

**டி.பொ.க. (உ.பெல) வினாக்கள் 2011**  
**க.பொ.த.(உயர்தர)ப் பரீட்சை 2011**

வினாக்கள்  
பாடம்

} Information & Communication Technology பாட இலக்கம் } ..... 20 .....

**ஆளுகைத் திட்டம் - I பகுதி**  
**புள்ளி வழங்கும் திட்டம் - பத்திரம் I**

பகுதி எண்	பெறு புள்ளி								
வினா இல	விடை								
01	2	11	3	21	3,4	31	4	41	1 over
02	4	12	5	22	1	32	3	42	4
03	4	13	4	23	3	33	5	43	4
04	4	14	5	24	3	34	4	44	2
05	3	15	5	25	4	35	4	45	2
06	2	16	1	26	3	36	2	46	3
07	4	17	3	27	3	37	1	47	4
08	4	18	3	28	5	38	2	48	2
09	2	19	3	29	5	39	2	49	5
10	5	20	3	30	4	40	3	50	4

Kup.

Information and Communication Technology (Paper No 20)

Paper II – A

Marks Allocated 10 x 4 = 40

A -75, B – 65, C-55, S - 35

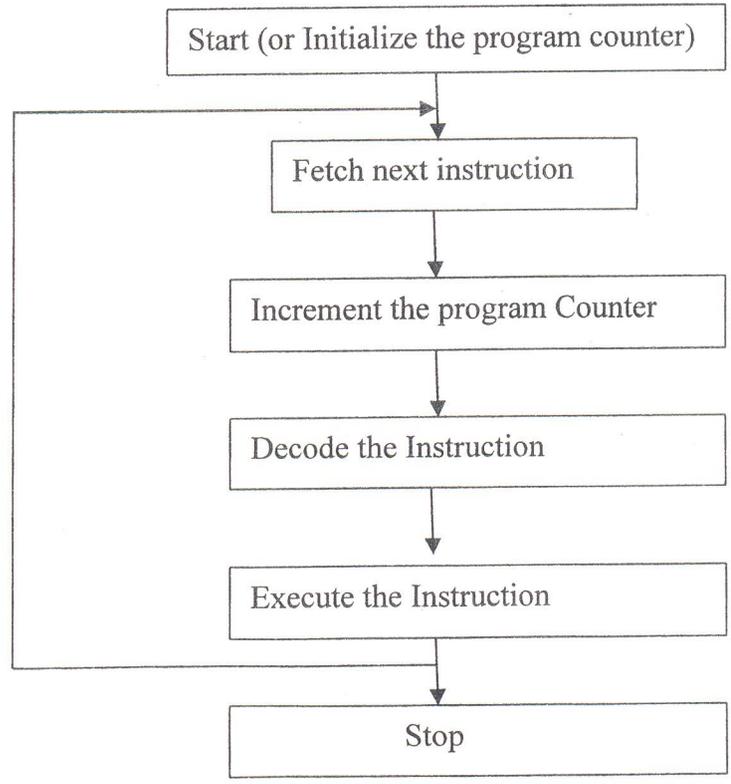
1.

- a) First Generation (1GL) : Electronic valves or Vacuum Tubes  
Second Generation (2GL) : Transistors  
Third Generation (3 GL) : Integrated circuits(ICs)  
Fourth Generation (4 GL) : Large Scale Integration (LSI) ,Very large scale Integration (VLSI), Microprocessors

**Total 4 Marks**

- One marks for each correct answer

b)



**Total 2 Marks**

- Three states **fetch, decode, execute** items in correct order 2 Marks
- Any two items fetch, decode, execute in correct order 1 Mark

*(with the cycle)*  
*without cycle - 1/2 mark*  
fetch, decode, execute without cycle 1 Mark

c)

c)

5 => 0000 0101

3 => 0000 0011

-3 => 1111 1100 + 0000 0001 => **1111 1101**

Total 2 Marks

- Correct representation of 5 1 Mark
- Correct representation of -3 in two's complement 1 Mark

0000 0101

1111 1101 +

-----

1carry 0000 00 10

1 Mark

A carry out of the most significant bit is ignored in two's complement addition.

1 Mark

2)

a)

	FAT32	NTFS
Max file size	<u>limited</u> /unlimited	limited/ <u>unlimited</u>
Max file name length	<u>limited</u> /unlimited	limited/ <u>unlimited</u>
Security	yes/ <u>no</u>	<u>yes</u> /no
Support of Unicode.	yes/ <u>no</u>	<u>yes</u> /no

Total 3 Marks

- All 8 answers are correct – 3 Marks
- 4,5,6 or 7 correct answers – 2 Marks
- 1,2,or 3 – 1 Mark

b)

i) Total number of pages =  $2^6 = 64$

Total 2 Marks

- $2^6 = 64$  2 Mark
- $2^6$  1 Mark

64 ——— 1 mark

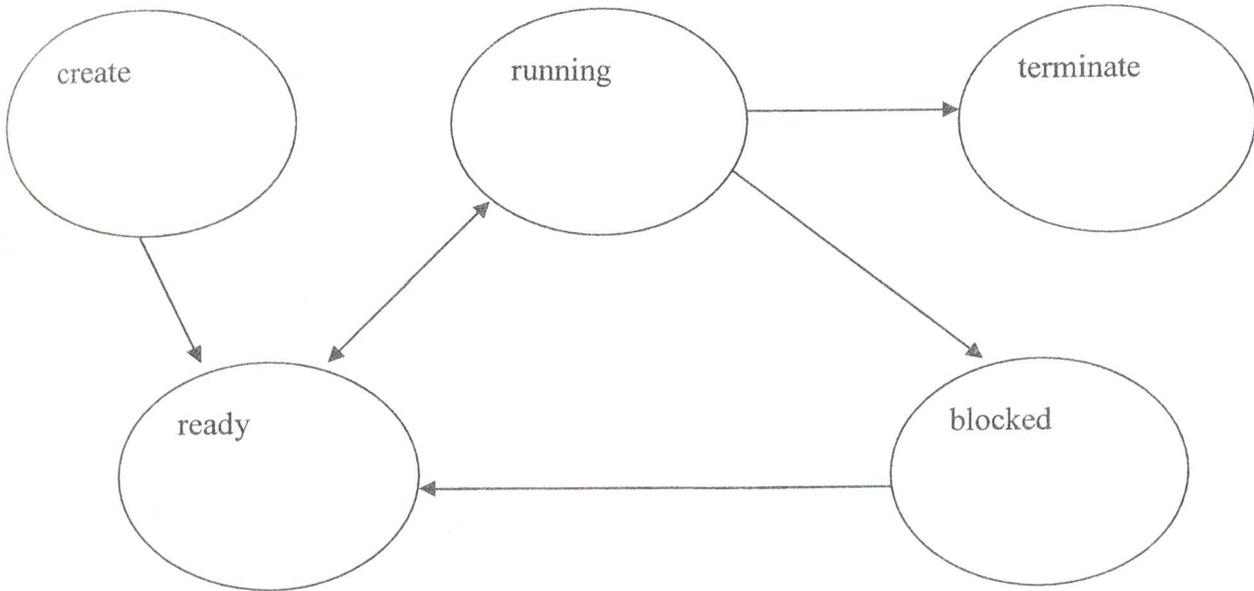
ii)

[ 010111 | 000000111100 ]  
Page displacement

Total 1 Mark

- Both page and displacements are correct 1 Mark (No marks for partial answers)
- If at least page and displacement is identified 0.5 Marks

c)



Total 4 Marks

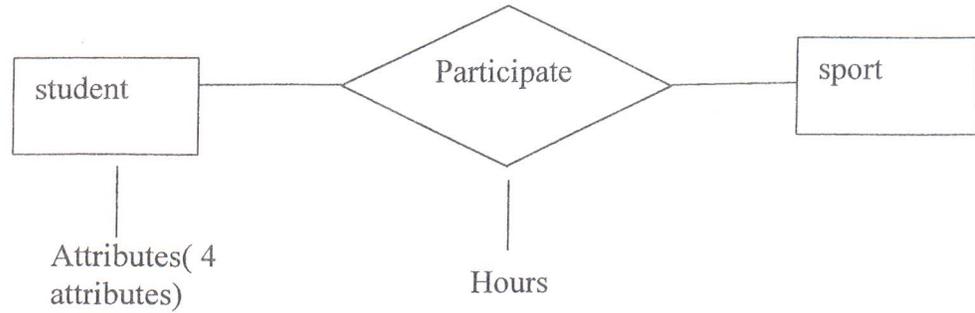
All 5 states with arrows in the correct directions– 4 Marks.

Create, Ready, Running, Terminate with arrows in the correct directions – 3 Marks.

All five states of the above ~~4~~ states (arrows in wrong direction or without arrows)– 2 Marks

Any two states – 1 Mark

3) a)



Total 2 Marks

- Complete diagram with attributes – 2 Marks
- Diagram without attributes – 1 Mark
- Two entities and one relationship (names may not be correct) – 1 Mark

b)

Relationship	Cardinality	Reasons
Participate	Many-to-many	One student can participate for more than one Sport. More than one student for a sport.

Total 1 Mark

- All correct

c) False or not correct

1 Mark

True

**0 Marks for the section, No marks for explanation**

Reason :

No of hours is defined as an attribute on the participate relationship

1 Mark

d)

**Two weaknesses**

- 1) Data duplication or any statement implying this.
- 2) Attribute 'Hours' on the relationship 'Participate' is excluded in the table

Total 2 Marks

- 1 Mark for each

St **Student table with the attributes Admission No, Name, Address, Class**

	<b>Total 1 Mark</b>
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Sp **Sport table with attribute – Sport Code, Sport Name**

arks

	<b>Total 1 Mark</b>
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Pa **Participate relationship with attributes Admission No, Sport Code, No of Hours**

	<b>Total 1 Mark</b>
--	---------------------

arks

ark

k

4)

a)

Linux – System Software  
Word Processor – Application Software  
Web Browser – Application Software

Total 2 Marks

- All three correct – 2 marks
- Any two correct – 1 Marks

b)

Magnetic – Hard disk, Diskette, Tape Drive ( Any one)  
Optical – CD, DVD, VCD , *BlueRay Disk*  
Solid State – Flash Drive, Memory cards

Total 3 Marks

- All six correct – 3 marks
- All 3 types without any examples – 2 Marks
- Any four or five correct – 2 Marks
- Any one, two or three correct - 1 Mark

Only Examples without media will not be given any marks

c)

Data Element	Validation Check
Employee Number	Presence in Employee Master Table
Hours worked	Range check
Department code	Presence in Department Master
Week number	Range check

Total 3 Marks

- All 4 correct – 3 marks
- Two or three – 2 Marks
- One correct - 1 Mark

d)

Video Conferencing : This is the process by which **two or more individuals**, located in **different places** carry out a **discussion(communication)** through network by transmitting audio and video. ~~data~~

1 - Mark

Copyright : The right of the author to copy, print and market his/her material.

1 - Mark

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