OMR Sheet No.

## Subject Code <br> 30

ROLL No.
Time Allowed : 150 Minutes
Max. Marks : 150
No. of pages in this Booklet : 12
No. of Questions : 75

## INSTRUCTIONS FOR CANDIDATES

1. Write your Roll No. and the OMR Sheet No. in the spaces provided on top of this page.
2. Fill in the necessary information in the spaces provided on the OMR response sheet.
3. This booklet consists of seventy five (75) compulsory questions each carrying 2 marks.
4. Examine the question booklet carefully and tally the number of pages/questions in the booklet with the information printed above. Do not accept a damaged or open booklet. Damaged or faulty booklet may be got replaced within the first 5 minutes. Afterwards, neither the Question Booklet will be replaced nor any extra time given.
5. Each Question has four alternative responses marked (A), (B), (C) and (D) in the OMR sheet. You have to completely darken the circle indicating the most appropriate response against each item as in the illustration.

6. All entries in the OMR response sheet are to be recorded in the original copy only.
7. Use only Blue/Black Ball point pen.
8. Rough Work is to be done on the blank pages provided at the end of this booklet.
9. If you write your Name, Roll Number, Phone Number or put any mark on any part of the OMR Sheet, except in the spaces allotted for the relevant entries, which may disclose your identity, or use abusive language or employ any other unfair means, you will render yourself liable to disqualification.
10. You have to return the Original OMR Sheet to the invigilators at the end of the examination compulsorily and must not carry it with you outside the Examination Hall. You are, however, allowed to carry the test booklet and the duplicate copy of OMR Sheet on conclusion of examination.
11. Use of any calculator, mobile phone or log table etc. is strictly prohibited.
12. There is no negative marking.

## PAPER-III <br> PHYSICAL EDUCATION

1. Which theory of ple maintains that past is the key to play?
(A) Recreation theory
(B) Inheritance theory
(C) Instinct theory
(D) Self expression theory
2. The nervous system that increases the heart rate :
(A) Sympathetic
(B) Parasympathetic
(C) Peripheral
(D) Sensory
3. The highest percentage of gas available in the exhaled air:
(A) Carbon Dioxide
(B) Oxygen
(C) Nitorgen
(D) Hydrogen
4. 16 PF test was developed by :
(A) R-B Cattel
(B) Eyesenck
(C) Thorndike
(D) Aristotle
5. The first Padmashree Awardee in the field of Physical Education:
(A) J.P. Thomas
(B) P.M. Joseph
(C) P.A. Vaidya
(D) S.D. Chopde
6. Raw scores are converted into standard scores by using:
(A) Hull scale
(B) t-ratio
(C) F-ratio
(D) Chi-square
7. Field goal speed test, throw for accuracy and dribble test are the test items of :
(A) Knox Basketball Test
(B) French Frideal Hockey Test
(C) Mac Donald Soccer Test
(D) Johnson Basketball Test
8. If a test measured what it claimed to rrex re the test is said to be :
(A) Reliable
(B) Valid
(C) Subjective
(D) Objective
9. Match the following:

| List-I | List-II |  |  |
| :--- | :--- | :--- | :--- |
| I. | Soft tissue injury | 1. | Arthritis |
| II. | Ligament injury | 2. | Rupture |
| III. | Bone fracture | 3. | Sprain |
| IV. | Tendon injury | 4. | Green stick |
|  |  | 5. | Laceration |

## Code:

|  | I | II | III | IV |
| :--- | :--- | :--- | :--- | :--- |
| (A) | 1 | 2 | 4 | 5 |
| (B) | 4 | 1 | 2 | 3 |
| (C) | 5 | 3 | 4 | 2 |
| (D) | 5 | 3 | 4 | 1 |

10. Match the List-I with List-II :

| List-I | List-II |  |  |
| :--- | :--- | :--- | :--- |
| I. | Two groups for | 1. | Zero order correlati |
|  | comparison | 2. | F-ratio |
| II. | Degree of | 3. | t-ratio (uncorrelated |
|  | relationship | 4. | Eliminating influence |
|  | between groups | 5. | Chi-square |$|$| III. | Partial correlation |
| :--- | :--- | :--- |
| IV. | More than two |
| groups for |  |
| comparison |  |

## Code:

|  | I | II | III | IV |
| :--- | :--- | :--- | :--- | :--- |
| (A) | 3 | 1 | 4 | 5 |
| (B) | 3 | 1 | 2 | 4 |
| (C) | 3 | 1 | 4 | 2 |
| (D) | 5 | 1 | 4 | 2 |

11. Human respiration involves:
(I) Ventilation
(II) Pulmonary gas exchang:
(III) Gas tranpornolisucelivel
(IV) Trargor-fian of waiters

ammerer of
(7) .10.2--
(I) ar-u_- mation
(II) Li-er-mion
(IV) $4=-$ lermaion
(A) (D) and (II) are correct
(B) (I) and (III) are correct
(C) (I) and (IV) are correct
(D) (III) and (IV) are correct
12. Mechanical effects of massage includes :
(I) Enhance blood circulation
(II) Increase body temperature
(III) Improve bone density
(IV) Improve tissue elasticity
(A) (I) and (II) are correct
(B) (III) and (IV) are correct
(C) (II) and (III) are correct
(D) (I), (II) and (IV) are correct
13. The qualities of a leader are :
(I) Loyalty
(II) Discipline
(III) Arrogance
(IV) Educational qualifications
(A) (I) and (III) are correct
(B) (II) and (III) are correct
(C) (I) and (II) are correct
(D) (III) and (IV) are correct
14. Tests of significance are :
(I) t -ratio
(II) T-scale
(III) F-ratio
(IV) Post hoc test
(A) (I), (II) and (IV) are corroct
(B) (I), (II) and (III) are correot
(C) (III), (II) and (IV) are coirect
(D) (I), (III) and (IV) are correct
15. Test results are used for :
(I) Grading
(II) Classification
(III) Guidance
(IV) Analysis
(A) (I), (II) and (III) are correct
(B) (I) and (II) are correct
(C) (II) and (III) are correct
(D) (I) and (III) are correct
16. Validity of a test is established by relating with :
(I) Previously established standard test
(II) Composite score
(III) Tournament standing
(IV) Test-Retest
(A) (I) and (II) are correct
(B) (I), (II) and (III) are correct
(C) (I) and (III) are correct
(D) (II) and (III) are correct
17. Leilich Basketball test consists of the following test items:
(I) Bounce and shoot
(II) Half minute shooting
(III) Push pass
(IV) Dribbling
(A) (I) and (III) are correct
(B) (I), (II) and (III) are correct
(C) (II) and (III) are correct
(D) (I) and (II) are correct
18. The following parts come under special lesson to teach 23. Arrange the following regions in order from top to major games :
(I) Specific warming-up
(II) Teaching fundamental skills
(III) Formal exercise
(IV) Lead up activity
(A) (I) and (II) are correct
(B) (II) and (III) are correct
(C) (III) and (IV) are correct
(D) (I), (II) and (IV) are correct
19. The following parts come under general lesson plan:
(I) Formal part
(II) Specific warming up
(III) Recreational part
(IV) Teaching technique
(A) (I) and (II) are correct
(B) (II) and (III) are correct
(C) (III) and (IV) are correct
(D) (I) and (III) are correct
20. Artange the Olympics Venues in ascending order:
(A) Sydney, London, Athens, Beijing
(B) Sydney, Athens, Beijing, London
(C) Athens, Sydney, Beijing, London
(D) Beijing, Sydney, Athens, London
21. Arrange the parts present in the muscle in sequence. Use the code given below :
(I) Myofilaments
(II) Muscles
(III) Muscle fibre
(IV) Myofibril
(A) (III), (I), (II), (IV)
(B) (II), (III), (IV), (I)
(C) (I), (III), (IV), (II)
(D) (I), (II), (III), (IV)
bottom :
(A) Thoracic, Cervical, Sacrum Lumbar
(B) Cervical, Thoracic, Lumbar. Sarm
(C) Sacrum, Cervical, Thoracic, Lumber
(D) Thoracic, Lumbar, Cervical, Sarrm
22. Sequentiallyarrange the events in the process of motivation:
(A) Occurrence of needs, Drive towards benavior Development motives, Achievement of gral
(B) Achievement of goal, Drive towards behaviour Development of motives, Occurrence of neesis
(C) Occurrence of needs, Development of motivas Drive towards behaviour, Achievement of guai
(D) Occurrence of needs, Achievement of goal, Dere towards behaviour, Development of motives
23. Set the principles of curriculum of planning in ondar
(I) Establishing learning experiences
(II) Organising learning experiences
(III) Evaluation
(IV) Define objectives
(A) (I), (II), (IV), (III)
(B) IV. I. T. (III)
(C) (IV), (I), (III), (II)
(D) ILatio... (II)
24. Arrange the following staciant -is in arder:
(I) Collection of data
(II) Analysis
(III) Classification
(IV) Interpretation
(A) (II), (TV), (ITI - IV
(B) (I), (II), (ILL, NT
(C) (I), (III) IIL, IV
(D) (II), (IILLINLIT)
25. Arrange the number of matches played in sequence from $1^{\text {st }}$ to $4^{\text {th }}$ round when 16 teams participate in knockout tournament :
(I) 4
(II) 8
(III) 2
(IV) 1
(A) (I), (II), (III), (IV)
(B) (II), (III), (IV), (I)
(C) (II), (I), (IV), (III)
(D) (II), (I), (III), (IV)
26. Arrange the stages involved in the training in sequence:
(A) Warm-down, practicing fundamentals, teaching fundamentals, Warm-up
(B) Teaching fundamentals, Warm-down, Warm-up, Practicing fundamentals
(C) Warm-down, Warm-up, Practicing fundamentals, Teaching fundamentals
(D) Warm-up, Teaching fundamentals, Practicing fundamentals, Warm-down
27. Arrange the bones present in the leg from top to bottom:
(A) Femur, Tarsals, Metatarsals, Tibia and fibula
(B) Femur, Tibia and fibula, Tarsals, Metatarsals
(C) Metatarsals, Femur, Tibia and fibula, Tarsals
(D) Tibia and fibula, Femur, Tarsals, Metatarsals
28. Assertion (A) : Athletic injuries are a result of stress put on both muscles and bones.
Reason (R): Stress and injuries are not the related factors with sports.
(A) (A) is wrong and (R) is correct
(B) (A) is correct and (R) is wrong
(C) (A) and (R) are wrong
(D) (A) and (R) are correct
29. Assertion (A): Patients take drugs under medical advice.
Reason (R): Self medication is good for treating minor ailments.
(A) Both (A) and (R) are wrong
(B) (A) is correct but ( $R$ ) is wrong
(C) (A) is wrong but (R) is correct
(D) Both (A) and (R) are correct
30. Assertion (A) : Tournaments are conducted to decide the winners.
Reason (R): Tournaments are the competitions to measure the abilities of a team.
(A) (A) is correct but (R) is wrong
(B) Both (A) and (R) are correct
(C) Both (A) and (R) are wrong
(D) (A) is wrong but (R) is correct
31. Assertion (A) : Preparing lesson plan gives clear picture about the subject to be taught.
Reason (R): Recreational part is not needed in the general lesson plan.
(A) (A) is wrong but (R) is correct
(B) (A) is correct but ( R ) is wrong
(C) Both (A) and (R) are wrong
(D) Both (A) and (R) are correct
32. Assertion (A): Everybody cannot change its state of rest (or) uniform motion on its own.
Reason (R): Inertia is the prime cause by which the bodies cannot change their state of rest or uniform motion.
(A) Both (A) and (R) are true
(B) (A) is true but (R) is false
(C) (A) is false but (R) is true
(D) (A) and (R) are false
33. Performance related fitness includes:
(I) Leg explosive strength
(II) Cardio-vascular endurance
(III) Reaction ability
(IV) Flexibility

Find the correct combination:
(A) (I), (II)
(B) (II), (III)
(C) (I), (III)
(D) (II), (IV)
36. A first class lever can provide mechanical advantage in form of:
(I) Speed
(II) Strength
(III) Balance
(IV) Coordination

Find the correct combination:
(A) (I), (II), (III)
(B) (II), (III), (IV)
(C) (III), (IV), (I)
(D) (IV), (I), (II)
37. Biological basis of life includes:
(I) Motor fitness
(II) Physical exercise
(III) Intelligence
(IV) Food

Find the correct combination :
(A) (I), (II)
(B) (II), (III)
(C) (I), (III)
(D) (II), (IV)
38. Professional ethics in physical education includes:
(I) Moral values
(II) Judgement
(III) Physical fitness
(IV) Sincerity

Find the correct combination:
(A) (I), (II)
(B) (II), (III)
(C) (I), (IV)
(D) (II), (IV)
39. Evaluation measures:
(I) Efficiency of efforts
(II) Achievement level of target
(III) Distance from goal
(IV) Status of the subject

Find the correct combination :
(A) (I), (II)
(B) (II), (III)
(C) (II), (III), (IV)
(D) (I), (II), (III), (IV)
40. Progression of load proceeds :
(I) Linearly
(II) Stepwise
(III) Stimulus wise
(IV) Circularly

Find the correct combination:
(A) (I), (III)
(B) (II), (IV)
(C) (I), (II)
(D) (II), (III)
41. Intramural programme creates in students the of:
(I) Mass participation
(II) Selfishness
(III) Enmity
(IV) Maximum involvement

Find the correct combination:
(A) (I), (II)
(B) (II), (IV)
(C) (III), (IV)
(D) (I), (C.
42. Given below are two stateme-关

Assertion (A) and the other izel
Assertion (A) : Arunner-rs force frem
Reason (R): Force is
In context of the abo: $=7 \pi$
of the following is coce*
Code :
(A) (A) is right ox 3 erse
(B) Both (A) ane 3
(C) $(A)$ i
(D) Boin $!$

Paper-III
43. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).
Assertion (A) : Physical education emphasizes also in mental development.
Reason (R) : Nationalism considers nature as the only reality.
In context of the above two statements, which one of the following is correct ?
Code:
(A) (A) is right, but ( $R$ ) is wrong
(B) Both (A) and (R) are right
(C) (A) is wrong but ( $R$ ) is right
(D) Both ( $A$ ) and ( $R$ ) are urong
44. Given below are two statements, one labelled as Assertion ( $A$ ) and the other labelled as Reason ( $R$ ). Assertion (A): Strength of movement produced by a muscle depends upon how close to the joint it is attached.
Reason (R): A muscle attached further away will produce a more powerful movement than one attached to nearer the joint. In context of the above two statements, which one of the following is correct?
Code:
(A) (A) is false, but (R) is true
(B) (A) is true, but (R) is false
(C) Both (A) and (R) are false
(D) Both (A) and (R) are true

Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Assertion (A) : Autocratic style of leadership is usually task oriented and tightly structured.
Reason (R): Leadership style is responsible for effective decision making in sport. In context of the above two statements, which one of the following is correct?
Code:
(A) Both (A) and (R) are true and (R) is the correct explanation of (A)
(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
C) (A) is true, but (R) is false
D) (A) is false, but (R) is true
46. Given below are two statements, one labelled as

Assertion (A) and the other labelled as Reason (R).
Assertion (A) : Physical Education is an integral part of education.
Reason (R): Both education and physical education aim at the total development of personality.
In context of the above two statements, which one of the following is correct?
Code :
(A) (A) is true, but ( R ) is false
(B) (A) is false, but ( $R$ ) is true
(C) Both $(A)$ and ( $R$ ) are false
(D) Both (A) and (R) are true
47. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).
Assertion (A): Health and safety skills can be taught in the school through First Aid and Safety Education.
Reason (R): School age is the appropriate age to learn First Aid and Safety Education.
In context of the two statements, which one of the following is correct?
Code :
(A) Both $(A)$ and $(R)$ are true and (R) is the correct explanation of (A)
(B) Both $(A)$ and $(R)$ are true, but $(R)$ is not the correct explanation of $(A)$
(C) (A) is true, but (R) is false
(D) (A) is false, but ( $R$ ) is true
48. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R).
Assertion (A) : Type-I error is rejecting the null hypothesis when it is true.
Reason (R): Type-I error arises due to false interpretation of data.
In context of the above two statements, which one of the following is correct?
Code :
(A) (A) is right, but ( $R$ ) is wrong
(B) Both (A) and (R) are right
(C) (A) is wrong, but ( $R$ ) is right
(D) Both (A) and (R) are wrong
49. Make the correct choice from codes given below consulting the Assertion (A) and Reason (R).
Assertion (A) : Management is the dynamic life giving element in every organization.
Reason (R): It is the activating force that gets things done through people.

## Code:

(A) (A) is true, but ( $R$ ) is false
(B) (A) is false, but (R) is true
(C) Both (A) and (R) are false
(D) Both $(A)$ and $(R)$ are true and $(R)$ is the correct explanation of (A)
50. Given below are two statements, one of which is labelled as Assertion (A) and the other is labelled as Reason (R).
Assertion (A) : Hand grip dynamometer is used to measure the arm power.
Reason (R): Dynamometer measures strength. In context of the above two statements, which one of the following is correct?

## Code:

(A) Both (A) and (R) are true and (A) is the correct explanation of $(\mathrm{R})$
(B) Both (A) and (R) are false
(C) (A) is true, but ( $R$ ) is false
(D) (A) is false, but (R) is true
51. Given below are two statements, one is labelled as Assertion (A) and the other is labelled as Reason (R).
Assertion (A) : Stateanxiety is animmediateemotional experience that is characterized by apprehension, fear and tension and sometimes accompanied by physiological arousal.
Reason (R): This state is experienced because of personality disposition to perceive certain environmental situations as stressful and to respond to these situations with increased state anxiety. In the context of the above two statements, which one of the following is correct?

## Code :

(A) Both are true, but $(\mathrm{R})$ is not the correct explanation of (A)
(B) Both are true, but $(\mathrm{R})$ is the correct explanation of (A)
(C) (A) is true, but ( R ) is false
(D) (A) is false, but (R) is true
52. Given below are two statements, one is labelled Assertion (A) and the other is labelled as Reason (RL
Assertion (A): Professional preparation is necessary to become efficient in the profession.
Reason (R): Physical Education is an integral par of education.
In context of the above two statements, which one of the following is correct?

## Code :

(A) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
(B) Both $(\mathrm{A})$ and $(\mathrm{R})$ are true and $(\mathrm{R})$ is the correa explanation of (A)
(C) (A) is true, but (R) is false
(D) (A) is false, but (R) is true
53. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R):
Asscrtion (A) : Knowledge of review of literature should be referred for interpretation of results of a study.
Reason (R) : Review of literature provides the knowledge base of a research study: In the context of the above two statements, which one of the following is correct?
Code :
(A) Both $(A)$ and $(R)$ are true and $(R)$ is the correct explanation of (A)
(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
(C) (A) is true, but ( R ) is false
(D) (A) is false, but (R) is true
54. Arrange the following sources of energy for muscular exercise in order of their sequence of availability :
(I) Triglyceride
(II) Glycogen
(III) A.T.P.
(IV) Phosphocreatine

## Code:

(A) (I), (III), (IV), (II)
(B) (II), (I), (III), (IV)
(C) (IV), (II), (I), (III)
(D) (III), (IV), (II), (I)
55. Arrange the following courses in Physical Education in chronological order as they were started in India:
(I) Ph.D.
(II) B.P.E.
(III) B.P.Ed.
(IV) M.Phil

Code:
(A) (II), (III), (I), (IV)
(B) (I), (II), (III), (IV)
(C) (III), (IV), (II), (I)
(ID) (II), (IV), (III), (I)

A-mesthe fillowie progranmes and institutions in dernoligyizal ortier:
(1) Narival Homess Corps
(1) Nutional Plan of Physical Education and Recreation

- Labsuibai College of Physical Education (7V) Allindia Council of Sports


## Cinde:

s)
(B) (II), (III), (I), (IV)
(-)
(D) (III), (I), (II), (IV)


CMB-33150
58. Arrange the Grand Slam Tennis Tournaments in the order they are played using the code given below:
(I) Wimbledon
(II) Australian Open
(III) U.S. Open
(IV) French Open

Code :
(A) (I), (II), (III), (IV)
(B) (II), (IV), (I), (III)
(C) (IV), (III), (II), (I)
(D) (IV), (I), (II), (III)
59. Match List-I with List-II and select the correct option using the code given below:

|  | List-I |  | List-II |
| :--- | :--- | :---: | :--- |
| I. | Vastus Internus | 1. | Knee flexion |
| II. | Biceps Femoris | 2. | Hip extension |
| II. | Middle Deltoid | 3. | Knee extension |
| IV. | Gluteus Maximus | 4. | Shoulder Abduction |

Code :

|  | I | II | III | IV |
| :--- | :--- | :--- | :--- | :--- |
| (A) | 3 | 1 | 4 | 2 |
| (B) | 1 | 4 | 2 | 3 |
| (C) | 4 | 2 | 3 | 1 |
| (D) | 2 | 3 | 1 | 4 |

60. Match List-I with List -II and select the correct option using the code given below:

|  | List-I |  | List-II |
| :--- | :--- | :--- | :--- |
| I. | Axiology | 1. | A cultural heritage |
| II. | Competition | 2. | Associative factor <br> for social interaction |
| III. | Sport | 3. | A component of <br> philosophy |
| IV. | Cooperation | 4. | Dissociative factor <br> of social interaction |

Code:

|  | I | II | III | IV |
| :--- | :--- | :--- | :--- | :--- |
| (A) | 3 | 4 | 1 | 2 |
| (B) | 4 | 3 | 2 | 1 |
| (C) | 1 | 2 | 3 | 4 |
| (D) | 2 | 1 | 4 | 3 |

61. Match List-I with List- $I$ and select the correct option using the code given below:

|  | List-I |  | List-II |
| :--- | :--- | :---: | :--- |
| I. | Platelets | 1. | Insulin |
| II. | Lowhaemoglobin | 2. | H.D.L. |
| III. | Diabetes | 3. | Anaemia |
| IV. | Cholesterol | 4. | Thrombocytes |

Code :

|  | I | II | III | IV |
| :--- | :--- | :--- | :--- | :--- |
| (A) | 4 | 2 | 1 | 3 |
| (B) | 4 | 3 | 1 | 2 |
| (C) | 1 | 2 | 3 | 4 |
| (D) | 2 | 3 | 4 | 1 |

62. Match List-I with List-II and select the correct option using the code given below:

|  | List-I |  | List-II |
| :--- | :--- | :--- | :--- |
| I. | Milk, Cheese, Yoghurt | 1. | Carbohydrates |
| II. | Meat, Poultry, Fish | 2. | Minerals |
| III. | Vegetables | 3. | Protein |
| IV. | Bread, Cereal, Rice | 4. | Vitamin |

Code :

|  | I | II | III | IV |
| :--- | :--- | :--- | :--- | :--- |
| (A) | 2 | 4 | 3 | 1 |
| (B) | 1 | 4 | 3 | 2 |
| (C) | 2 | 1 | 4 | 3 |
| (D) | 2 | 3 | 4 | 1 |

63. Match List-I with List- $\Pi$ and select the correct option using the code given below :

|  | List-I |  | List-II |
| :---: | :--- | :---: | :--- |
| I. | Malaria | 1. | Parasites |
| II. | Dengue | 2. | Pancreas |
| III. | Measles | 3. | Bacteria |
| IV. | Diabetes | 4. | Virus |

## Code:

|  | I | II | III | IV |
| :--- | :--- | :--- | :--- | :--- |
| (A) | 1 | 3 | 4 | 2 |
| (B) | 3 | 4 | 1 | 2 |
| (C) | 2 | 1 | 4 | 3 |
| (D) | 4 | 2 | 3 | 1 |

68. Select the correct option from the code given below : Synonymous terms of cardiovascular endurance are
(I) Cardio-respiratory endurance
(II) Cardio-pulmonary endurance
(III) Aerobic endurance
(IV) Speed endurance
(V) Strength endurance

Code :
(A) (II), (III) and (IV)
(B) (I), (II) and (III)
(C) (II), (V) and (III)
(D) (III), (II) and (V)
69. The systematic process of sports training involves the following:
(I) Evaluation
(II) Feedback
(III) Execution of training
(IV) Setting goal and objectives

Arrange in proper sequential phase :
Code :
(A) (II), (IV), (I), (III) (B) (IV), (III), (II), (II)
(C) (I), (II), (IV), (III)
(D) (III), (I), (II), (IV)
U. e the currect cote given below:

Su mid roule dienyenntod blowd is :

(II) 1 ans
(III) Ritr $=$ LLL
(IV) Left Aurinte

Code:
(A) (I), (II), (III), (IV)
(B) (I), (III), (II), (IV)
(C) (IV), (II), (I), (III)
(D) (II), (I), (III), (IV)

Arrange the following in a sequential order to identify te subject matter of Psychology:
(I) Psychology is the study of mind
(II) Psychology is the study of human bohmiour
(III) Psychology is the study of soul

C mise
(4) G.
Q. No. 72-75

Research is a careful, systematic and scientific method of solving a problem. It helps to find out cause and effect relationship. In experimental research 'cause' is called as independent variable and 'effect' as dependent variable. Independent variable is the characteristics or conditions manipulated or compared by the investigator. Dependent variable is a measured characteristic. It appears or disappears or changes,due to the intervention of independent variable. The measured characteristics are expressed in nominal, ordinal interval and ratio scales. Nominal data are otherwise called as attributes. Attributes are non-gradient classification. There are no numerical basis of grouping. They are mere classifications. Ordinal data assign the measured characteristics on the basis of ranking. But there is no uniformity in the order of ranking. Normally for nominal and ordinal data nonparametric statistics are used since most of the data do not assume normal curve. Interval data do not have true zero point whereas ratio data have true zero points. Normally parametric statistics are applied to interval and ratio data since most of these characteristics assume normal curve.
72. Cause and effect relationship is established by :
(A) Test
(B) Measurement
(C) Research
(D) Data
73. In experimental research measured characteristics are called as:
(A) Extraneous variable (B) Dependent variable
(C) Irdependent variable (D) Control variable
(C) Ihdependent variable (D) Control variable
74. $\operatorname{Ar}$-allent classification of the data is called as :
(A) Cominal data
(B) Interval data
(C) Nominal data
(D) Ratio data
-5. A careful systematic and scientific method of finding solution to a problem is called as :
(A) Parametric
(B) Non-parametric
(C) Ambute
(D) Research

