

Seat No.	
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P.G. Entrance Examination, May - 2023
M.Tech. (Rural Technology) (YCSR)
Sub. Code : 71140

Day and Date : Tuesday, 09- 05 - 2023
Time : 1.00 p.m. to 02.30 p.m.

Total Marks : 100

- Instructions :**
- 1) All questions are compulsory.
 - 2) Each question carries one mark.
 - 3) Answers should be marked in the given OMR answer sheet by darkening the appropriate option.
 - 4) Follow the instructions given on OMR Sheet.
 - 5) Rough work shall be done on the sheet provided at the end of question paper.

- 1) Which of the following serves as a cooling and ventilation of engine lubricating oil?
A) Piston
B) Cam shaft
C) Oil sump
D) Crank case
- 2) For the survival of fish in a river stream, the minimum dissolved oxygen is prescribed
A) 3 ppm
B) 4 ppm
C) 5 ppm
D) 10 ppm
- 3) Ozone hole refers to
A) hole in ozone layer
B) decrease in the ozone layer in troposphere
C) decrease in thickness of ozone layer in stratosphere
D) increase in the thickness of ozone layer in troposphere
- 4) Speed of sound does not depend on-
A) Temperature
B) Humidity
C) Pressure
D) None of these

P.T.O.

- 5) Industry lobbying, local to international rules, Quality and food safety etc includes which component of the food industry?
- A) R & D
C) Regulation
- B) Financial Services
D) Wholesale and distribution
- 6) How is milk pasteurized?
- A) Low temperature, Long time
C) Ultrahigh temperature
- B) High temperature, Short time
D) All of the mentioned
- 7) The ozone layer restricts
- A) Visible light
C) X-rays and Gamma rays
- B) Infrared radiation
D) Ultraviolet radiation
- 8) Malaria is caused by
- A) Bacteria
C) Protozoa
- B) Mosquito
D) Virus
- 9) For purifying drinking water alum is used
- A) for coagulation of mud particles
C) to remove salts
- B) to kill bacteria
D) to remove gases
- 10) Full form of COD is;
- A) Catalytic Oxygen Demand
C) Colloidal Oxide Demand
- B) Chemical Oxygen Demand
D) None of these
- 11) Depending on the chemical composition and mechanical properties, iron may be classified as
- A) Cast iron
C) Steel
- B) Wrought iron
D) All of above

- 19) A thermistor is a type of
A) Switch
B) Resistor
C) Battery
D) Power supply
- 20) A computer program that converts assembly language to machine language is
A) Compiler
B) Interpreter
C) Assembler
D) Comparator
- 21) A computer is portable and easy to carry by travellers is -
A) super computer
B) laptop
C) mini computer
D) file servers
- 22) Fog is an example of colloidal system of
A) solid dispersed in gas
B) solid dispersed in liquid
C) liquid dispersed in gas
D) gas dispersed in liquid
- 23) Which of the following is not an explosive?
A) TNT
B) CMC
C) RDX
D) Lead azide
- 24) Which of the following parameter is not necessary for the description of an automobile?
A) Model
B) Type
C) Capacity
D) Colour
- 25) The surface Run-off is the quantity of water
A) absorbed by soil
B) intercepted by buildings and vegetative cover
C) required to fill surface depressions
D) that reaches the stream channels

- 26) Which of the following is found in an automobile's electrical system?
A) Lighting systems
B) Battery
C) Alternators
D) All of the mentioned
- 27) With respect to the definition of an allied industry, which is an allied industry with the food industry?
A) Explosives Industry
B) Packaging Industry
C) Jute Industry
D) Leather Industry
- 28) Plasticisers are added to synthetic plastics to
A) impart flexibility
B) improve workability during fabrication
C) develop new improved properties not present in the original resin
D) All (A), (B) and (C)
- 29) What is mean by LPG
A) Liquefied petroleum gas
B) Liquid purified gas
C) Low pressure gas
D) Liquid pressure gas
- 30) Inhalation of lead compounds present in automobile exhaust (using leaded petrol) causes
A) blood poisoning
B) anaemia
C) nervous system disorder
D) All (A), (B) and (C)
- 31) An ideal vertical curve to join two gradients, is
A) Circular
B) Parabolic
C) Elliptical
D) Hyperbolic

- 32) Black cotton soil is unsuitable for foundations because its
- A) bearing capacity is low
 - B) Permeability is uncertain
 - C) Particles are cohesive
 - D) Property to undergo a volumetric change due to variation of moisture content
- 33) Insulation is used to _____.
- A) Decrease heat transfer rate
 - B) Increase heat transfer rate
 - C) All the above
 - D) None of above
- 34) Discharge of a centrifugal pump is (Where N = Speed of the pump impeller)
- A) Directly proportional to N
 - B) Inversely proportional to N
 - C) Directly proportional to N^2
 - D) Inversely proportional to N^2
- 35) Resistance is measured in
- A) Henries
 - B) Ohms
 - C) Hertz
 - D) Watts
- 36) Biochemical Oxygen Demand (BOD) of safe drinking water is
- A) 50 mg/l
 - B) 10 mg/l
 - C) 5 mg/l
 - D) 30 mg/l
- 37) Pick up the correct statement from the following:
- A) Excess quantities of iron and manganese in water, cause discolouration of clothes
 - B) Lead and barium salts have toxic effect
 - C) Arsenic and selenium are poisonous to human health
 - D) All of the above
- 38) Turbidity of raw water is a measure of
- A) suspended solids
 - B) acidity of water
 - C) B.O.D.
 - D) None of these

- 39) Intensity of Heat is expressed in
A) Volts
B) Kg
C) Joule
D) Ampere
- 40) Hydroelectric power plant converts
A) Mechanical energy to chemical energy
B) Hydraulic to mechanical to electrical energy
C) Chemical energy to mechanical energy
D) None of above
- 41) Pick out the scalar quantity
A) Force
B) Velocity
C) Pressure
D) Acceleration
- 42) SI unit for the density, is
A) kg/m^4
B) kg/m^2
C) kg/m
D) kg/m^3
- 43) Entomology is the science that studies
A) Behaviour of human beings
B) Insects
C) The origin and history of technical and scientific terms
D) The formation of rock
- 44) Which of the following values of pH represents a stronger acid?
A) 2
B) 7
C) 10
D) 9
- 45) The element common to all acids is
A) Hydrogen
B) Carbon
C) Sulphur
D) Oxygen

- 46) Of the various non-conventional energy sources that are being tapped, which has the largest potential?
- A) Solar power
 - B) Wind power
 - C) Geothermal power
 - D) None of these
- 47) Viscosity is defined as
- A) Resistance of the body
 - B) Resistance to flow
 - C) Acceptance to flow
 - D) None of above
- 48) Pa(Pascal) is the unit for
- A) Thrust
 - B) Pressure
 - C) Frequency
 - D) Conductivity
- 49) What refers to a metal combined with one or more other elements?
- A) Metal
 - B) Alloy
 - C) Metaloy
 - D) Gas
- 50) Water functions in the body to
- A) Serve as a medium for chemical reactions
 - B) dissolve oxygen
 - C) Induce glycogen
 - D) Moderate metabolism
- 51) The state having a largest area of forest cover in India is
- A) Arunachal Pradesh
 - B) Haryana
 - C) Madhya Pradesh
 - D) Assam
- 52) 'MPG' extension refers usually to what kind of file?
- A) Word Perfect Document file
 - B) MS Office document
 - C) Animation/movie file
 - D) Image file

- 53) The president can dissolve the Lok Sabha on
- A) Advice of the Prime Minister
 - B) Advice of the chief justice of India
 - C) Recommendation of Lok Sabha
 - D) Recommendation of the Rajya Sabha
- 54) Ecology deals with
- A) Birds
 - B) Cell formation
 - C) Relation between organisms and their environment
 - D) Tissues
- 55) Pollution which occurs by poor disposal of waste and rubbish is classified as
- A) Visual pollution
 - B) Noise pollution
 - C) Land pollution
 - D) Thermal pollution
- 56) What is the range of pH of alkaline water?
- A) 7-14
 - B) 0-6
 - C) 0-14
 - D) None of above
- 57) When a gas is turned into a liquid, the process is called
- A) Condensation
 - B) Evaporation
 - C) Deposition
 - D) Sublimation
- 58) 40 % of 280 = ?
- A) 112
 - B) 116
 - C) 115
 - D) 120

- 66) The Rath Yatra at Puri is celebrated in honour of which Hindu deity
A) Ram
B) Jaganath
C) Shiva
D) Vishnu
- 67) What James Watt invented?
A) Diving bell
B) Steam boat
C) Hot air balloon
D) Rotary steam engine
- 68) Fathometer is used to measure
A) Earthquakes
B) Rainfall
C) Ocean depth
D) Sound intensity
- 69) Economic goods are
A) All commodities that are limited in quantity as compared to their demand
B) Commodities that is available according to their demand
C) Commodities that is available more as compared to demand
D) None of the above
- 70) Ajanta Caves are located in the State of
A) Maharashtra
B) Gujarat
C) Tamil Nadu
D) West Bengal
- 71) The first metal used by the man was
A) Iron
B) Copper
C) Aluminium
D) Gold
- 72) The water in an open pond remains cool even in hot summer because
A) Of continuous evaporation of water
B) Water radiates heat more rapidly than the atmosphere
C) Water absorbs heat less rapidly than the atmosphere
D) Water absorbs heat more rapidly than the atmosphere

- 73) A can type 10 pages in 5 minutes. B can type 5 pages in 10 minutes. Working together, how many pages can they type in 30 minutes?
A) 15
B) 25
C) 65
D) 75
- 74) If the area of a circle is 75.44 square cm then what is the circumference of the circle?
A) 40.2 cm
B) 28.9 cm
C) 29.2 cm
D) 30.8 cm
- 75) Architect : Building :: Sculptor : ?
A) Museum
B) Statue
C) Chisel
D) Stone
- 76) The income tax raid was too sudden _____.
A) so that the man escaped
B) for the man escaping
C) then the man escaped
D) for the man to escape
- 77) A sleeping room for a number of people
A) Dump
B) Dormitory
C) Fireside
D) Office
- 78) Policemen riding on motorcycles as guards of VIP
A) Attendants
B) Commandos
C) Servants
D) Outriders
- 79) Teetotaler means
A) One who abstains from taking malice
B) One who abstains from taking wine
C) One who abstains from meat
D) One who abstains from theft
- 80) _____ his principles, he has to be very careful.
A) with regard of
B) with regard on
C) with regard to
D) None of these

- 81) She _____ in the sun for 1 hour.
A) sitting
B) has been sitting
C) has been sit
D) has sit
- 82) Find the synonym for the word PRESTIGE
A) Influence
B) Quality
C) Name
D) Wealth
- 83) Find out the proper sequence: I read an advertisement that said
P : posh, air conditioned
Q : gentlemen of taste
R : are available for
S : fully furnished rooms
The proper sequence should be
A) PQRS
B) PSRQ
C) PSQR
D) SRPQ
- 84) Choose the correct alternative for underlined word which improve the sentence.
his powerful desire brought about his downfall.
A) His intense desire
B) His desire for power
C) His fatal desire
D) No improvement
- 85) Choose the correct order of sentence
1) Medicine 2) A 3) Neeta 4) Given 5) Was
A) 51423
B) 25431
C) 35421
D) 42531
- 86) Which of these must be avoided for effective communication?
A) Sharing of activity
B) Listening
C) Ambiguity
D) Politeness
- 87) Which of these must be avoided in a group discussion?
A) Speaking facts
B) Asking questions
C) Speaking fast
D) Speaking with clarity

- 88) Before the meeting is concluded, there must be a _____.
- A) Summary
 - B) Question
 - C) Discussion
 - D) Agenda
- 89) Communication is a part of _____ skills.
- A) Soft
 - B) Hard
 - C) Rough
 - D) Short
- 90) It is important to consider proper _____ room where you are giving your presentation.
- A) Darkness
 - B) Lighting
 - C) Ventilation
 - D) None of above
- 91) A person of good understanding knowledge and reasoning power
- A) Expert
 - B) Intellectual
 - C) Snob
 - D) Literate
- 92) Select the pair which has the same relationship.
- LIGHT : BLIND
- A) speech : dumb
 - B) language : deaf
 - C) tongue : sound
 - D) voice : vibration
- 93) Communication is affected by _____ context
- A) Psychological
 - B) Environmental
 - C) Cultural
 - D) All of above
- 94) The skills of enquiry are mainly
- A) Speaking skills
 - B) Listening skills
 - C) Creating and sharing ideas
 - D) All of above

- 95) Proper nouns always begin with _____ letters
A) Running
B) Capital
C) Small
D) Numerical
- 96) Reading comprehension means understanding a _____ text.
A) Oral
B) Written
C) Usual
D) Audio
- 97) Reading is a _____ process.
A) Encoding
B) Listening
C) Decoding
D) Talking
- 98) _____ refers to the time of action.
A) Tense
B) Transitive
C) Intransitive
D) Main
- 99) Which is the volatile memory?
A) RAM
B) EEPROM
C) EPROM
D) ROM
- 100) Choose the correct meaning of proverb for the following sentence to pick holes
A) To find some reason to quarrel
B) To destroy something
C) To criticise someone
D) To cut some part of an item



Rough Work