 9 innings. In the 10th innings P scores 100 runs, so increased his aveARge run by 8 runs. Then the new average is

    (a) 20   (b) 21

    (c) 32   (d) 28

25. Rs. 1,500 is lent out at 5% per annum simple interest for 3 years. The amount after 3 years is

    (a) Rs. 1,525   (b) Rs. 1,725

    (c) Rs. 1,800   (d) Rs. 1,675

26. The least number which will leave remiander 5 when divided by 8, 12, 16 and 20 is

    (a) 240   (b) 245

    (c) 265   (d) 235

27. The population of a town increases every year by 4%. If its present population is 50,000 then after 2 years it will be
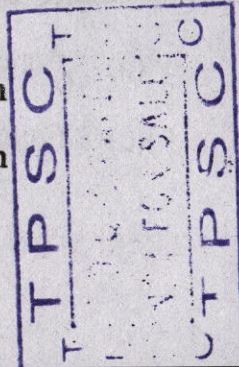
    (a) 53,900   (b) 54,000

    (c) 54,080   (d) 54,750

28. If $\frac{2}{3}$ of A = 75% of B = 0.6 of C then A:B:C is

   (a) 2:3:3   (b) 4:5:6

   (c) 3:4:5   (d) 9:8:10

29. If a man was to sell his chair for Rs. 720, he would lose 25%, then the cost price of the chair is

   (a) Rs. 960   (b) Rs. 1,200

   (c) Rs. 900   (d) Rs. 1,260

30. A man covers half of his journey at 6 km/hr and the remaininig half at 3 km/hr. His average speed is

   (a) 9 km/hr   (b) 4.5 km/hr

   (c) 4 km/hr   (d) 3 km/hr

31. The length of a bridge, which a train 130m long and travelling at 45 km/hr. can cross in 30 seconds, is

   (a) 245m   (b) 200m

   (c) 225m   (d) 250m

32. If A and B together can complete a piece of work in 15 days and B alone in 20 days, in how many days can A alone complete the work ?

    (a) 45 days   (b) 60 days

    (c) 40 days   (d) 30 days

33. In a zoo there are deers and ducks. If the heads are counted, there are 180, while the legs are 448. What will be the number of deers in the zoo ?

    (a) 136   (b) 68

    (c) 44   (d) 22

34. A father said to his son, "I was as old as you are at the present at the time of your birth." If the father's age is 38 years now, the son's age five years back was

    (a) 14 years   (b) 19 years

    (c) 33 years   (d) 38 years

35. Three times the first of three consecutive integers is 3 more than twice the third. The third integer is

    (a) 9   (b) 11

    (c) 13   (d) 15

36. If $3^{x-y} = 27$ and $3^{x+y} = 243$, the value of x is

(a) 0   (b) 2

(c) 4   (d) 6
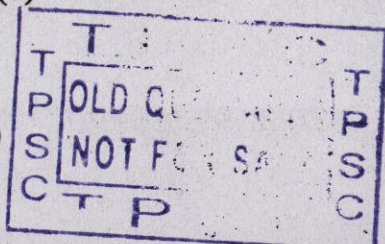
37. The roots of the equation $x^2 - 3x - 28 = 0$ are

(a) 2,14   (b) $-4, 7$

(c) $4, -7$ (d) 6, 9

38. If $\frac{a}{b} = \frac{2}{3}$ and $\frac{b}{c} = \frac{4}{5}$ then the value of $\frac{a+b}{b+c}$ is equal to

(a) $\frac{20}{27}$ (b) $\frac{27}{20}$

(c) $\frac{6}{8}$ (d) $\frac{8}{6}$

39. The difference between the length and breadth of a rectangle is 23m. If its perimeter is 206m, then the area is
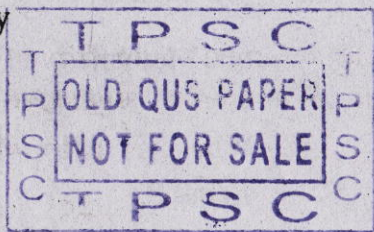
(a) 1520 m²   (b) 2420 m²

(c) 2480m²   (d) 2520m²

40. Interest obtained on a sum of money Rs. 5,000 for 3 years is Rs. 1,500. Then the rate of interest is

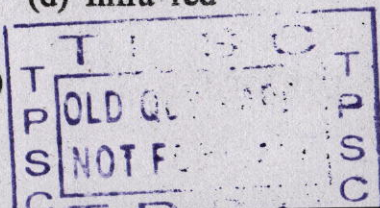   (a) 9%   (b) 10%

    (c) 11%   (d) 12%

SECTION – C

(Q. No. 41 to 60)

41. Which polymer is used in making non-stick kitchen ware ?

    (a) Nylon   (b) PVC

    (c) Bakelite   (d) Teflon

42. Which of the following pair is incorrect ?

    (a) Roentgen : X-ray

    (b) Newton : Law of Gravitation

    (c) Faraday : Diffusion of gases

    (d) Pasteur : Bacteriology

43. What is Bryology ?

    (a) Study of food

    (b) Study of fruit

    (c) Study of mosses and liverworts

    (d) Study of rings

44. Which of the following is a large blood vessel that carries blood away from the heart ?

(a) Vein   (b) Artery

(c) Capillary   (d) Nerve

45. Which of the following is not a member of vitamin B Complex ?

(a) Thiamine   (b) Riboflavin

(c) Folic acid   (d) Ascorbic acid

46. The HIV virus affects the

(a) Leucocytes   (b) Lymphocytes

(c) Erythrocytes   (d) None of these

47. Liquid natural gas (LNG) predominantly contains — in liquid form.

(a) Ethane   (b) Ethylene

(c) Methane   (d) Methylene

48. What is reason for using red light as a stop signal ?

(a) Long wavelength   (b) Short wavelength

(c) Chromogenic effect (d) Infra red
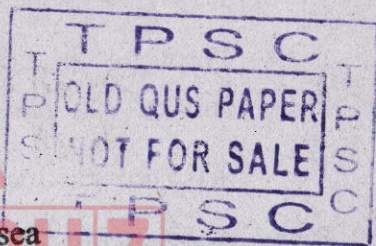
1/TR/SIP/P-I(One)/19   (16)

49. Which of the followng is not correctly matched ?

   (a) Becquerel : Radioactivity

   (b) Alexander Flaming : Penicillin

   (c) Louis Pasteur : Blood groups

   (d) William Harvey : Blood circulation

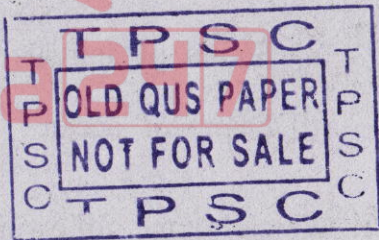50. All ships have sonar system. It is used to detect /measure :

   (a) Distance of the shore

   (b) Sound on the surface

   (c) Sound of animals in sea

   (d) Depth of ocean

51. Which of the following is not correct ?

   (a) Exercise does not help in managing psychological discomfort.

   (b) Exercise increases cardio-respiratory fitness.

   (c) Exercise reduces risk of diabetes.

   (d) Exercise helps in managing bone health.

52. The rusting of the iron is the example of

    (a) Oxidation   (b) Reduction

    (c) Polymerisation   (d) Galvanization

53. An F1 car is mostly made up of which material ?

    (a) Plastic   (b) Carbon fibre

    (c) Steel   (d) Aluminium

54. Through the fused sodium chloride, electric current can pass out due to the presence of

    (a) Free electron

    (b) Free ion

    (c) Free molecule

    (d) None of these

55. Which one among the following is strong smelling agent used in LPG cylinder to help in the detection of gas leakge ?

    (a) Ethanol   (b) Thioethanolanine

    (c) Methane   (d) Chloroform

56. The mountaineers carry oxygen with them because

   (a) at an altitude of more than 5 km there is no air

   (b) the amount of air available to a person on mountain is lesser than that available on the ground

   (c) the temperature of air is lesser than that on the ground.

   (d) The pressure of air is higher than that on the ground.

57. Which of the following is an example of static electricity ?

   (a) Glass rod rubbed with slik cloth

   (b) Ebonite rod rubbed with wool

   (c) Lightening in the sky

   (d) All of the above

58. Sound-waves from a loud speaker is caused by

   (a) frequency   (b) vibrations

   (c) pitch   (d) amplitude

59. Magnetic effect of current gives rise to which force ?

(a) mechanical   (b) frictional

(c) spring   (d) gravitational

60. Quality of petrol is expressed in

(a) Gold number   (b) Cetane number

(c) Methane number   (d) Octane number.